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PFLUGERVILLE

TEXAS

PFLUGERVILLE STORMWATER MANAGEMENT PROGRAM (SWMP)

Phase II Municipal Separate Storm Sewer System

Developed in accordance with the requirements of
TEXAS COMMISSION ON ENVIRONMENTAL
QUALITY -- TEXAS POLLUTANT DISCHARGE
ELIMINATION SYSTEM -- TPDES GENERAL
PERMIT TXR040000

Permit Term:
2013-2018

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Section 1

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Background & Intent

The City of Pflugerville (City) was issued a Phase II Municipal Stormwater Permit (TXR040000) in 2007 by the Texas Commission on Environmental Quality (TCEQ). The Permit authorizes the City to directly discharge from the municipal separate storm sewer system (MS4) to surface and ground waters of the state.

The City's Stormwater Management Program (SWMP) is designed as a comprehensive program to manage the quality of discharges from the MS4.

The organization of the City's SWMP reflects the five core components required by the TCEQ:

1. Public Education, Outreach, and Involvement
2. Illicit Discharge Detection and Elimination
3. Construction Site Stormwater Runoff Control
4. Post-Construction Stormwater Management in New Development and Redevelopment
5. Pollution Prevention and Good Housekeeping for Municipal Operations

The City's SWMP will be updated and submitted to the TCEQ annually as required. Electronic copies of updates will be available on the City's stormwater web page.

The Permit deadline for final SWMP development is June 11, 2014.

The public is encouraged to participate in the development & implementation of the SWMP. Please contact the Department of Engineering with questions, comments or suggestions.

Mailing Address
P O Box 589
Pflugerville, TX 78691
Phone: 512-990-6300
Email: stormwater@pflugervilletx.gov
Website: www.pflugervilletx.gov

Category Designation

MS4 operators are now defined by categories, or levels, that are based on the population served within the 2010 Urbanized Area (UA). The level of a small MS4 may change during the permit term based on the MS4 operator acquiring or giving up regulated area, such as by annexing land or if land is annexed away. However, the level of a small MS4 will not change during the permit term based on population fluctuation. Pflugerville qualifies as a Level 3 operator according to the definition below:
Level 3: Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,000 within a UA (TXR040000 page 12 5.(c))

Interlocal Agreement

The extraterritorial jurisdiction (ETJ) of the City of Pflugerville currently extends for a distance of two miles from the corporate boundary. The ETJ is not considered within the jurisdiction of the City's MS4. Most of the ETJ is within Travis County, which is developing its own Phase II MS4 permit and SWMP. As necessary, the City will coordinate with Travis County to ensure consistency between MS4 jurisdictions. Initial maps pertaining to the MS4 are contained in Appendix A. However, as the City grows and development occurs within the City, the MS4 jurisdictional boundaries will change. Revisions to the initial maps will be made periodically, and any such changes will be incorporated into the SWMP in Appendix B.

Public Notice

The City will publish notice regarding the MS4 Permit in accordance with the General Permit Part II, Section E, 12(a) – (j). The City will await a final acceptance from the Executive Director after considering public comment as applicable.

TMDL– (Total Maximum Daily Load)

Gilleland Creek TMDL

In Gilleland Creek (Segment 1428C), bacteria concentrations have been noted to be elevated at times, indicating a possible health risk for people who swim or wade in them—activities called "contact recreation" under the state's definitions for water quality.

The City is a stakeholder in the implementation plan (I-Plan) set forth by the TCEQ. This I-Plan is designed to guide activities that will achieve the water quality goals for Gilleland Creek as defined in the adopted TMDL. All I-Plans are implemented using an adaptive management approach in which measures are periodically assessed for efficiency and effectiveness.

The Gilleland Creek I-Plan includes the six stakeholder-developed management measures and one control action described in the following sections.

- **Management Measures**

1) Identify, prioritize, inspect, and bring into compliance malfunctioning OSSFs.
2) Restore and preserve riparian zones to protect water quality.
3) Determine the effectiveness of retrofitting existing storm-water detention basins to also perform as water quality facilities to reduce bacteria concentrations.
4) Partners coordinate to develop a general campaign to raise public awareness of unregulated contributions of bacteria pollution, specifically pet waste.
5) Develop and adopt equivalent water quality ordinances between government jurisdictions.
6) Conduct visual inspection of wastewater collection systems within 100 ft from the centerline of Gilleland Creek and its tributaries.

- **Control Action**

  - Monitor and report effluent E. coli concentrations from WWTFs (Wastewater Treatment Facility).

TMDL

Onsite Sewage Disposal Systems

The TCEQ has jurisdictional authority of onsite sewage disposal systems located within the Pflugerville area.

Pollutant of Concern

The pollutant of concern for Gilleland Creek TMDL is bacteria; therefore, the City has the option of referring to the I-Plan for appropriate BMPs. The permit requires BMPs throughout the SWMP to address areas relating to specific TMDL measures.

Targeted Controls

The City's BMPs have addressed the following requirements in relation to the TMDL I-Plan and the MS4 General Permit:

A. Sanitary Sewer Systems *(BMP 18)*
   - Make improvements to sanitary sewers to reduce overflows;
   - Address lift station inadequacies;
   - Improve reporting of overflows; and
   - Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease

B. Illicit Discharges and Dumping *(BMP 7)*
   - Place additional effort to reduce waste sources of bacteria
   - Conduct preliminary & follow up inspections of illicit discharges to identify areas of possible increased focus efforts.

C. Animal Sources *(BMP 9)*
   - Expand existing management programs to identify and target animal sources such as pet waste. The City has implemented pet waste stations throughout City parks and complies yearly data highlighting any changes with the program.

Targeted Controls continued on page V

TMDL

D. Residential Education *(BMP1)*
   - Education on bacteria runoff, sanitary sewer line overflows, and pet waste is provided throughout the City's website under various department webpages including social media as well. The City also provides materials to Homeowners Associations promoting practices such as responsible pool drainage techniques.

Assessment of Progress

The City will assess improvements to water quality by using available data for segments and assessment units of water bodies from other reliable sources. The current data is available from the Lower Colorado River Authority (LCRA), therefore, the City will monitor data according to the scheduled input period set forth by the LCRA monitoring station. Progress will be reported in the annual report. If no progress is observed by the third year, a new approach will be developed focusing on sources of pollutant and will develop alternative focused BMPs. The City is participating in an I-plan that uses an aggregate waste load allocation for MS4 stormwater sources.

Benchmark: *WLARegulatedStormWater = 1.51 x 1013 cfu/day*

Section 2

BMP # Best Management Practices (BMP)

1. Educational Pamphlet
2. Storm Water Web Site
3. Drop-by-Drop Water Conservation Program
4. Storm Drain Markers
5. Storm Sewer Map
6. MS4 Staff Training
7. Illicit Discharge Inspections
8. Erosion Control/Stormwater Ordinance
9. Gilleland Creek TMDL Implementation Plan Stakeholders Group
10. Stormwater Reporting Line/Email
11. Construction Plan Review
12. Construction Site Inspection and Enforcement
13. Permanent Stormwater Controls
14. Waste Disposal
15. Municipal Operation & Maintenance Activities
16. Contractor Oversight
17. Storm Sewer System Operation and Maintenance
18. Facility Standard Operating Procedures
19. Sanitary Sewer Inspection Program

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
1	Educational Pamphlet	Public Education, Outreach, and Involvement

DESCRIPTION: The City will continue to provide & distribute educational material to residents via the City's Development Services counter and website. The brochures include storm water education in general per the TCEQ general permit guidelines. Other various flyers include information specifically relating to fertilizer, herbicide, and pesticide usage, proper disposal of household hazardous waste and oils, and other educational and participatory opportunities. Materials shall also be distributed at City events such as the July 4th celebration at Lake Pflugerville.

MEASUREBLE GOALS: Continue the public education program to educate Citizens on City's MS4 permit and stormwater activities.

TARGET AUDIENCE:
General Public, Businesses, Public Employees

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Maintain distribution of educational information at least one time per year	Completed	Ongoing
Document the amount of information distributed	Completed	Ongoing
Document audience intended to be reached	Completed	Ongoing
Revise, update, and replace educational materials as needed	TBD	TBD

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
2	Storm Water Web Site	Public Education, Outreach, and Involvement

DESCRIPTION: The City will maintain storm water-related content for the City's web site and update stormwater education information as needed. The web site provides specific information regarding the City's TPDES Phase II program, educational & volunteer opportunities, and links to other local, state, and national storm water-related web sites. Contact information concerning the City's stormwater program is also available on the webpage as well. Additional information provided throughout the City's website includes water conservation practices for homeowners, encouragement of proper lawn/garden care,

MEASURABLE GOALS: Keep the website updated with additional public outreach material related to stormwater education on an ongoing basis

TARGET AUDIENCE:
General Public, Construction Personnel, Commercial Business

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE/FREQUENCY	IMPLEMENTATION STATUS
Revise and update the storm water website as needed.	Annually	Ongoing
Post a copy of the SWMP on website	February 2016	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
3	Drop-by-Drop Water Conservation Program	Public Education, Outreach, and Involvement

DESCRIPTION: The City has established the Drop by Drop landscape rebate program to promote water conservation through landscaping by offering an incentive to residents for planting native or drought tolerant trees, shrubs, plants and grasses. This program reduces the need for costly fertilizers and pesticides which can pollute water resources. The rebate program also advocates easy, efficient, economic and environmentally sound water use and conservation. Water conservation handouts are also available to the public providing tips on reducing usage. Annual events such as "Nature Pfest" provide opportunities for coordination with school groups.

TARGET AUDIENCE:
General Public

MEASURABLE GOALS: Continue to promote water conservation programs to reduce the pollution in stormwater runoff.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE/FREQUENCY	IMPLEMENTATION STATUS
Continue to promote water conservation programs to educate public on stormwater issues and to reduce pollution in stormwater runoff	Ongoing	Ongoing
Revise, update, and replace material as needed	Annually	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
4	Storm Drain Markers	Public Education, Outreach, and Involvement

DESCRIPTION: The City installs decals on existing storm drain inlets with the message "No Dumping Drains to Creek." This helps promote awareness about storm drain outflow. The curb markers are aluminum disks that have a considerable life span. New development construction contractors are required to install these decals before close of a project. Existing neighborhood decals are installed by City Public Works staff.

TARGET AUDIENCE:
General Public, Construction Personnel, Development Community

MEASURABLE GOAL: Document the number of storm drain decals installed on new development projects.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE/FREQUENCY	IMPLEMENTATION STATUS
Label the residential storm drains on newly developed projects	Annually	Ongoing
Begin documenting the number of labels installed with new development	December 2015	
Identify budget requirements to acquire drain markers	Annually	Ongoing
Document markers installed or replaced by city staff on existing inlets	January 2016	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
5	Storm Sewer Map	Illicit Discharge Detection/Elimination Pollution Prevention /Good Housekeeping Municipal Operations

DESCRIPTION: The City developed a stormwater system map that shows all known separate storm sewer outfalls, receiving waters, BMPs maintained by the City, tributary conveyances, associated drainage areas, and zoning land use.

MEASURABLE GOALS: The City maintains a comprehensive stormwater map and associated GIS datasets, identifying where City owned facilities and stormwater controls are located.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Document any updated information, including the percent of outfalls identified and the percent of drainage areas or system features mapped if applicable	Completed	Ongoing
Incorporate the storm drain system map to facilitate the City's investigation of any identified illicit discharges or hazardous materials spills.	December 2015	
Maintain a map of City owned facilities and stormwater controls physical locations	Completed	Ongoing

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
6	MS4 Staff Training	Illicit Discharge Detection/Elimination Construction Stormwater Runoff Control Poll. Prev. Housekeeping Municipal Ops

DESCRIPTION: The City ensures that all municipal field staff responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, improper disposal, and illicit connections are trained to conduct these activities. Erosion/Sediment Control Training is also conducted on an annual basis. Employees involved in implementing pollution prevention and good housekeeping practices are trained appropriately as well. Follow up training will be provided as needed to address changes in procedures, techniques, or requirements. The City will document and maintain records of training provided and staff trained.

MEASURABLE GOALS: The City will provide training on an annual basis. Illicit Discharge Training and Erosion/Sediment Control training are the main topics covered during each session given.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Provide annual training on the hazards associated with illicit discharges, addressing spills, and Municipal Operations.	Completed	Ongoing
Document and maintain records of training provided and staff trained.	Completed	Ongoing
Initiate erosion/sediment control training session annually	Completed	Ongoing
Update, as necessary, the City's written procedures and checklist for identifying Illicit Discharges	December 2016	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
7	Illicit Discharge Inspections	Illicit Discharge Detection and Elimination

DESCRIPTION: The City's existing program for the identification and elimination of illicit discharge sources is comprised of spill and complaint response, field investigation, and pollution abatement. The City will continue preliminary & follow up inspections of the storm sewer system to identify not only the presence and sources of illicit connections and illegal dumping activities, but any other unauthorized discharges that can adversely impact water quality. The City currently has established procedures for tracing and removing sources of illicit discharges. Public reporting is encouraged through the City's website.

MEASURABLE GOALS: Maintain the current program, document outfalls screened, observations made, and corrective actions taken. Evaluate and update, as necessary, the City's procedures to eliminate detected illicit discharges.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Conduct illicit discharge inspections at the identified regulated outfalls.	Completed	Ongoing
Track all investigations and document 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.	Completed	Ongoing

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
8	Stormwater Ordinance	Illicit Discharge Detection/Elimination Construction Stormwater Runoff Control Post-Construction Stormwater Management

DESCRIPTION: An ordinance prohibiting the unauthorized discharge of polluted storm water to the MS4 from construction sites one acre or greater in size, or less than one acre but part of a larger common plan was adopted by City Council in 2012. Construction site contractors are required to implement appropriate erosion and sediment control BMPs and to control waste, such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste that may adversely affect storm water quality. A SWP3 is required for all projects where one or more acres will be disturbed.

MEASURABLE GOALS: Continue the enforcement of a stormwater pollution control ordinance.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Review existing ordinance to determine if it meets requirements of new permit	June 2015	
Draft ordinance revisions as necessary	August 2015	
Adopt modified/updated ordinance as necessary	November 2015	
Enforce any new elements of ordinance, as needed	June 2016	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
9	Participate in the Gilleland Creek TMDL Implementation Plan Stakeholders Group	Illicit Discharge Detection and Elimination Construction Stormwater Runoff Control Public Education, Outreach, and Involvement

DESCRIPTION: The City remains an active participant in the stakeholder group tasked with the development of an Implementation Plan for the Gilleland Creek Bacteria Total Maximum Daily Load project. The process is managed by the Lower Colorado River Authority on behalf of the Texas Commission on Environmental Quality. The City will continue to work within this stakeholder group to complete the Implementation Plan. In reference to the requirements for TMDL within the MS4 permit, the City addresses Sanitary Sewer Systems, Illicit Discharges & Dumping, and Residential Education in subsequent BMPs throughout the SWMP. Pet waste stations are implemented throughout City parks as well.

TARGET AUDIENCE: General Public

MEASURABLE GOALS: Include focused BMPs addressing the Implementation Plan for the Gilleland Creek Bacteria TMDL project that reflects the best interests of the City of Pflugerville in regard to the reduction of bacteria loading to the portion of Gilleland Creek that flows through the City and is consistent with the goals and objectives of the Stormwater Management Program.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Participate in annual sub-committee meetings of the I-Plan adopted by the TCEQ.	Complete	Ongoing
Assess improvements in water quality by using available data provided by TCEQ	November 2017	
Enforce any new elements of ordinance, as needed	December 2017	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
10	Stormwater Reporting Line/Email	Illicit Discharge Detection and Elimination Construction Stormwater Runoff Control Public Education, Outreach, and Involvement

DESCRIPTION: A stormwater reporting line & email address was established during the previous permit term. The City encourages its citizens to solicit information related to illicit discharges, illegal dumping, complaints, and general comments regarding Pflugerville's storm water management program. The Reporting Line is 512-990-6400 and the email is stormwater@pflugervilletx.gov

MEASURABLE GOALS: Identify trends (i.e., repeated reports of illegal dumping in certain areas of the City), general needs for reporting line improvement, and areas requiring additional educational or enforcement effort to protect storm water quality.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Educate the public about the existence of the stormwater reporting line through various Public Education BMPs.	Complete	Ongoing
Document the number of calls received, nature of call, and action taken, if any.	Complete	Ongoing
Dispatch calls to appropriate department for proper response	Complete	Ongoing

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
11	Construction Plan Review	Construction Stormwater Runoff Control Post-Construction Stormwater Management

DESCRIPTION: The procedures for site plan review that incorporate considerations of water quality impacts by proposed construction activity have been implemented during the previous MS4 permit term. Included in the procedures is information received from the public on proposed construction activities, requirements for inspection of construction sites, enforcement of control measures dictated in the stormwater pollution control ordinance, & stormwater control details. Inlet protection standards were also incorporated in the City's Engineering Design Guidelines manual. All sites are inspected by the Stormwater Inspector prior to start of construction to ensure all approved erosion/sediment control measures have been implemented per the site plan. Pursuant to CGP TXR150000, a SWP3 is required for applicable projects.

MEASURABLE GOALS: Revise the site plan review process to incorporate water quality aspects in the initial development phase as appropriate.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Review & update, as necessary, existing construction site plan process.	August 2015	
Revise the site plan review procedure in accordance with the TPDES permit.	November 2017	
Review ongoing programs, ordinance, and codes relative to construction site stormwater pollution prevention requirements.	As necessary	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
12	Construction Site Inspection and Enforcement	Construction Stormwater Runoff Control Post-Construction Stormwater Management

DESCRIPTION: Inspectors use written procedures that outline the inspection and enforcement requirements in accordance with CGP. City inspectors conduct construction site inspections to determine if control measures have been selected, installed, implemented, & maintained. An inventory of construction sites is updated on a weekly basis to track the status of plan reviews, inspections, correction notices, and final project approvals. An inspection report is produced after each inspection and kept within program records. Follow up actions are based on site inspection findings. Prohibited discharges include concrete washout, fuels, oils, soaps, solvents, and dewatering activities.

MEASURABLE GOALS: Review and refine the inspection procedures used during construction to inspect & enforce the construction general permit measures on projects exceeding the 1-acre land disturbance threshold.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Review and update the inspection program for construction, as necessary	January 2018	
Enforce SWP3 requirements in accordance with TPDES standards	Complete	Ongoing
Document inspections, instances of enforcement activity, and the reason(s) for non-compliance	Complete	Ongoing
Take necessary follow-up enforcement actions to ensure compliance	Complete	Ongoing

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
13	Permanent Stormwater Controls	Construction Stormwater Runoff Control Post-Construction Stormwater Management Good Housekeeping for Municipal Operations

DESCRIPTION: Review and update the City's standard requirements of adequate long-term operation, maintenance, and protection of storm water quality in new and redeveloped areas. The City's current requirement addresses long term maintenance of drainage structures, schedule of maintenance, and accessibility of the structure. Wet ponds are regulated in accordance with TCEQ regulations. All activities will be documented as necessary. *See Appendix B for Post Construction Stormwater Management Plan standards.*

MEASURABLE GOALS: Ensure long term maintenance by implementing a plan addressing requirements for structural control measures.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Revise the current contract to include a maintenance agreement emphasizing operation & maintenance of appropriate facilities to process storm water, resulting in discharge to the MS4 in quantity and quality acceptable to the city.	December 2016	
Review & revise existing ordinance and/or Engineering Design Guidelines to determine if it meets requirements of new permit	March 2017	
Adopt a maintenance agreement	June 2017	
Adopt ordinance modifications	November 2017	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
14	Waste Disposal	Pollution Prevention/Good Housekeeping for Municipal Operations

DESCRIPTION: Waste removed and collected from the City's MS4 as a result of maintenance of stormwater structural controls, must be properly disposed to meet the requirements of the general permit Part III.A.6.d. The City has developed procedures for the proper disposal of waste including dredge spoil, accumulated sediments and floatable.

MEASURABLE GOALS: Update waste disposal procedures to meet requirements of the general permit, as applicable.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Review existing procedures relative to waste disposal from MS4	June 2016	
Revise procedures to meet requirements of new permit as necessary	January 2017	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
15	Municipal Operation & Maintenance Activities	Pollution Prevention/Good Housekeeping for Municipal Operations

DESCRIPTION: A general assessment and inventory of the municipal operations that have a potential to adversely impact storm water quality will be conducted by the City. Also, the City will identify "High Priority" facilities that have a high potential to generate storm water pollutants. Existing facility Standard Operating Procedures (SOP) will be modified as necessary. The City will also identify pollutants of concern that have a potential from O&M activities. Pollution prevention measures at City owned facilities will be inspected and/or developed ensuring proper functionality. If BMPs include structural controls, maintenance of the controls will be performed at a frequency determined by the City and consistent with maintaining the effectiveness of the BMP.

MEASURABLE GOALS: Evaluate municipal operations with the potential to impact storm water quality. Identify pollutants of concern. Inspect pollution prevention measures at City owned facilities. The assessment documentation will include the results of the initial assessment, and any identified deficiencies and corrective actions taken. Implement stormwater controls at high priority facilities that address good housekeeping, de-icing/anti-icing storage, fleet operations, and equipment/vehicle washing.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Identify pollutants of concern discharges from O&M activities	June 2015	
Conduct assessments of municipal operations & document assessment results	August 2015	
Identify "high priority" city facilities based on assessments and document findings	February 2016	
Begin implementation of the recommended BMPs for facilities evaluated in prior years.	November 2017	
Inspect pollution prevention measures at City owned facilities and provide documentation	January 2018	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
16	Contractor Oversight	Pollution Prevention/Good Housekeeping for Municipal Operations

DESCRIPTION: The City will begin contractually requiring contractors hired by the City to perform maintenance activities on City owned facilities to comply with all of the stormwater control measures, good housekeeping practices, & facility specific stormwater management operating procedures.

MEASURABLE GOALS: Provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Draft oversight procedures regarding contractor maintenance activities at City owned facilities.	June 2016	
Adopt procedures and update as necessary	January 2017	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
17	Storm Sewer System Operation and Maintenance	Pollution Prevention/Good Housekeeping for Municipal Operations

DESCRIPTION: The City has established an O&M maintenance that removes floatables, sediment, and other debris from the storm sewer system to reduce storm water pollution and minimize drainage impediments. The overall goal of the O&M program is to reduce, to the maximum extent practicable, the collection of pollutants in catch basins and other surface drainage structures. In lieu of a street sweeping program, the City requires inlet protection measures during road construction, & throughout surrounding active construction to minimize pollutant discharges to storm drains and creeks.

MEASURABLE GOALS: Develop an O&M program to reduce the collection of pollutants and develop a list a of potential problem areas that include maintenance yards and chemical storage areas.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Evaluate the need to update the City's O&M program in accordance with the General Permit.	May 2016	
Update existing schedule to conduct visual inspections of the City's storm sewer system such as catch basins, ditch maintenance, culvert and inlet cleanouts, and construction site waste.	August 2016	
Identify potential problem areas & create list	December 2017	
Prioritize increased inspections per the problem areas list	February 2018	
Document areas inspected, observations made, problems reported, and maintenance/updates performed	November 2018	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
18	Facility Standard Operating Procedures	Pollution Prevention/Good Housekeeping for Municipal Operations

DESCRIPTION: The City has established facility specific stormwater management SOPs. This is an existing document containing information pertaining to high priority facilities identifies BMPs that are installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility. Copies of the SOPs are maintained and available for review upon request.

MEASURABLE GOALS: Maintain and update the City's SOPs in accordance with General Permit specifications.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Review existing facility SOPs & determine if modifications are needed.	September 2017	
Update existing SOPs as necessary	December 2017	

No.	BEST MANAGEMENT PRACTICE	APPLICABLE MINIMUM CONTROL MEASURES
19	Sanitary Sewer Inspection Program	Pollution Prevention/Good Housekeeping for Municipal Operations

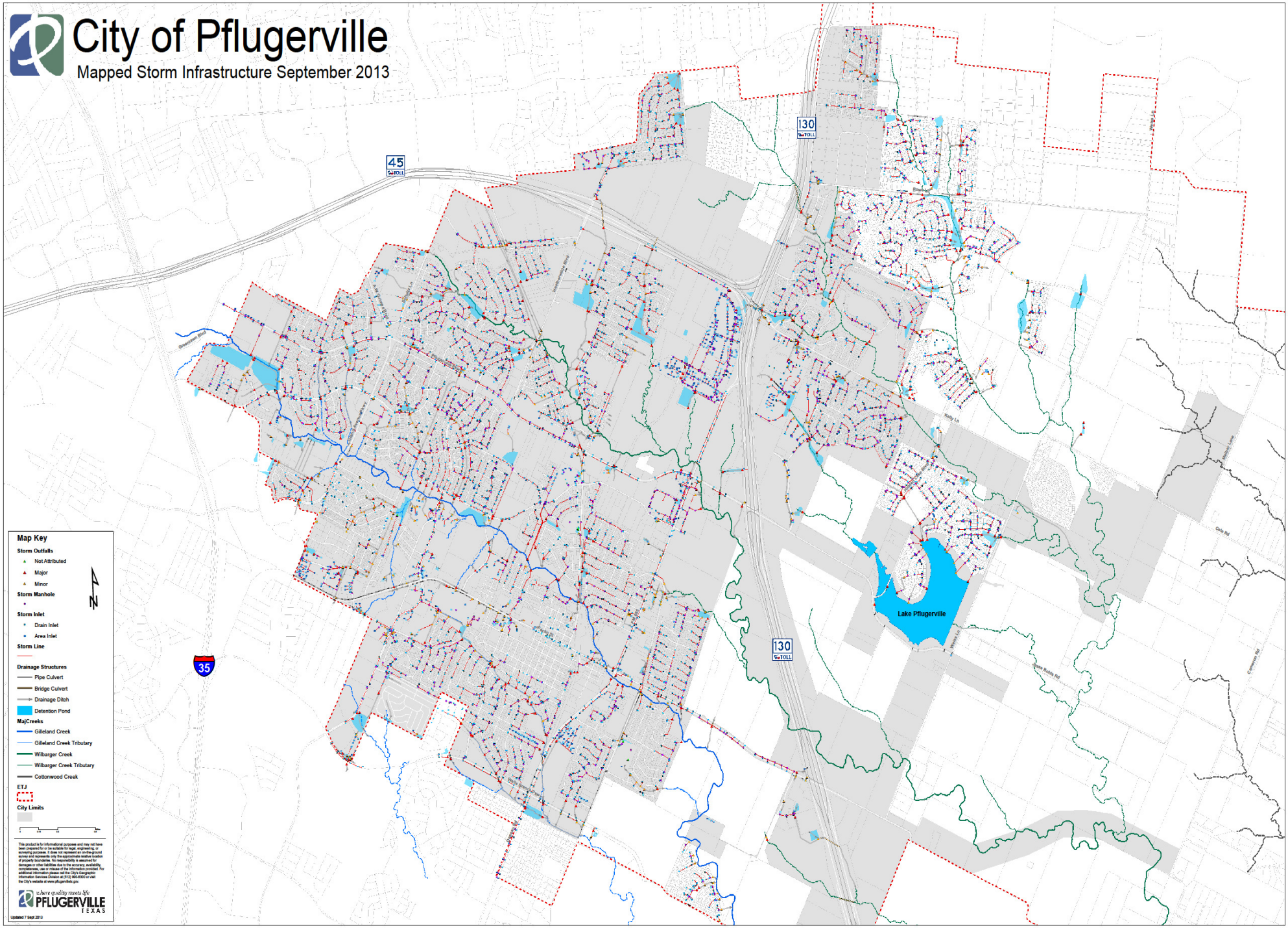
DESCRIPTION: The City has an ongoing program to periodically inspect wastewater collection lines, manholes, and lift stations. Currently the frequency of inspection is at least once every five years. Inspections include the videotaping of lines to determine integrity and identify problem areas. The City will continue with the current program as part of the illicit discharge detection and elimination control measure. The City will evaluate the current program to determine if additional measures should be taken.

MEASURABLE GOALS: The ongoing inspection of wastewater lines in accordance with the existing program. In addition, measurable goals will include additional wastewater line inspection measures, if it determined that additional measures are needed to meet the requirements of this control measure.

IMPLEMENTATION MILESTONE	TARGET COMPLETION DATE	IMPLEMENTATION STATUS
Inspect wastewater lines within the City in accordance with the current plan	Complete	Ongoing
Evaluate the current program to determine if additional measures are appropriate	August 2016	
Implement new measures, as necessary	August 2017	

Appendix A

Storm Sewer Map


City of Pflugerville
Mapped Storm Infrastructure September 2013
45
130
130
35
Lake Pflugerville
Map Key
Storm Outfalls
Not Attributed
Major
Minor
Storm Manhole
Storm Inlet
Drain Inlet
Area Inlet
Storm Line
Drainage Structures
Pipe Culvert
Bridge Culvert
Drainage Ditch
Detention Pond
MajCreeks
Gilleland Creek
Gilleland Creek Tributary
Wilbarger Creek
Wilbarger Creek Tributary
Cottonwood Creek
ETJ
City Limits
where quality meets life
PFLUGERVILLE
TEXAS

Appendix B

Post Construction Stormwater Management Plan Requirements

City of Pflugerville Engineering Design Guidelines DG7-13 POLLUTION CONTROL

DG7.4.5 POST CONSTRUCTION STORM WATER MANAGEMENT PLAN

The following shall be addressed when permanent BMPs have been installed during construction:

A. The Developer shall prepare a post construction maintenance and operation manual that describes the function and operation for each permanent stormwater facility to ensure compliance with the City of Pflugerville Engineering Design Guidelines and Construction Standards.
B. The Developer shall prepare a schedule for when and how often inspection will occur to ensure proper function of the stormwater facility. The schedule shall also include periodic inspections to ensure proper performance of the facility between scheduled clean outs.
C. The Developer shall ensure that all stormwater facilities undergo, at the minimum, an annual inspection to document the maintenance and repair needs and ensure compliance with the requirements of this ordinance and accomplishments of its purposes.
D. The program shall require that controls are in place that will infiltrate evapotranspire, or harvest and use stormwater from the site to meet the performance standards as determined by the City of Pflugerville to protect water quality.