City of Georgetown, Texas Storm Water Management Program (SWMP)

TPDES (Phase II) Municipal Separate Storm Sewer System (MS4)



2019-2024



Table of Contents

1.0	Introduction	
1.1	Regulatory Background	2
1.2	Phases	
1.1	Process	
2.0 Ci	ity of Georgetown Background	3
2.1	City Facilities and Stormwater Systems	
2.2	City's Drainage Basins (Watersheds)	
2.3	Existing Stormwater Management Practices	4
3.0 S	tormwater Management Program Overview	
3.1	Development of the SWMP	9
3.2	Organization of the SWMP	9
3.3	List of Allowable Non-Stormwater Discharges	
3.4	NPDES Stormwater Final MS4 General Permit Remand Rule	
3.5	Annexations	
3.6	Endangered Species	
4.0 N	ICM #1 - Public Education, Outreach and Involvement	12
4.1	Regulatory Requirements	13
4.2	Selected Best Management Practices	18
5.0 N	MCM #2 - Illicit DIscharge Detection an Elimination	25
5.1	Regulatory Requirements	
5.2	Selected Best Management Practices	27
6.0 N	ICM #3 - Construction Site Stormwater Runoff Control	
6.1	Regulatory Requirements	
6.2	Selected Best Management Practices	37
7.0	MCM #4 - Post-Construction Stormwater Management in New Development and	
	elopment	40
7.1	Regulatory Requirements	
7.2	Selected Best Management Practices	42
8.0	MCM #5 - Pollution Prevention/Good Housekeeping for Municipal Operations	
8.1	Regulatory Requirements	
8.2	Selected Best Management Practices	50
9.0 MC	M#7 - Authorization for Municipal Construction Activities	60
0.0 lm	paired Waterbodies	61
11 0 Die	scharges to the Edwards Aquifer Recharze Zone	66
2.0 Re	cord Keeping and Reporting	
12.1	Record Keeping	67
12.2	The state of the s	
12.3		



1.0 Introduction

The City of Georgetown has developed a Storm Water Management Program (SWMP) as required for coverage under the Texas Pollutant Discharge Elimination System Program (TPDES) General Permit No. TXR040000. The SWMP describes the minimum control measures and Best Management Practices (BMPs) that will be implemented by the City of Georgetown in order to achieve the regulatory standard of reducing pollutants in the City's storm water to the "maximum extent practicable". The City's existing programs and activities designed to protect the environment and water quality will be enhanced and supplemented with new BMP activities. The BMPs were selected based on general assessment of BMP effectiveness, applicability to the City of Georgetown and costs associated with implementation. The BMPs, measurable goals and implementation schedule in the SWMP were developed by Engineering and Development Services Department with input from multiple City departments.

1.1 Regulatory Background

The Federal Water Pollution Control Act was passed in 1972. After the law was amended in 1977, it became commonly known as the Clean Water Act. The Act established the structure for federal regulation of pollutant discharges into the waters of the United States, authorized the Environmental Protection Agency (EPA) to implement pollution control programs, extended the requirement to establish standards for surface water contaminants, and made it unlawful to discharge unpermitted point source pollutants into navigable waters. The Act also established funding for construction of sewage treatment plants and promoted planning to address non-point source pollution. In order to reduce stormwater pollution, amendments were made to the Clean Water Act in 1987, requiring stormwater discharges to be permitted in two phases.

1.2 Phases

Phase 1 applied, among other things, to larger cities (population > 100,000) with separate stormwater sewer systems. The regulations required these cities to obtain National Pollutant Discharge Elimination System (NPDES) permits. The permit process imposed controls on the cities to reduce pollution in stormwater discharges.

Phase 2 applies to smaller cities (population <100,000 with Urbanized Areas). In 1999, the EPA issued final regulations for Phase 2. The Texas Commission on Environmental Quality (TCEQ) issued the Texas Pollutant Discharge Elimination System (TPDES) General Permit Number TXR040000 (General Permit) for Phase 2 Stormwater on August 13, 2007 in order to create a mechanism for Phase 2 Texas cities to come into compliance with the federal regulations.

1.1 Process

The processes of applying for coverage under and maintaining conformance to the General Permit begins with submittal of two documents to the TCEQ. The first document is a form provided by the TCEQ, called a Notice of Intent (NOI). The second document is the proposed Implementation Program for the Stormwater Management Plan (SWMP).

The Implementation Program for the SWMP proposes to reduce stormwater pollution by increasing the city's control of pollution sources. The Implementation Program provides maps (see Tab 3) and photos (see Tab 3), which identify many of the points where stormwater is discharged from the city to other municipalities. The plan must be fully implemented within 5 years of the TCEQ's issuance of the General Permit.



2.0 City of Georgetown Background

The City of Georgetown is located in Williamson County in Central Texas. The 2010 census placed Georgetown in an urbanized area that includes Austin. With a population of approximately 47,000, Georgetown is categorized as a Level 3 Small Municipal Separate Storm Sewer System (MS4). The estimated population, utilizing City of Georgetown's Population and Demographics information, in City Limits as of April 2019, is 64,716. The City was not previously classified as an urbanized area, and therefore the City is required to obtain coverage under Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR040000 for the first time.

Hydrologically, the City is located in the San Gabriel River watershed of the Brazos River Basin. Seventy-four percent of the City is over the Edwards Aquifer Recharge Zone. Development in areas of the City lying over the Recharge Zone is subject to requirements of the Edwards Aquifer Recharge Zone (EARZ) rules.

2.1 City Facilities and Stormwater Systems

The City of Georgetown's stormwater system and facilities are designed and operated to efficiently convey runoff, minimize flooding risks and eliminate standing water on publicly owned and highly traveled surfaces. For public safety, runoff is directed off publically owned areas such as roadways through drainage systems on site or with the use of easements. Structures are sized for both existing public properties and flow from off-site areas conveyed by natural or pre-existing drainage patterns.

Stormwater is collected from a variety of land uses and vegetation types throughout the city. Conveyance occurs through a system of channels, culverts, underground pipes, and storage ponds owned and maintained by private entities, TxDOT, The City of Georgetown and Williamson County. Treatment facilities in the city are built to treat diverse contaminants from urban city centers, suburban neighborhoods and rural farmlands before discharging to surface or groundwater.

2.2 City's Drainage Basins (Watersheds)

The City of Georgetown is located in the San Gabriel River subwatershed of the Little River watershed located in the Brazos River Basin as shown in Figure-1. Both the North and South forks of the San Gabriel River flow through the city center of Georgetown. Runoff from the outskirts of town flow into the Georgetown reservoir on the west end of town, tributaries to Granger Lake on the East side of town, and south towards Brushy Creek.



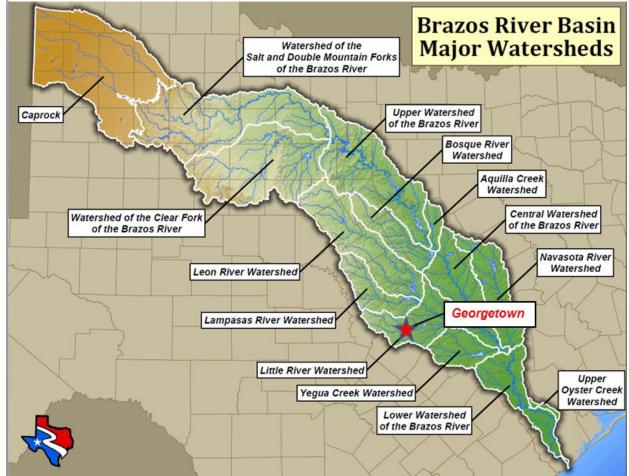


Figure 1. City of Georgetown Location within Brazos River Basin (Brazos.org).

2.3 Existing Stormwater Management Practices

2.3.1 Public Education and Outreach on Stormwater Impacts

The City's Public Communications Department provides information to the public through City of Georgetown websites, a monthly resident newsletter called the Georgetown City Reporter, City cable access channel 10 on the Suddenlink basic tier, news releases, and advertisements.

The City of Georgetown maintains two separate Facebook pages and Twitter feeds:

- City News: The City News Facebook Page and Twitter feed keeps you up-to-date on all city news, such as road closings, construction updates, election information, and crime alerts.
- 2. Live & Play: Georgetown's Live & Play Facebook and Twitter feed are set up to list events and programs sponsored by the City of Georgetown that are geared toward recreational activities such as Parks & Recreation programs, trips, races, and announcements; programming for all ages and author events at the Georgetown Public Library; and Downtown festivals and special events. These links will keep you up to date on things you can do with your family and friends and also on community programs that will benefit you.



Public Safety

In an effort to keep people apprised of public safety situations, the City has recently set up a Twitter feed to which it will try to send notices of brush fires, major traffic accidents and other emergency notifications.

2.3.2 Public Involvement / Participation

The City provides opportunities for public involvement and participation at various municipal meetings. Interested residents are encouraged to attend or contact city staff or council members about concerns at these meetings.

The City currently engages the community about environmental issues through outreach and education. Georgetown is involved in a "Go Green!" initiative which provides information to citizens on its website about how recycling in the city works and ways they can get involved in sustainable practices such as urban farming. The Forestry department organizes volunteer tree planting and gardening events throughout the community. The City of Georgetown currently has a FOG campaign regarding fats, oils, and greases in sanitary sewers. Information about all of these initiatives and other programs are easily accessed by the public through the City of Georgetown's website.

2.3.3 Illicit Discharge Detection and Elimination

The City of Georgetown has a curbside single stream recycling program, household hazardous waste program, and curbside yard trimmings collection program. Regular residential and non-residential solid waste collection services are provided through a contract with Texas Disposal Systems (TDS).

The City currently maintains a Geographic Information System (GIS) database of the existing wastewater collection system.

Because 74% of the City is over the Edwards Aquifer Recharge Zone, Georgetown is subject to requirements of the Edwards Aquifer Recharge Zone (EARZ) rules. The regulatory requirements of the Texas Commission on Environmental Quality (TCEQ) require annual testing of at least 20% of the collection system every year, resulting in the testing of the entire system every 5 years. The testing is included in the Wastewater CIP program. As problems are identified, the City has twelve (12) months to make repairs. A significant portion of the capital budget for the Wastewater Utility is dedicated for inspection and repair of existing mains.

2.3.4 Construction Site Stormwater Runoff Control

The City ensures that construction stormwater runoff is managed through two regulating ordinances of the TCEQ. The City requires temporary erosion and sediment control best management practices (BMPs) and inspects for compliance with established measures in accordance with the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (TXR150000). The TXR15000 regulates stormwater discharge from construction sites and other associated activities. Coverage must be obtained under this permit for construction activities that disturb one or more acre or are part of a larger common plan of development that would disturb one or more acre. The permit requires preparation of a stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include BMPs aimed at reducing the discharge of pollutants from the site in stormwater runoff.

The majority of the City of Georgetown lies over the Edwards Aquifer Recharge Zone (EARZ), all development that occurs in these central and western areas of the City must adhere to the EARZ

rules (30 TAC § 213) as administered by the TCEQ. For parcels within the EARZ, a SWPPP must be submitted to TCEQ, which must include documentation of a WPAP to control site runoff both during and after construction.

2.3.5 <u>Post-Construction Stormwater Management in New Development and Redevelopment</u>

Nearly the entire City of Georgetown resides within the Edwards Aquifer Recharge Zone (Recharge Zone), as shown in Figure 2, which is the State-regulated area of land for which stormwater surface runoff enters the Edwards Aquifer. The Recharge Zone stretches across eight counties from Williamson County to Kinney County and is regulated by the Texas Commission on Environmental Quality (TCEQ). Since the late 1990's, TCEQ has required installation of stormwater quality treatment measures for development within the Recharge Zone. The requirements apply to development conducted by both private and public entities and have resulted in numerous permanent Best Management Practices (BMPs) across the City of Georgetown, mostly in the form of structural BMPs that impound water to settle or filter out total suspended solids (TSS) from stormwater.

Section 3.17 of the City's Unified Development Code (UDC) requires that a stormwater permit be obtained prior to any land disturbance. Issuance of the stormwater permit is contingent upon issuance of all applicable related permits from the TCEQ, the U.S. Environmental Protection Agency, or any other state or federal agency. The permit application must be prepared or reviewed, approved, and sealed by a professional engineer licensed in the State of Texas. The engineer must also verify that the development meets the stormwater and pollution management requirements of Chapter 11 of the UDC. These requirements include impervious cover limitations, pollution attenuation plans for industrial facilities, and collection and conveyance of stormwater runoff as described in the City of Georgetown Drainage Criteria Manual. Chapter 11 includes provisions to encourage development in areas intended for low density single family residential to be designed as Conservation Subdivisions, which include special provisions for watershed and other environmental protection measures.



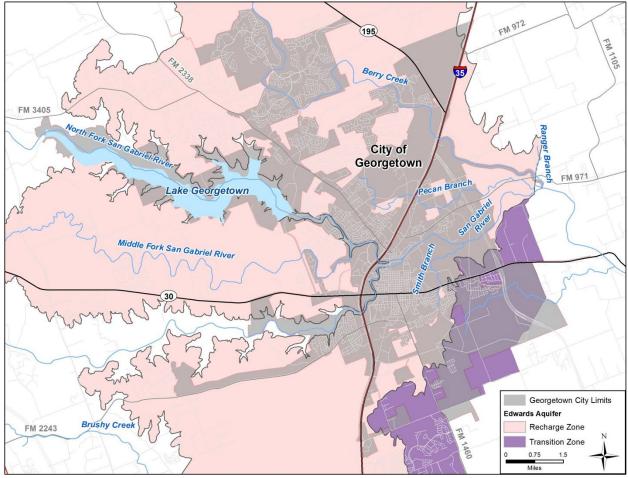


Figure 2. Edwards Aquifer Recharge Zone in the vicinity of the City of Georgetown.

2.3.6 Pollution Prevention / Good Housekeeping for Municipal Operation

The estimated City budget (FY17) for stormwater operations and maintenance and capital costs is approximately \$3.3 million. Revenue for stormwater management is generated through a Stormwater Management Fee assessed to all residents and businesses within corporate limits. The fee is based on average residential lot size. The City adopted a standard rate (sometimes called a fee) for one Billing Unit (BU) of impervious cover in 2011. The current rate is \$6.50/BU/month. The applicable rate times the number of billing units for a customer is the basis for that customer's monthly bill. Stormwater management is a function within the Transportation Services department. The department is responsible for maintaining the public stormwater conveyance system in public right-of-ways and easements receiving stormwater runoff. This system consists of inlets or catch basins, open channels and ditches, underground pipelines, and detention ponds.

The City maintains a number of Geographic Information System (GIS) databases that are relevant to stormwater management. These include City and Extra Territorial Jurisdiction (ETJ) limits, street centerlines, parcels, zoning districts, future land use, Edwards Aquifer recharge zone, and FEMA flood hazard areas. This data is publicly available through the City's website, which includes a web-based map viewer for displaying the data over various base maps. The City also maintains electronic files of site plans through its development review process.

A number of other entities also provide publicly available GIS data that is relevant to stormwater management. Aerial imagery, LiDAR ground elevation data, rivers and streams, and soil and vegetation classification data are available from Williamson County. Watershed boundaries are

EORGETOWN TEXAS available from the U.S. Geological Survey National Hydrography Dataset. The Capital Area Council of Governments (CAPCOG) and Texas Natural Resources Information System (TNRIS) also provide a number of GIS datasets for download from their websites.

In 2011, the City contracted with HDR for the inventory of privately owned water quality basins located within the City limits. The basins were identified through review of the TCEQ permit database and examination of aerial imagery, and their locations were recorded in a GIS database.

In 2003, the City adopted a Master Drainage Plan and Drainage Criteria Manual for the city corporate limits as well as the ETJ. The master plan includes all tributaries of San Gabriel River located within the City and its ETJ area including Berry Creek, Pecan Branch, Middle Fork of San Gabriel River, Smith Branch and Mankins Creek.



3.0 Stormwater Management Program Overview

3.1 Development of the SWMP

Following notification by the Texas Commission on Environmental Quality (TCEQ) in December 2013, the City began the development of the SWMP with the assistance of relevant City staff and HDR Engineering, Inc. (HDR). The City's SWMP was developed through numerous public meetings, outreach to elected city officials, peer jurisdictions and technical stormwater management experts and is in accordance with the requirements of the TPDES General Permit TXR040000 administered under the TCEQ..

The SWMP addresses the six minimum control measures (MCM's) that are required under the EPA Stormwater Phase II Final Rule for small Municipal Separate Storm Sewer System (MS4) and includes BMPs that will eliminate or reduce pollutants discharging from the City's MS4. The City has not chosen to develop and include the optional seventh minimum control measure in the SWMP to obtain permit coverage for municipal construction activities.

3.2 Organization of the SWMP

The City of Georgetown's SWMP is organized around the following seven major minimum control measures with the selected best management practices and impaired waterbodies with the selected best management practices:

MCM #1 - Public Education, Outreach and Involvement

PE-1 Community Education

PE-2 Garden and Lawn Care Education

PE-3 Household Hazardous Waste Education

PE-4 Volunteer Inlet Marketing

PE-5 Stream Clean-Up Projects

PE-6 Tree Planting Program

PE-7 Attitude Survey

PE-8 FOG Campaign

PE-9 Public Access to SWMP

PE-10 Public Access to Annual Reports

MCM #2 - Illicit Discharge Detection and Elimination

ID-1 Illicit Discharge Ordinance

ID-2 Citizen Complaint Hotline

ID-3 Storm Drain and Outlet Mapping

ID-4 The Collection System

ID-5 Staff IDDE Education

ID-6 Illicit Discharge Investigation

ID-7 Sanitary Sewer System Cleaning

MCM #3 - Construction Site Stormwater Runoff Control

C-1 Staff Training

C-2 Preconstruction Meetings

C-3 Construction Site Inspection and Enforcement

MCM #4 - Post-Construction Stormwater Management in New Development

PC-1 Review of Permanent BMP's

PC-2 Private Water Quality Pond Education

PC-3 Long Term Maintenance of PC BMPs



PC-4 Post-Construction Storm Water Management Ordinance

MCM #5 - Pollution Prevention / Good Housekeeping for Municipal Operations

GH-1	Permittee- Owned Facilities Control
GH-2	Staff Training and Reporting
GH-3	City Facility Ponds
GH-4	Street Sweeping
GH-5	Inlet Drain and Structure Cleaning
GH-6	Facilities Assessment and SOPs
GH-7	Licensed Applicators
GH-8	Dog Station Management
GH-9	Transfer Station Improvements
GH-10	Dead Animal Program

MCM #6 – Industrial Storm Water Sources

Not Applicable for Level 3 Small MS4s

MCM #7 - Authorization for Municipal Construction Activities

Not Applicable

Impaired Waterbodies-Best Management Practices

IVV-1	Mankins Branch (Bacteria)
IW-2	San Gabriel/North Fork San Gabriel River (TDS)
IW-3	San Gabriel/North Fork San Gabriel River (Chloride)

Each of the minimum control measure sections describes regulatory permit requirements and selected best management practices with measurable goal(s), implementation schedule, target audience and the responsible party. The City's SWMP will be implemented over a five-year permit period which coincides with the City's fiscal year. The five-year permit term begins October 1st, 2019 and runs through September 30th, 2023.

3.3 List of Allowable Non-Stormwater Discharges

The City has assessed a list of non-stormwater discharges and identified them to be non-significant contributors of pollution to the City's MS4. Below is a list of common and incidental non- stormwater discharges that will not be addressed in the City's SWMP. However, if any of these allowable discharges are identified as contributors of pollutants by City or TCEQ, then the SWMP will be amended to include BMPs for those discharges.

- 1. De-chlorinated swimming pool discharges
- 2. Individual residential vehicle washing
- 3. Water line flushing (excludes discharges of hyper-chlorinated water)
- 4. Air conditioning condensation
- 5. Uncontaminated pumped groundwater
- 6. Uncontaminated groundwater infiltration
- 7. Pavement and exterior building wash water conducted without use of detergent/soap or chemicals
- 8. Foundation or footing drains
- 9. Runoff or return flow from landscape irrigation and lawn irrigation
- 10. Discharges from potable water sources
- 11. Diverted stream flows
- 12. Rising ground waters and springs
- 13. Water from crawl space pumps
- 14. Flows from wetlands and riparian habitats



- 15. Street wash water
- 16. Discharges or flows from firefighting activities (discharges or flows from firefighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where identified as significant sources of pollutants to the City's MS4).

3.4 NPDES Stormwater Final MS4 General Permit Remand Rule

The final rule for the Environmental Protection Agency went in effect on January 9-2017. EPA issued this final rule to revise the way regulations and governing over small municipal separate storm sewer systems obtain coverage under the National Pollutant Discharge Elimination System Permit and the permit is authorized. The final rules states all terms must be listed as "clear, specific, and measurable." Performance expectations must be addressed and schedules are clearly understood. Requirements can be quantitative and qualitative.

3.5 Annexations

The permit states all annexations and de-annexations must be listed in the SWMP. Below is all the annexations in the City of Georgetown since 2014.

	YEAR			
ORDINANCE	ANNEXED	ACRES	NAME/AREA	DATE ANNEXED
			Lakeside at Lake Georgetown	
2014-34	2014	45.79	Annexation	6/10/2014
2014-32	2014	98.22	Celebration Church Annexation	6/10/2014
			Wright Survey 3816 Williams	
2014-43	2014	4.92	Annexation	7/22/2014
2014-69	2014	25.25	Hills at Georgetown Village	10/14/2014
2014-71	2014	768.90	Sun City Somerset Annexation	10/14/2014
2014-73	2014	405.95	Sun City Queen Tract Annexation	10/14/2014
2014-79	2014	1.37	Evans Annexation	10/28/2014
2014-80	2014	1.23	Wright Annexation	10/28/2014
2014-82	2014	54.54	Southwest Bypass (Wolf)	10/28/2014
2014-83	2014	10.76	First Baptist GT (Wolf)	10/28/2014
2014-81	2014	753.30	Wolf Ranch Hillwood	10/28/2014
2014-28	2014	3.40	Bluffview/Weir Ranch Annexation	5/27/2014
2016-13	2016	207.15	Kasper Tract	2/23/2016
2016-12	2016	2.73	Williams ROW	2/23/2016
2016-19	2016	17.81	1000 FM 1460	3/8/2016
2016-34	2016	10.06	Enterprise Pump Station	4/26/2016
2016-41	2016	11.17	Oak Meadow Corner	5/10/2016
2016-69	2016	14.46	Berry Creek	11/22/2016
2017-35	2017	113.00	Wolf Lakes Tract	5/23/2017
2017-37	2017	25.71	Oakmont Annexation	5/23/2017

2017-36	2017	12.23	Echo Park 5/23/2017			
2017-73	2017	244.50	Somerset Hills-1 Tract	11/28/2017		
2017-74	2017	133.10	Somerset Hills-2 Tract 11/28/2017			
2017-75	2017	120.53	Highland Village	11/28/2017		
2018-16	2018	106.21	Berry Creek Highlands	5/8/2018		
2018-17	2018	208.33	Berry Creek Highlands	5/8/2018		
2018-28	2018	44.69	Keyes Tract	6/26/2018		
2018-43	2018	18.33	Morning Dove Annexation	8/14/2018		
2018-62	2018	553.46	Garey Park 10/9/2018			
2018-67	2018	1.42	Fire Station No. 7 11/13/2018			
2018-70	2018	22.90	GISD No. 11 11/27/2018			
2018-79	2018	6.38	Highland Village 2 12/11/2018			
2019-19	2019	262.01	Shell Road Development 3/26/2019			
2019-20	2019	23.10	Maravilla 3/26/2019			
2019-1-ANX	2019	0.63	8350 RM 2338 05/10/2019			
2019-4-ANX	2019	2.54	Old 1460 Trail	07/09/2019		

3.5 Endangered Species

The Endangered Species Act was enacted in 1973 to help protect and recover species which are classified as threatened or endangered along with the ecosystems of found endangered species. The following endangered species are located within the waterbodies of the City of Georgetown Limits as according to the TCEQ.

- Coffin Cave mold beetle (Batrisodes texamus)
- Tooth Cave ground beetle (Rhadine Persephone)*
- Bee Creek Cave harvestman (Texella reddelli)
- Bone Cave harvestman (Texella reyesi)
- Navasota ladies'-tresses (Spiranthes parksii)*

*Note: These endangered species at this time are not found in the City of Georgetown's City Limits according to the Williamson County Conservation Foundation. If this information changes, the Stormwater Management Plan will be updated.



4.0 MCM #1 - Public Education, Outreach and Involvement

The Public Education, Outreach and Involvement minimum control measure consists of BMPs that focus on the development of educational materials designed to inform the public about the impacts that stormwater discharges have on local water bodies. The BMPs describe how the target audience will be informed about the steps they can take to reduce stormwater pollution; how to become involved in the SWMP; and the mechanisms that will be used to reach target audiences. The Public Education, Outreach and Involvement program is developed to reach all of the constituents (residents, visitors, public service employees, businesses, commercial and industrial facilities and construction site personnel) within the City Limits.

4.1 Regulatory Requirements

I. Public Education and Outreach

Implement and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as steps that the public can take to reduce pollutants in stormwater.

The program must at a minimum:

- a. Define the goals and objectives of the program based on high priority community-wide issues:
- b. Identify the target audience(s);
- c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites;
- d. Determine cost effective and practical methods and procedures for distribution of materials.

Throughout the permit term of the SWMP, education materials must be available to convey the program's message to the target audiences at least annually.

City of Georgetown has a public website and shall post the SWMP and annual reports as required under Part IV.B.2 on the website. The SWMP must be posted no later than 30 days after the approval date from the Texas Commission on Environmental Quality (TCEQ) and the annual report no later than 30 days after the due date, by January 28 of every year.

To view the City's SWMP and annual reports, please click the following link: https://transportation.georgetown.org/storm-water-plan/

II. Public Involvement

Involve the public, and, at a minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP. At a minimum:

- a. If feasible, consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program;
- b. If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream cleanups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and education materials;



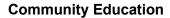
c. Ensure the public can easily find information about the SWMP.



4.2 Selected Best Management Practices

PE-1 Community Education

PE-1





BMP Description:

The City will continue to develop or obtain a public education and outreach campaign focused on the reduction of the bacteria, floatables and fertilizer. Special consideration will be paid to aquifer and salamander concerns.

Responsible Department Public Works/ Stormwater	Target Audience		Residents, visitors, public service employees, businesses, commercial and industrial facilities, construction site personnel	
	Year		Measurable Goal	
Supporting Departments Public Comm	1	total of	The City will hold four events annually and hand out a total of 100 educational materials annually by September 30, 2019.	
GUS-Sys. Eng. GUS- Conservation	2		y will hold four events annually and hand out a 100 educational materials annually by September 0.	
Police-Code Building Officials	3		y will hold four events annually and hand out a 100 educational materials annually by September 1.	
	4		y will hold four events annually and hand out a 100 educational materials annually by September 2.	
	5		y will hold four events annually and hand out a 100 educational materials annually by September 3.	



PE-2 Garden and Lawn Care Education

PE-2

Garden and Lawn Care Education



BMP Description:

The City will continue to acquire, create or support the creation of public education and outreach materials focused on garden and lawn care education. Update as needed.

Responsible Department GUS-Conservation Public Works- Stormwater.	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities
	Year		Measurable Goal
Supporting Departments	1	The City will hand out 50 educational materials at one event annually by September 30, 2019.	
Public Comm Parks	2	The City will hand out 50 educational materials at one ever annually by September 30, 2020. The City will hand out 50 educational materials at one ever annually by September 30, 2021. The City will hand out 50 educational materials at one ever annually by September 30, 2022.	
	3		
	4		
	5		will hand out 50 educational materials at one event by September 30, 2023.



PE-3 Household Hazardous Waste Education

PE-3 **Household Hazardous Waste Education How does** BMP Description: hazardous waste harm the The City will continue to collect household environment and Hazardous Waste from residents at designated our water supply facilities. Refine communication efforts to maximize citizen participation in proper disposal. The City will continue to acquire, create or support the creation of public education and outreach materials focused on use of less toxic alternatives. Responsible **Target Department** Residents, public service employees, businesses, commercial and industrial facilities Audience Environmental Services. Year Measurable Goal Supporting The City will hand out 50 educational materials at one event 1 **Departments** annually by September 30, 2019. **Public Comm** The City will hand out 50 educational materials at one event 2 Public Worksannually by September 30, 2020. Stormwater The City will hand out 50 educational materials at one event 3 annually by September 30, 2021. The City will hand out 50 educational materials at one event 4 annually by September 30, 2022. The City will hand out 50 educational materials at one event 5 annually by September 30, 2023.



PE-4 Volunteer Inlet Marking

PE-4 **Volunteer Inlet Marking BMP** Description: Staff shall continue to recruit and manage volunteer efforts to install inlet markers throughout the city. Volunteers will be educated about water quality impacts. The City will continue to acquire, create or support the creation of public education and outreach materials to be distributed in target neighborhoods to explain the purpose of the recent inlet marker installation and concepts associated with "Flows to Waterway". Responsible **Target Department** Residents, public service employees, businesses, commercial and industrial facilities Audience Public Works-Stormwater Year Measurable Goal Supporting Hold one volunteer inlet marking event once a year and utilize GIS mapping. Review materials online once a year and update if applicable 1 **Departments** by September 30, 2019. GIS Hold one volunteer inlet marking event once a year and utilize GIS mapping. Review materials online once a year and update if applicable 2 by September 30, 2020. Hold one volunteer inlet marking event once a year and utilize GIS mapping. Review materials online once a year and update if applicable 3 by September 30, 2021. Hold one volunteer inlet marking event once a year and utilize GIS mapping. Review materials online once a year and update if applicable 4 by September 30, 2022. Hold one volunteer inlet marking event once a year and utilize GIS mapping. Review materials online once a year and update if applicable 5



by September 30, 2023.

PE-5 Stream Cleanup Projects

PE-5

Stream Cleanup Projects



BMP Description:

The City will continue recruiting volunteers, identifying public spaces, facilitating clean-up and documenting activities. Volunteers will be educated about water quality impacts.

Responsible Department Public Works- Stormwater.	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities
	Year		Measurable Goal
Supporting Departments	1	City will host one (1) clean up event and track smaller events during the year by September 30, 2019	
		Track list	of cleanup locations & dates
Parks Environmental Services	2	City will host one (1) clean up event and track smaller even during the year by September 30, 2020. Track list of cleanup locations & dates City will host one (1) clean up event and track smaller even during the year by September 30, 2021. Track list of cleanup locations & dates City will host one (1) clean up event and track smaller even during the year by September 30, 2022. Track list of cleanup locations & dates City will host one (1) clean up event and track smaller even during the year by September 30, 2023. Track list of cleanup locations & dates	
	3		
	4		
	5		



PE-6 <u>Tree Planting Program</u>

PE-6

Tree Planting Program



BMP Description:

The City will continue to promote multiple tree planting events. Staff shall develop/acquire and provide supplemental materials to make the connection between tree planting and creek water quality.

Responsible Department Parks- Horitculture	Target Audience		Residents, public service employees, schools, businesses, commercial and industrial facilities		
	Year		Measurable Goal		
Supporting Departments	1		anting event. Report numbers of tree plantings and planting Distribute education and outreach materials by September 30,		
Public Communications	2		Hold (1) tree planting event. Report numbers of tree plantings and planting events/dates. Distribute education and outreach materials by September 30, 2020.		
Environmental Services Public Works-	3	` '	anting event. Report numbers of tree plantings and planting Distribute education and outreach materials by September 30,		
Stormwater Conservation	4	` '	anting event. Report numbers of tree plantings and planting Distribute education and outreach materials by September 30,		
	5	` '	anting event. Report numbers of tree plantings and planting Distribute education and outreach materials by September 30,		



PE-7 Attitude Survey

PE-7			Attitude Survey	
			BMP Description: The City will utilize a survey every year targeting citizens. Conduct survey and analyze responses. If warranted, revise outreach articles and materials in response to the survey.	
Responsible Department Public Works- Stormwater	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities	
	Year		Measurable Goal	
Supporting Departments	1	outreach i	survey once a year and evaluate success of materials, make changes if applicable by er 30, 2019.	
Communications GUS – Conservation	2	Conduct survey once a year and evaluate success of outreach materials, make changes if applicable by September 30, 2020.		
Environmental Services	3	Conduct survey once a year and evaluate success of outreach materials, make changes if applicable by September 30, 2021.		
	4	outreach i	survey once a year and evaluate success of materials, make changes if applicable by er 30, 2022.	
5 outreach n		outreach i	survey once a year and evaluate success of materials, make changes if applicable by er 30, 2023.	



PE-8 FOG Campaign

PE-8 FOG Campaign BMP Description: The City will Continue the FOG (Fats, Oil or Grease) campaign. Refine communication efforts to maximize citizen awareness. Responsible **Target Department** Residents, public service employees, businesses, commercial and industrial facilities Audience Environmental Services Year **Measurable Goal** Supporting The City will hand out 50 education materials at one event 1 **Departments** annually by September 20, 2019. Pub Comm The City will hand out 50 education materials at one event Public Works-2 annually by September 20, 2020. Stormwater The City will hand out 50 education materials at one event 3 annually by September 20, 2021. The City will hand out 50 education materials at one event 4 annually by September 20, 2022. The City will hand out 50 education materials at one event 5 annually by September 20, 2023.



PE-9 Public Access to SWMP

PE-9

Public Access to SWMP



BMP Description:

The City will make the SWMP publicly available online along with brief description of SWMP purpose and regulatory driver. Announce SWMP adoption through traditional social media.

Responsible Department Public Works- Stormwater	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities
	Year		Measurable Goal
Supporting Departments	1	Review SWMP on City website and verify if accessible to the public once a year by September 30, 2019.	
Communications	2	Post new SWMP. Review SWMP on City website and verify is accessible to the public once a year by September 30, 2020.	
	3	Review SWMPs on City website and verify is accessible to the public once a year by September 30, 2021. Review SWMPs on City website and verify is accessible to the public once a year by September 30, 2022. Review SWMPs on City website and verify is accessible to the public once a year by September 30, 2023.	
	4		
	5		



PE-10 Public Access to Annual Reports

PE-10

Public Access to Annual Reports



BMP Description:

The City will make the annual reports publically available online along with brief description of annual report purpose and regulatory driver. Annuance annual report adoption through traditional or social media.

Responsible Department Public Works- Stormwater	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities
	Year		Measurable Goal
Supporting Departments	1	Post annual report from Year 4 on City Website. Review 100% of existing annual reports for accessibility on website once a year by September 30, 2019.	
Communications	2	Post annual report from Year 5/1 on City Website. Review 100% of existing annual reports for accessibility on website once a year by September 30, 2020. Post annual report from Year 2 on City Website. Review 100% of existing annual reports for accessibility on website once a year by September 30, 2021. Post annual report from Year 3 on City Website. Review 100% of existing annual reports for accessibility on website once a year by September 30, 2022. Post annual report from Year 4 on City Website. Review 100% of existing annual reports for accessibility on website once a year by September 30, 2023.	
	3		
	4		
	5		



5.0 MCM #2 - Illicit Discharge Detection and Elimination

The Illicit Discharge Detection and Elimination minimum control measure consists of BMPs that focus on the detection and elimination of illicit discharges into the City's MS4. An illicit discharge is defined as "a point source discharge of pollutants to a separate storm drain system which is not composed entirely of stormwater and not authorized by an NPDES permit." The BMPs describe development and update of storm sewer map; the legal authority mechanism (to the extent allowable under State or local law) which will be used to effectively prohibit illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; and programs to detect and eliminate non-stormwater discharges from the City's MS4. BMPs also focus on education and training of public service employees, businesses, and the general public with regard to the hazards associated with illegal discharges and improper disposal of waste as described in the Public Education and Outreach minimum control measure. The City has developed a list of non-stormwater discharges that will not be considered illicit, see section 3.3, List of Allowable Non-Stormwater Discharges.

5.1 Regulatory Requirements

I. Program Development

Implement and enforce a program to detect, investigate and eliminate illicit discharges into the small MS4. The SWMP must include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system. Elements must include:

- a. An up-to-date MS4 map (see Part III.B.2.(c)(1))
- b. Methods for informing and training MS4 field staff
- c. Procedures for tracing and removing the source of an illicit discharge
- d. Procedures for removing the source of the illicit discharge (see Part III.B.2.(c)(5));
- e. For Level 2, 3, and 4 small MS4s, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;
- f. For Level 3 and 4 small MS4s, will create procedures for follow-up Investigations to verify illicit discharge has been removed.

II. Allowable Non-Stormwater Discharges

Non-stormwater flows listed in Part II.C of the TPDES General Permit do not need to be considered by the MS4 operator as an illicit discharge requiring elimination unless the operator of the MS4 or the TCEQ identifies the flow as a significant source of pollutants to the MS4.

II. MS4 Mapping

Maintain an up-to-date MS4 map which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information:

- a. The location of all small MS4 outfalls that are operated by the City and discharge into the waters of the U.S.
- b. The names and locations of all waters of the U.S. that receive discharges from the outfalls; and
- c. Priority areas identified under Part III.B.2.(e)(1) if applicable.



III. Education and Training

- a. Implement training for all of the City field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.
- b. All permittees shall develop and maintain on-site procedures for responding to illicit discharges and spills.

IV. Public Reporting of Illicit Discharges and Spills

To the extent feasible, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4. Provide a central contact point to receive reports, for example by including a phone number for complaints and spill reporting. Develop and maintain on site procedures for responding to illicit discharges and spills.

V. Source Investigation and Elimination

Minimum Investigation Requirements – Upon becoming aware of an illicit discharge, conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable. The investigation shall include:

- a. Prioritize the investigation of discharges based on their relative risk of pollution. For example sanitary sewage may be considered a high priority discharge.
- b. Report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.
- c. Track all investigations and document, at a minimum, the date(s) the illicit discharge was observed, the results of the investigation, any follow-up of the investigation and the date the investigation was closed.
- d. If the source of the illicit discharge extends outside the City's jurisdiction, notify the adjacent permitted MS4 operator or TCEQ's Field operations Support division in accordance with Part III.A.3.b
- e. If and when the source of the illicit discharge has been determined, immediately notify the responsible party of the problem, and require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.

VI. Inspections

Conduct inspections, as determined appropriate, in response to complaints, and conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party.

The permittee developed procedures describing the basis for conducting inspections in response to complaints and conducting follow-up inspections.



5.2 Selected Best Management Practices

ID-1 Illicit Discharge Ordinance

ID-1

Illicit Discharge Ordinance



BMP Description:

The City will review and revise, if needed, relevant ordinance(s) to provide authority to: prohibit illicit discharges and illicit connections, respond to and contain other releases, and prohibit dumping or disposal of materials other than stormwater.

Responsible Department Code Enforcement	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities	
	Year		Measurable Goal	
Supporting Departments	1	Enforce ordinance 100%. Review ordinance once a year and update if applicable by September 30, 2019.		
Legal Public Works- Stormwater	2	Enforce ordinance 100%. Review ordinance once a year and update if applicable by September 30, 2020.		
	3	Enforce ordinance 100%. Review ordinance once a year and update if applicable by September 30, 2021.		
	4	Enforce ordinance 100%. Review ordinance once a year and update if applicable by September 30, 2022.		
	5	Enforce ordinance 100%. Review ordinance once a year and update if applicable by September 30, 2023.		



ID-2 <u>Citizen Complaint Webpage</u>

ID-2	Citizen Complaint Webpage				
Tell Us About an Issue You'd Like Us to Fix Would you like to report an issue that you would like the City to take care of? This can include Code Enforcement, Asimal Control of other issue. If you would like to report an STREET LIGHT OUTAGE, piease use https://records.googleton.org/sems/ReportStreet_UpCollage. PLEAGE_WOTE_If this is an emergency, piease call 9-1-1. This form is not by monitores Mondow - Fafore, 2004M - 5.00PM. If you are experiencing a utility outage after hours please call (\$312-80-3558) You can submit this form amorphously, but if you see the Code you would like a follow up. Any field marked with an asterisk "is a required field. Date Date Disc captured on form submission First Name Last Name Last Name Email If you would like as to contact you with the status of the Issue, please litere either your email address or phone number What would you like for us to help you with? Add Photos (optional) Photo of the Issue Citizose File)		s issue, please give	BMP Description: The City will continue using written procedures for responding to illicit discharge complaints, maintaining a complaint hotline webpage and promote the hotline to the residents.		
Respons Departm	ent	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities	
		Year		Measurable Goal	
Support Departm	_	1	The City will utilize the Citizen Complaint webpage to respond to 100% of reportable illicit discharges by September 30, 2019.		
Police- Control Public Work Communic	orks,	2	The City will utilize the Citizen Complaint webpage to respond to 100% of reportable illicit discharges by September 30, 2020.		
		3	The City will utilize the Citizen Complaint webpage to respond to 100% of reportable illicit discharges by September 30, 2021.		
		4	The City will utilize the Citizen Complaint webpage to respond to 100% of reportable illicit discharges by September 30, 2022.		
		5	The City will utilize the Citizen Complaint webpage to respond to 100% of reportable illicit discharges by September 30, 2023.		



ID-3 Storm Drain and Outlet Mapping

ID-3

Storm Drain and Outlet Mapping



BMP Description:

The City will continue to update the City's storm drain map as needed with identification of new, altered, and newly discovered storm drain features.

Responsible Department Public Works- Stormwater		rget ience	Residents, public service employees, businesses, commercial and industrial facilities	
	Year	Measurable Goal		
Supporting Departments	1	Map 100% of Berry Creek Watershed by September 30, 2019.		
GIS	2	Map 100% of Chandler Branch – Brushy Creek watershed by September 30, 2020.		
	3	Map 100% of Cottonwood Creek – Brushy Creek watershed by September 30, 2021. Map 100% of Mileham Branch – San Gabriel River watershed by September 30, 2022. Map 100% assets from new development by September 30, 2023.		
	4			
	5			



ID-4 The Collection Station

ID-4



The Collection Station

BMP Description:

The City will continue to manage contractual services of operation provided by the City's solid waste contractor and promote use of The Collection Station. Refine communication efforts to increase citizen participation in proper disposal.

Responsible Department Environmental Services		rget ience	Residents, public service employees, businesses, commercial and industrial facilities	
	Year		Measurable Goal	
Supporting Departments	1	The City will host or partner with another MS4 for one household hazardous waste event annually and report 100% of items receive at the event by September 2019.		
Public Works	2	The City will host or partner with another MS4 for one household hazardous waste event annually and report 100% of items received at the event by September 2020.		
	3	The City will host or partner with another MS4 for one household hazardous waste event annually and report 100% of items received at the event by September 2021.		
	4	The City will host or partner with another MS4 for one household hazardous waste event annually and report 100% of items received at the event by September 2022.		
	5	hazardous	rill host or partner with another MS4 for one household waste event annually and report 100% of items received int by September 2023.	



ID-5 Staff IDDE Education

ID-5

Staff IDDE Education



BMP Description:

The City will provide education on elimination and detection for illicit discharge and dumping issues.

Responsible Department Public Works - Stormwater	Target Audience		Public Service Employees	
	Year		Measurable Goal	
Supporting Departments	1		all employees, once a year, list of attendees / tember 30, 2019.	
Police-Code	2	1 training for all employees, once a year, list of attendees / dates by September 30, 2020.		
	3	1 training for all employees, once a year, list of attendees / dates by September 30, 2021. 1 training for all employees, once a year, list of attendees / dates by September 30, 2022.		
	4			
	5	•	all employees, once a year, list of attendees / tember 30, 2023.	



ID-6 <u>Illicit Discharge Investigations</u>

5

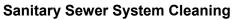
2023.

ID-6 **Illicit Discharge Investigations BMP Description:** The City will continue to respond to complaints utilizing the complaint hotline and will track investigations. Responsible **Target** Residents, public service employees, businesses, **Department** commercial and industrial facilities **Audience** Code Enforcement Year Measurable Goal Supporting List 100% of investigation types and locations by September 30, 1 **Departments** 2019. Public Works -List 100% of investigation types and locations by September 30, 2 Stormwater 2020. Environmental Services List 100% of investigation types and locations by September 30, 3 **Customer Care** 2021. List 100% of investigation types and locations by September 30, 4 2022. List 100% of investigation types and locations by September 30,



ID-7 Sanitary Sewer System Cleaning

ID-7





BMP Description:

The City's water services department will continue to clean the sanitary sewer collection system

Responsible Department GUS Util	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities	
	Year		Measurable Goal	
Supporting Departments	1	Clean 30,0	00 feet of sanitary sewer by September 30, 2019.	
Public Works- Stormwater	2	Clean 30,000 feet of sanitary sewer by September 30, 2020.		
	3	Clean 30,0	000 feet of sanitary sewer by September 30, 2021.	
	4	Clean 30,0	000 feet of sanitary sewer by September 30, 2022.	
	5	Clean 30,0	000 feet of sanitary sewer by September 30, 2023.	



6.0 MCM #3 - Construction Site Stormwater Runoff Control

The Construction Site Runoff minimum control measure consists of BMPs that focus on the reduction of pollutants in any stormwater runoff to the City's MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The BMPs describe the legal authority mechanism (to the extent allowable under State or local law); procedures for site plan review and project acceptance; procedures for site inspection and enforcement; development of a list of appropriate erosion and sediment control BMPs; construction community education; citizen complaint hotline and construction site stormwater runoff employee training.

6.1 Regulatory Requirements

The MS4 operator, to the extent allowable under State and local law, must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more of land. The MS4 operator is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from sites where the construction site operator has obtained a waiver from permit requirements under NPDES or TPDES construction permitting requirements based on a low potential for erosion. The Program requires operators of construction sites (one acre or greater or common plan of development) to select, install, implement, and maintain stormwater control measures. The program must include the development and implementation of an ordinance or other regulatory mechanism to require install of erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable, under local, state, and federal law.

- I. The program must include the development and implementation of, at a minimum, an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and local law.
- II. Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.3(b)(1)-(7)

All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4s.

(a). Erosion and Sediment Controls – Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.

The permittee shall develop written procedures that describes initiating and completing stabilization measures for construction sites

The permittee must:

- (i). Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters
- (ii). Minimize the exposure of building material, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater





(iii). Minimize the discharge of pollutants from spills and leaks.

The permittee shall ensure that all small and large construction sites have developed a stormwater pollution prevention plan (SWP3) under the TPDES TXR1500 general permit.

- III. Prohibited Discharges The following discharges are prohibited:
 - (1). Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control
 - (2). Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials:
 - (3). Fuels, oils, or other pollutants, used in vehicle and equipment operation and maintenance;
 - (4). Soaps or solvents used in vehicle and equipment washing; and
 - (5). Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPS.

IV. Construction Plan Review

To the extent allowable by state, federal, and local law, all permittees shall maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:

- (a). The site plan reviews procedures must incorporate consideration of potential water quality impacts.
- (b). The permittee may not approve any plans unless the plans contain appropriate site specific construction site control measures that, at a minimum, meet the requirements described in Part III.B.3.(a) or in the TPDES CGP, TXR150000
- V. Construction Site Inspections and Enforcement

To the extent allowable by state, federal, and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall at a minimum conduct inspection of sites operated by the permittee or is contractors and that are located in the permittees regulated area.

VI. Information submitted by the Public

All permittees shall develop, implement, and maintain procedures for receipt and consideration of information submitted by the public.

VII. MS4 Staff Training

All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site

inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers. Procedures have been developed for MS4 staff.

VII. Construction Site Inventory

In addition to the requirements described in Parts II.B.3(b)(1)-(7) above, permittees who operate Level 3 and 4 small MS4s shall meet the following requirements:

Construction Site Inventory

Permittees who operate Level 3 and 4 small MS4s shall maintain an inventory of all permitted active public and private construction sites that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. Notification to the small MS4 must be made by submittal of a copy of an NOI or a small construction site notice, as applicable. The permittee shall make this inventory available to the TCEQ upon request.



6.2 Selected Best Management Practices

C-1 Staff Training

C-1

<u>Otan manning</u>



Staff Training

BMP Description:

The City will develop and implement staff training for procedures, regulations and policies.

Responsible Department Public Works- Stormwater	Target Audience		Public service employees	
	Year		Measurable Goal	
Supporting Departments	1		for all employees, once a year, list of attendees / September 30, 2019.	
GUS-Sys. Eng. Building Officials	2	1 training for all employees, once a year, list of attendees / dates by September 30, 2020.		
	3	_	for all employees, once a year, list of attendees / September 30, 2021.	
	4		for all employees, once a year, list of attendees / September 30, 2022.	
	5	_	for all employees, once a year, list of attendees / September 30, 2023.	



C-2 <u>Preconstruction Meetings</u>

C-2

Preconstruction Meetings



BMP Description:

The City will document procedures for plan review. Review and refine plan review and permitting for all projects to add in compliance with the TPDES CGP.

Responsible Department Public Works	Target Audience		Residents, public service employees, businesses, contractors	
Supporting Departments	Year		Measurable Goal	
	1	employee	The Stormwater Management Coordinator or qualified employee will attend 50% of preconstruction meetings to discuss the site plans and SWP3 by September 30, 2019.	
Systems Engineering Building Inspections	2	The Stormwater Management Coordinator or qualified employee will attend 50% of preconstruction meetings to discuss the site plans and SWP3 by September 30, 2020.		
Planning GUS Utilities	3	The Stormwater Management Coordinator or qualified employee will attend 50% of preconstruction meetings to discuss the site plans and SWP3 by September 30, 2021.		
	4	The Stormwater Management Coordinator or qualified employee will attend 50% of preconstruction meetings to discuss the site plans and SWP3 by September 30, 2022.		
	5	employee	nwater Management Coordinator or qualified will attend 50% of preconstruction meetings to see site plans and SWP3 by September 30, 2023.	



C-3 Construction Site Inspection and Enforcement

C-3

Construction Site Inspection and Enforcement



BMP Description:

The City developed procedures for inspecting construction sites for erosion, sedimentation, and other sources of stormwater pollution. The City will document procedures for site inspection and enforcement. Review and update procedures for all projects to add in compliance with the TPDES CGP.

Responsible Department GUS-Sys Eng. Building Inspection	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities	
	Year		Measurable Goal	
Supporting Departments Planning Public Works- Stormwater	1	sedimenta	0% of active construction sites for erosion, ation, and other sources of stormwater pollution by September 30, 2019.	
	2	Inspect 50% of active construction sites for erosion, sedimentation, and other sources of stormwater pollution annually by September 30, 2020.		
	3	Inspect 50% of active construction sites for erosion, sedimentation, and other sources of stormwater pollution annually by September 30, 2021.		
	4	sedimenta	0% of active construction sites for erosion, ation, and other sources of stormwater pollution by September 30, 2022.	
	5	sedimenta	0% of active construction sites for erosion, ation, and other sources of stormwater pollution by September 30, 2023.	



7.0 MCM #4 - Post-Construction Stormwater Management in New Development and Redevelopment

The Post-Construction Stormwater Management minimum control measure consists of BMPs that focus on the prevention or minimization of water quality impacts from new development and redevelopment projects that disturb greater than or equal to one acre. The BMPs describe the legal authority mechanism (to the extent allowable under State or local law); plan review, project acceptance and site inspection procedures; permanent erosion and sediment control BMPs and long term operation and maintenance plan to address post construction runoff from new development and redevelopment projects.

7.1 Regulatory Requirements

To the extent allowable under State and local law, the MS4 operator must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in disturbance of one or more acres, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. The MS4 Operator shall:

- (a) Post-Construction Stormwater Management Program
- (1) All permittees shall develop, implement, and enforce a program to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.
 - (2) All permittees shall use, to the extent allowable under state, federal, and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitation, health, and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approval to TCEQ. Newly regulated permittees shall have the program element fully implemented by the end of the permit term.
- (b) All permittees shall document and maintain records of enforcement and make them available for review by TCEQ.
- (c) Long-Term Maintenance of Post-Construction Stormwater Control Measure

All measures shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:

(1) Maintenance performed by the permittee (See Part III.B.5)



(2) Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as the offices of the owner or operator, and made available for review by the small MS4.

Procedures have been developed to ensure long-term operation and maintenance post construction stormwater control measures.

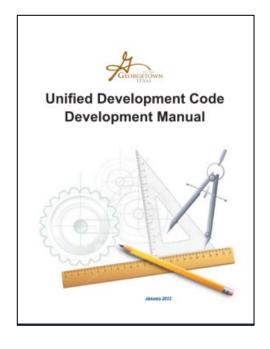


7.2 Selected Best Management Practices

PC-1 Review of Permanent BMPs

PC-1





BMP Description:

The City will document procedures and standards for plan review. Conduct plan review for all new construction and redevelopment projects to ensure designs address permanent water quality measures in the most sensitive areas of the City (i.e. Edwards Aquifer Recharge Zone).

Responsible Department GUS-Sys Eng.	Target Audience		Commercial and industrial facilities, construction site personnel, businesses	
	Year		Measurable Goal	
Supporting Departments	1		00% of construction plans. Review procedures and applicable by September 30, 2019.	
Transportation	2	Review 100% of construction plans. Review procedures and update if applicable by September 30, 2020.		
Planning	3		00% of construction plans. Review procedures and applicable by September 30, 2021.	
	4		00% of construction plans. Review procedures and applicable by September 30, 2022.	
	5		00% of construction plans. Review procedures and applicable by September 30, 2023.	



PC-2 Private Water Quality Pond Education

PC-2

Private Water Quality Pond Education



BMP Description:

The City will offer an annual educational workshop to HOA and private pond owners on maintenance and reporting requirements of the state. Create and update education materials in accordance with changes in state regulations.

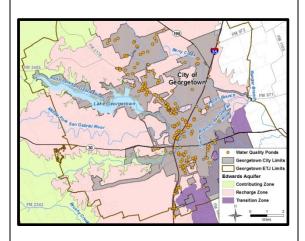
Responsible Department Public Works- Stormwater	Target Audience		Commercial and industrial facilities, construction site personnel, businesses	
	Year		Measurable Goal	
Supporting Departments	1	Create education program, meet with 100% of City Departments because 30, 2019.		
GUS-Sys Eng.Planning	2	Review education materials once a year and update if applicable. Hold 1 event, once a year, track list of event/dates by September 30, 2020.		
Eng. Rammig	3		ucation materials once a year and update if applicable. Hold nce a year, track list of event/dates by September 30, 2021.	
4 1 event, once a		Review education materials once a year and update if applicable. Hold 1 event, once a year, track list of event/dates by September 30, 2022.		
			ucation materials once a year and update if applicable. Hold nce a year, track list of event/dates by September 30, 2023.	



PC-3 Long-Term Maintenance of PC BMPs

PC-3

Long-Term Maintenance of PC BMPs



BMP Description:

The City will continue to use processes and procedures to ensure maintenance by initial owner and subsequent property owners by requiring developers to create a maintenance plan in the Edwards Aquifer Recharge and Contributing Zone and require that plan be recorded in the Williamson County property records.

Responsible Department GUS-Sys Eng.Planning		rget ience	Commercial and industrial facilities, construction site personnel, businesses	
	Year		Measurable Goal	
Supporting Departments	1	The city will review 100% of procedures and continue maintenance plans by September 30, 2019.		
Planning Public Works - Stormwater Legal	2	The city will review 100% of procedures and continue tracking maintenance plans by September 30, 2020.		
	3	The city will review 100% of procedures and continue tracking maintenance plans by September 30, 2021.		
	4	,	vill review 100% of procedures and continue tracking nce plans by September 30, 2022.	
	5	,	vill review 100% of procedures and continue tracking nce plans by September 30, 2023.	



PC-4 Post-Construction Stormwater Management Ordinance

PC-4 Post-Construction Stormwater Management Ordinance



BMP Description:

The City will continue to inspect city owned ponds and perform operation and maintenance. The City will inspect and keep documentation of city-owned ponds.

Responsible Department Public Works- Stormwater	Target Audience		Commercial and industrial facilities, construction site personnel, businesses		
	Year		Measurable Goal		
Supporting Departments	1		Inspect 100% of City owned ponds. Document pond inspection and make/schedule repairs accordingly by September 30, 2019		
Parks Code	2		Inspect 100% of City owned ponds. Document pond inspections and make/schedule repairs accordingly by September 30, 2020		
Enforcement Facilities	3	Inspect 100% of City owned ponds. Document pond inspand make/schedule repairs accordingly by September 30			
	4		00% of City owned ponds. Document pond inspections /schedule repairs accordingly by September 30, 2022.		
	5		00% of City owned ponds. Document pond inspections /schedule repairs accordingly by September 30, 2023.		



8.0 MCM #5 - Pollution Prevention/Good Housekeeping for Municipal Operations

The Pollution Prevention/Good Housekeeping minimum control measure consists of BMPs that focus on training and on the prevention or reduction of pollutant runoff from municipal operations. Municipal operations that are subject to operation and maintenance programs include park and open space maintenance, street and road maintenance, fleet and building maintenance, stormwater system maintenance, new construction and land disturbances, municipal parking lots, vehicle and equipment maintenance and storage yards, waste transfer stations and salt/sand storage locations. The BMPs describe the specific maintenance activities, schedules and long term inspection procedures for controls to reduce floatables and other pollutants from municipal operations; employee training program to prevent and reduce stormwater pollution from municipal operations; procedures for the proper disposal of waste removed from the MS4; structural control maintenance programs and developing a list of the municipally-owned industrial facilities which require other stormwater discharge permits.

8.1 Regulatory Requirements

A section within the SWMP must be developed to establish an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

I. Good Housekeeping and Best Management Practices (BMPs)

Housekeeping measures and BMPs (which may include new or existing structural and non-structural controls) must be identified and either continued or implemented with the goal of preventing or reducing pollutant runoff from municipal operations. Examples of municipal operations and municipally owned areas include, but are not limited to:

- (1) park and open space maintenance;
- (2) street, road, or highway maintenance;
- (3) fleet and building maintenance;
- (4) stormwater system maintenance;
- (5) new construction and land disturbances.
- (6) municipal parking lots;
- (7) vehicle and equipment maintenance and storage yards;
- (8) waste transfer stations; and
- (9) salt/sand storage locations.

II. Training

A training program has been developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing stormwater pollution from municipal operations. Materials may be developed, or obtained from the EPA, states, or other organizations and sources. Examples or descriptions of training materials being used must be included in the SWMP. MS4 must maintain training attendance records. Procedures were created to inform or train staff involved in implementing pollution prevention and good housekeeping measures. MS4 staff are trained utilizing the Stormwatch Municipal Storm Water Pollution Prevention training by Excal Visual along with other training opportunities throughout the year.



III. Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP. The permittee shall develop written procedures that define the frequency of inspections and how they will be conducted.

IV. Facility Inventory

The MS4 must keep an active inventory of all permittee owned facilities along with stormwater controls. In the inventory, all facilities must have permits, authorizations, and registration numbers. The following facilities to be on the list. The list must be made available for TCEQ. The following facilities on the inventory list are:

- A). Composting facilities
- B). Equipment storage and maintenance facilities
- C). Fuel storage facilities
- D). Hazardous waste disposal facilities
- E). Hazardous waste handling and transfer facilities
- F). Incinerators
- G). Landfills
- H). Materials storage yards
- I). Pesticide Storage facilities
- J). Buildings, including schools, libraries, police stations, fire stations, and office buildings
- K). Parking Lots.
- L). Golf courses;
- M). Swimming Pools
- N). Public Works yards
- O). Recycling facilities
- P). Salt storage facilities
- Q). Solid waste handling and transfer facilities
- R). Street repair and maintenance sites
- S). Vehicle storage and maintenance yards
- T). Structural Stormwater controls.

V. Disposal of Waste

Waste removed from the MS4 and waste collected from maintenance of stormwater structural controls must be properly disposed. Procedures have been written for proper waste disposal. Equipment and vehicle washing will stay at the Georgetown Municipal Complex in the designated wash area or will be taken to a local car wash.

VI. Contractor Requirements and Oversight

Contractors hired by the MS4 to perform maintenance of permittee-owned facilities must be contractually required to comply with all stormwater, good housekeeping, and stormwater management procedures. All contractors must have oversight to ensure contractors are in compliance with appropriate control measures and SOPs. Procedures must be retained on site and made available for review from TCEQ.

VII. Municipal Operations and Maintenance Activities



a). Assessment of permittee-owned operations

All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including, not limited to:

- (i). Road and parking lot maintenance, including such areas as pothole repair; pavement marking, sealing, and re-paving;
- (ii). Bridge maintenance, including such areas as re-chipping, grinding, and saw cutting;
- (iii). Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas;
 - (iv). Right-of-way maintenance, including mowing, herbicide and pesticide application and planting vegetation.
- b). All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides, hydrocarbons, such a benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).
- c). All permittees shall develop and implement a set of pollution prevention measure that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following examples:
 - (i). Replacing materials and chemicals with more environmentally benign materials or methods
 - (ii). Changing operations to minimize the exposure or mobilization of pollutants to prevent them from entering surface water; and
 - (iii.) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters
- d). Inspections of pollution prevention measures All pollution prevention measures implemented at permittee-owned facilities must be visually inspected to ensure they are working properly. The permittee shall develop written procedures that describes frequency of inspections and how they will be conducted. A log of inspections must be maintained and made available for review by the TCEQ upon request.

VIII. Structural Controls

If BMPs include structural controls, maintenance of the controls must be performed by the permittee and consistent with maintaining the effectiveness of the BMP. The permittee shall develop written procedures that define the frequency of inspections and how they will be conducted.

Additional Requirements for Level 3 and 4 small MS4s:

In addition to the requirements described in Parts.B.5(b)(1)-(6) above, permittees who operate Level 3 or 4 small MS4s shall meet the following requirements:

(1). Storm Sewer System Operation and Maintenance



- a). Permittees who operate Level 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the maximum extent practicable the collection of pollutants in catch basins and other surface drainage structures
- b). Permittees who operate Level 3 and 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increase inspection (for example, areas with recurrent illegal dumping).

IX. Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads

Permittees who operate Level 3 or 4 small MS4s shall implement an O&M program that includes at least a street sweeping and cleaning program or an equipment BMP such as an inlet protection program. A street sweeping program will be utilized and streets will be swept annually. The permittee will develop a procedure to dewater and properly dispose street sweeper waste appropriately, to prevent from re-entering the MS4.

X. Facility Assessment

Permittees who operate Level 3 or 4 small MS4s shall perform the following facility assessment in the regulated portion of the small MS4 operated by the permittee:

- a). Assessment of Facilities' Pollutant Discharge Potential The permittee shall review the facilities identified in Part III.B.5(b) once per permit term for their potential to discharge pollutants into stormwater
- b). Identification of high priority facilities Based on the Part III.B.5.(c)(4)a. assessment, the permittee shall identify as high priority those facilities that have a high potential to generate stormwater pollutants and shall document this in a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to waterbodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.
- c). Documentation of Assessment Results The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittees' assessments. The documentation must include the results of the permittees initial assessment, and any identified deficiencies and corrective actions taken. The permittee will develop specific stormwater management standard operation procedures for high priority facilities.

XI. Inspections

Permittees who operate Level 3 or 4 small MS4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.



8.2 Selected Best Management Practices

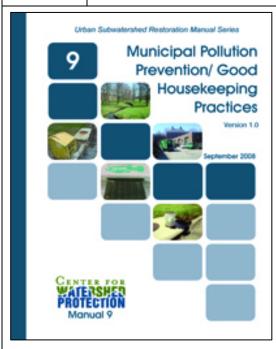
GH-1 Permittee-Owned Facilities and Control Inventory

GH-1 **Permittee-Owned Facilities and Control Inventory** BMP Description: The City will update the City's maps to include City owned facilities and controls. Responsible Target **Department** Public service employees Audience **GIS** Measurable Goal Year **Supporting** 1 Maintain/update database once a year by September 30, 2019. **Departments** Maintain/update database once a year by September 30, 2020. 2 **Facilities** GUS Sys. Eng. Police-Code Maintain/update database once a year by September 30, 2021. 3 Parks Maintain/update database once a year by September 30, 2022. 4 Maintain/update database once a year by September 30, 2023. 5



GH-2

Staff Training and Reporting



BMP Description:

The City will develop and implement staff training for procedures, regulations and policies.

Responsible Department Public Works- Stormwater	Target Audience		Public service employees	
	Year		Measurable Goal	
Supporting Departments	1 training for all employees, once a dates by September 30, 2019.		for all employees, once a year, list of attendees / September 30, 2019.	
GUS Sys. Eng.	2	1 training for all employees, once a year, list of attendees / dates by September 30, 2020.		
Code Enforcement Building Inspection	3	1 training for all employees, once a year, list of attendees / dates by September 30, 2021.		
	4	1 training for all employees, once a year, list of attendees / dates by September 30, 2022.		
	5		for all employees, once a year, list of attendees / September 30, 2023.	



GH-3 City Facility Ponds

GH-3





BMP Description:

The City will inspect city facility ponds to keep ponds in working condition and improve water quality in waterbodies within City limits. A list will be kept up to date of all facility ponds.

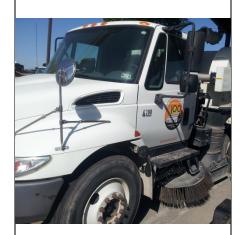
Responsible Department Public Works		rget ience	Residents	
	Year		Measurable Goal	
Supporting Departments	1	None, this goal did not exist. None, this goal did not exist.		
GIS	2			
	3	None, this goal did not exist. This goal was submitted to TCEQ at beginning of Year 4.		
	4	The City will inspect 25% of City facility ponds once a year and will eigerform or schedule maintenance and repairs by September 30, 202		
	5		l inspect 25% of City facility ponds once a year and will either schedule maintenance and repairs by September 30, 2023.	



GH-4 Street Sweeping

GH-4

Street Sweeping



BMP Description:

The City will continue sweeping public streets and high priority facilities, document disposal procedure. The City will continue the Street Sweeping Program to reduce the amount of sediment and associated pollutants discharged to the City's MS4 from roadways. The City has a street inventory to identify the streets that will be swept throughout the year. Additional sweeping services are performed as needed for accidents, citizen requests, special events or leaf collection.

Responsible Department Public Works- Stormwater	Target Audience	Public service employees
	Year	Measurable Goal
Supporting Departments	1	Sweep 100% of streets in City, once a year, by September 30, 2019.
NA	2	Sweep 100% of streets in City, once a year, by September 30, 2020.
	3	Sweep 100% of streets in City, once a year, by September 30, 2021.
	4	Sweep 100% of streets in City, once a year, by September 30, 2022.
	5	Sweep 100% of streets in City, once a year, by September 30, 2023.



GH-5 Inlet Drain and Structure Cleaning

GH-5

Inlet Drain and Structure Cleaning





BMP Description:

The City will continue system cleaning, develop a list of potential problem areas and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping)

Responsible Department Public Works- Stormwater		rget ience	Public service employees	
	Year		Measurable Goal	
Supporting Departments	1		et of high priority areas, clean 200 inlets by er 30, 2019.	
NA	2	Update list of high priority areas, clean 200 inlets by September 30, 2020.		
	3	Update list of high priority areas, clean 200 inlets by September 30, 2021. Update list of high priority areas, clean 200 inlets by September 30, 2022. Update list of high priority areas, clean 200 inlets by September 30, 2023.		
	4			
	5			



GH-6 Facility Assessments and SOPs

GH-6

Facility Assessments and SOPs



BMP Description:

The City will inspect City owned facilities to determine which ones have a high potential to release pollutants. The City will review Standard Operating Procedures (SOPs) specific to each identified high priority facility.



Responsible Department Facilities	Target Audience		Public service employees	
	Year		Measurable Goal	
Supporting Departments	1	1 Pools, Georgetown Municipal Comp	inspect the Parks Administration Building, Georgetown Swimming getown Municipal Complex, Georgetown Animal Shelter, and Rec Center (5 inspections total) annually by September 30, 2019.	
Public Works- Stormwater	2	The City will inspect the Parks Administration Building, Georgetown Swimming Pools, Georgetown Municipal Complex, Georgetown Animal Shelter, and Georgetown Rec Center (5 inspections total) annually by September 30, 2020.		
Parks and Rec Communications	3	Pools, Geor	inspect the Parks Administration Building, Georgetown Swimming getown Municipal Complex, Georgetown Animal Shelter, and Rec Center (5 inspections total) annually by September 30, 2021.	
	4	Pools, Ğeor	inspect the Parks Administration Building, Georgetown Swimming getown Municipal Complex, Georgetown Animal Shelter, and Rec Center (5 inspections total) annually by September 30, 2022.	
	5	Pools, Geor	inspect the Parks Administration Building, Georgetown Swimming getown Municipal Complex, Georgetown Animal Shelter, and Rec Center (5 inspections total) annually by September 30, 2023.	



GH-7 Licensed Applicators

GH-7 **Licensed Applicators** BMP Description: To reduce water quality impacts from fertilizers and pesticides, maintain licensed applicators by the Texas Department of Agriculture with annual training and certification on proper storage and application techniques. Responsible Department **Target** Public service employees **Audience Parks** Public Works Year Measurable Goal Supporting Obtain 100% of license renewals for annual report by 1 **Departments** September 30, 2019. Obtain 100% of license renewals for annual report by 2 none September 30, 2020. Obtain 100% of license renewals for annual report by 3 September 30, 2021. Obtain 100% of license renewals for annual report by 4 September 30, 2022.



5

September 30, 2023.

Obtain 100% of license renewals for annual report by

GH-8 Dog Station Management

GH-8

Dog Station Management



BMP Description:

The City has installed over 65 dog bag stations with trash bins throughout city-owned parks to reduce the amount of pet waste entering the MS4. Bags are replaced depending on rate of consumption. The city continues to educate residents on the impact of pet waste in the MS4.

Responsible Department Parks	Target Audience		Parks, Residents			
	Year					
Supporting Departments	1	None. A NOC is filed after submittal of Year 1 Annual Report to TCEQ.				
None	2	Replace 30,000 bags in dog stations at city parks by September 30, 2020.				
	3	Replace 30,000 bags in dog stations at city parks by September 30, 2021.				
	4	Replace 30,000 bags in dog stations at city parks by September 30, 2022.				
	5	Replace 30,000 bags in dog stations at city parks by September 30, 2023.				



GH-9 Transfer Station Improvements

GH-9

Transfer Station Improvements



BMP Description:

The Transfer Station will undergo construction and improvements for the growth of City of Georgetown. These improvements will help with educating the public along with improving water quality.

Responsible Department Environmental Services	Target Audience		Public service employees, Residents			
	Year		Measurable Goal			
Supporting Departments	1	None. A NOC is filed after submittal of Year 1 Annual Report to TCEQ.				
Public Works- Stormwater	2	Make improvements on the one existing pond at transfer station by September 30, 2020.				
Facilities GUS Sys. Eng	3	Install one outdoor classroom on site by September 3				
	4	Install one rain harvesting system if economically feasible. If not, install two rain harvesting barrels by September 30, 2022.				
	5	Identify three different uses for the closed landfill space by September 30, 2023.				



GH-10 Dead Animal Program

GH-10

Dead Animal Program



BMP Description:

The City removes dead animals to prevent the spread of parasites, diseases, and pathogens from entering the MS4. Work orders will be created and tracked for animal carcass removal.

Responsible Department Public Works- Stormwater	Target Audience		Public service employees				
	Year		Measurable Goal				
Supporting Departments	1	None. A None to TCEQ.	None. A NOC is filed after submittal of Year 1 Annual Report to TCEQ.				
Public Works- Transportation	2	The City will respond to 100% of work orders for dead animals by September 30, 2020.					
	3	The City will respond to 100% of work orders for dead animals by September 30, 2021.					
	4	The City will respond to 100% of work orders for dead animals by September 30, 2022.					
	5	The City will respond to 100% of work orders for dead animals by September 30, 2023.					



9.0 MCM #7 - Authorization for Municipal Construction Activities

The City has chosen not to develop the Authorization for Municipal Construction Activities, the optional seventh minimum control measure.

10.0 Impaired Waterbodies

Discharges of the pollutant(s) of concern to impaired water bodies or which there is a TCEQ and EPA approved TMDL are not eligible for this general permit unless they are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA approved CWA 303(d) list or the Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(s) which lists category 4 and 5 water bodies, as not meeting Texas Surface Quality Standards.

10.1 Impaired Water Bodies and Total Maximum Daily Load (TMDL)

As of February 2019, there are no impaired waterbodies with a TMDL in City of Georgetown.

The permittee shall check annually, in conjunction with preparation of the annual report, whether an impaired water within its permitted area has been added to the latest EPA approved 303(d) list or the Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d) which lists the category 4 and 5 water bodies. Within two years following the approval date of the new list(s) of impaired waters, the permittee shall comply with the requirements of Part II.D.4.(b) (with the exception of (b)(1)c), and identify any newly listed waters in the annual report (consistent with Part IV.B.2.f) and SWMP (consistent with Part II.A.2.f) submitting a notice of change (NOC).

10.2 Impaired Waterbodies without an approved TMDL

The permittee shall also determine whether the permitted discharge is directly to one or more water quality impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. If the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform the following activities.

- 1) Discharging a pollutant of Concern
- a) The permittee shall determine whether the MS4 may be a source of the pollutant(s) of concern by referring to the CWA 303(d) list and then determining if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern.
- b) If the permittee determines that the small MS4 may discharge the pollutant(s) of concern to an impaired waterbody without an approved TMDL, the permittee shall ensure that the SWMP includes focused BMPS, along with corresponding measurable goals, that the permittee will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body.
- c) In addition, the permittee shall submit an NOC to amend the SWMP in accordance with Part II.E.6 to include any additional BMPS to address the pollutant(s) of concern. This requirement does not apply to BMPs implemented to address impaired waters that are listed after permit authorization pursuant to II.D.4.

Creek Name	Segment #	Parameter	TMDL
San Gabriel/North Fork San Gabriel River	1248	Chloride, TDS	None
Mankins Branch	1248C	Bacteria	None



10.3 Impairment for Bacteria

One of the impaired waterbodies in the City is Mankins Branch, which the pollutant of concern is bacteria. The City shall identify potential significant sources and develop BMPs to focus reducing the amount of bacteria entering the waterbody. The City may utilize the BMPS listed in Part II D 4(a)(5) or proposed alternative BMPS as appropriate for reducing the contribution of bacteria to the impaired waterbody.

1). Sanitary Sewer Systems

- (i). Make improvements to sanitary sewers to reduce overflows
- (ii). Address lift station inadequacies
- (iii). Improve reporting of overflows
- (iv). Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease
- 2) On-site Sewage Facilities (for entities with appropriate jurisdiction)
 - (i). Identify and address failing systems
 - (ii). Address inadequate maintenance of On-site Sewage Facilities (OOSFs)
- 3) Illicit Discharges and Dumping

Place additional effort to reduce waste sources of bacteria; for example, from septic systems, grease traps, and grit traps

4) Animal Sources

Expand existing management programs to identify and target animal sources such as zoos, pet waste, and horse stables.

5) Residential Education

Increase focus to educate residents on:

- (i). Bacteria discharging from a residential site either during runoff events or directly
- (ii). Fats, oils, and grease clogging sanitary sewer lines and resulting overflows
- (iii). Maintenance and operation of decorative ponds
- (iv). Proper disposal of pet waste



10.4 Selected Best Management Practices

IW-1 Mankins Branch (Bacteria)

IW-1

Mankins Branch (Bacteria)



BMP Description:

Determined the MS4 is contributing to bacteria in Mankins Branch. The City will educate residents on activities, which contribute to the impact of water quality and aquatic life.

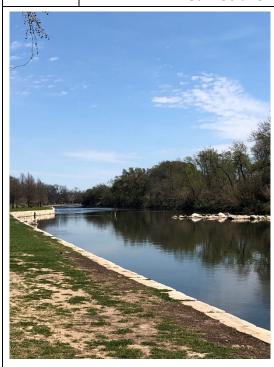
Responsible Department Public Works	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities				
	Year		Measurable Goal				
Supporting Departments	1	applicable. C	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions related to activities, which contribute to bacteria in rivers by September 30, 2019.				
Parks GUS-Utilities Communicatio ns Environmental Services	2	applicable. C	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions related to activities, which contribute to bacteria in rivers by September 30, 2020.				
	3	applicable. C	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions related to activities, which contribute to bacteria in rivers by September 30, 2021.				
	4	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions related to activities, which contribute to bacteria in rivers by September 30, 2022.					
	5	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions related to activities, which contribute to bacteria in rivers by September 30, 2023.					



IW-2 San Gabriel/North Fork San Gabriel River (TDS)

IW-2

San Gabriel/North Fork San Gabriel River (TDS)



BMP Description:

Determined total dissolved solids (TDS) is being contributed by the MS4. The City will educate residents on different pollutants associated with TDS and the impact TDS has in our water quality and aquatic life.

Responsible Department Public Works	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities			
	Year		Measurable Goal			
Supporting Departments	1	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to TDS in rivers by September 30, 2019.				
Conservation	2	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to TDS in rivers by September 30, 2020. Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to TDS to rivers by September 30, 2021.				
	3					
	4	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to TDS in rivers by September 30, 2022.				
	5	applicable.	sting outreach materials online once a year and update if Conduct Attitude survey annually and have questions on hich contribute to TDS in rivers by September 30, 2023.			



IW-3 San Gabriel/North Fork San Gabriel River (Chloride)

IW-3

San Gabriel/North Fork San Gabriel River (Chloride)



BMP Description:

Determined chloride is being contributed by the MS4. The City will educate residents on chloride and the impact chloride has in our water quality and aquatic life.

Responsible Department Public Works	Target Audience		Residents, public service employees, businesses, commercial and industrial facilities			
	Year	Measurable Goal Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to chloride in rivers by September 30, 2019				
Supporting Departments	1					
Code Enforcement GUS-Utilities	2	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to chloride in rivers by September 30, 2020.				
	3	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to chloride in rivers by September 30, 2021				
	4	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to chloride in rivers by September 30, 2022.				
	5	Review existing outreach materials online once a year and update if applicable. Conduct Attitude survey annually and have questions on activities, which contribute to chloride in rivers by September 30, 2023				



11.0 Discharges to the Edwards Aquifer Recharge Zone

Discharges of stormwater from regulated small MS4s, and other non-stormwater discharges, are not authorized by this general permit where those discharges are prohibited by 30 TAC Chapter 213 (Edwards Aquifer Rule). New discharges located within the Edwards Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

The permittee's agency-approved WPAPs (City-owned) that are required by the Edwards Aquifer Rule must be referenced in the SWMP. Any Additional plans not mentioned in the SWMP must be referenced in the annual reports. For discharges originating from the small MS4 permitted area, and located on or within ten stream miles upstream of the Edwards Aquifer recharge zone, applicants must also submit a copy of the MS4 NOI to the appropriate MS4 and TCEQ Regional Office.

For Williamson County: Submit the NOI to the following address:

TCEQ, Water Program Manager Austin Regional Office 12100 Park 35 Circle, Bldg. A, Rm 179 Austin, Texas 78753 (512)339-2929

Name	Type of	Plan	RN Number	Date
	Plan	Number		Active
GEORGETOWN MUNICPAL AIRPORT	WPAP	1111040402	RN103887279	05/26/2011
CITY OF GEORGETOWN PECAN BRANCH WWTP EXTENSION	WPAP	11000576	RN102731270	06/09/2017
BRAUN 3 MG ELEVATED STORAGE TANK	WPAP	11001292	RN110500469	11/13/2018
10 th AND 11 th STREET IMPROVEMENTS	WPAP	11001374	RN110588977	01/09/2019



12.0 Record Keeping and Reporting

The City will keep records and follow reporting procedures in compliance with the TPDES General Permit. The record keeping and reporting will allow the City to evaluate the implementation of the SWMP. In the first year of the program, the City developed a report format to follow when completing and submitting their annual report to the TCEQ.

12.1 Record Keeping

The City will retain the following documents for the permit period of five years to comply with the General Permit requirements:

- 1. Copy of the TPDES General Permit TXR040000.
- 2. Records of all data used to complete the NOI.
- 3. Any Notice of Changes (NOC's).
- City's SWMP retained at a location accessible by TCEQ.
- 5. Copy of each annual report.
- 6. Any correspondence with TCEQ.

The original files will be kept at the Georgetown Municipal Complex building (300-1 Industrial Ave, Georgetown, TX 78627). The City will make the NOI and SWMP available to the public if requested to do so in writing. All other records will be provided in accordance with the Texas Public Information Act and Freedom of Information Act. See the General Permit for additional record keeping requirements.

12.2.1 Reporting Requirements

The City will report any noncompliance, which may endanger human health or safety, or the environment to the TCEQ. Within 24 hours of becoming aware of each noncompliance, an oral or fax notification will be sent to the TCEQ regional office. Within five days of becoming aware of each noncompliance, a written report will be sent to the TCEQ Regional office and to the TCEQ Enforcement Division (MC-224). The Written report will contain the following:

- 1. a description of the noncompliance and its cause;
- 2. the potential danger to human health or safety, or the environment;
- 3. the period of the noncompliance, including exact dates and times;
- 4. if the noncompliance has not been corrected, the anticipated time it is expected to continue
- 5. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.



If the City becomes aware that it submitted incorrect information or failed to submit complete and accurate information in any of the reports, records, NOI, NOT or NOC, then the City will promptly correct facts and send notification or information to the TCEQ executive director.

12.2.2 Annual Report

The City will submit a concise annual report to the TCEQ Executive Director within 90 days of the end of each permit year. The City will keep a copy of the annual report in the original files at the Administration Building, which will be readily available for review by authorized TCEQ personnel upon request. An annual report will be prepared whether or not the NOI and SWMP have been approved by the TCEQ. If the City has not received approval of the NOI and SWMP, then this information will be included in the report. The SWMP will be reviewed annually in preparation of the annual report required in Part IV.B.2. Results of the review will be documented in the annual report.

The annual report will include the following:

- (a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), the measurable goals for each of the MCM's, and an evaluation of the success of the implementation of the measurable goals;
- (b) The status of any additional control measures implemented by the City;
- (c) Any MCM activities initiated before permit issuance may be included, under appropriate headings, as part of the first year's annual report;
- (d) A summary of the results of information (including monitoring data) collected and analyzed, if any, during the reporting period used to assess the success of the program at reducing the discharge of pollutants to the MEP;
- (e) A summary of the stormwater activities the City is planning to undertake during the next reporting cycle;
- (f) Proposed changes to the SWMP including changes to any BMPs or any identified measurable goals that apply to the program elements;
- (g) The number of municipal construction activities authorized under this general permit and the total number of acres disturbed.
- (h) The number of non-municipal construction activities that have occurred within the jurisdiction of the City (as given notice to the City by the construction operator);
- (i) An Indication if any requirements of the permit is being satisfied by another government agency;
- (j) A signature and certification by the City that the annual report is in accordance with 30 TAC $\delta\Box$ 305.128.

The annual report will be submitted to the following address (with a copy to the TCEQ Regional Office):

Texas Commission on Environmental Quality Stormwater & Pretreatment Team; MC – 148 P.O. Box 13087 Austin, Texas 78711-3087 **Or electronically** at www.tceq.state.tx.us

