

Grand Prairie  
T E X A S



# City of Grand Prairie &

Dallas County Flood Control District #1

## TPDES Phase II Small MS4 General Permit Annual Report

Year 5: January 1, 2018~ December 31, 2018

**City of Grand Prairie  
&  
Dallas County Flood Control District #1  
Phase II (Small) MS4 Year 5 Annual Report  
TPDES General Permit Number TXR040000**

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## A. General Information

**Municipality/Authorization #:** City of Grand Prairie/ TXR040065

**District/Authorization #:** Dallas County Flood Control District #1/ TXR040255

**Annual Reporting Year:** Year 5 Reporting Period, Calendar Year: January 1, 2018 – December 31, 2018

**MS4 Operator Level:** City of Grand Prairie: Level 4

**MS4 Operator Level:** Dallas County Flood Control District #1: Level 2

**Name of MS4/Permittee:** City of Grand Prairie and Dallas County Flood Control District #1

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## B. Status of Compliance with the MS4 GP and SWMP

### 1. Permit conditions compliance status:

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	x		
Permittee is currently in compliance with recordkeeping and reporting requirements.	x		
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	x		

**2. Each of the Year 5 BMPs was assessed as appropriate. See table below for more information:**

<i>MCMs</i>	<i>BMP#</i>	<i>BMP Name</i>	<i>BMP Description</i>	<i>BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.</i>
1: Public Education, Outreach, and Involvement	1.1	HHW Program	Reduction of the unauthorized disposal of household hazardous waste will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.	Yes. Encourages the proper disposal of hazardous waste and informs citizens of when and where they can dispose of waste.
1: Public Education, Outreach, and Involvement	1.2	Pet Waste	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach.	Yes. Give-a-ways, PSAs, and brochures target the appropriate audience and encourage proper disposal of pet waste.
1: Public Education, Outreach, and Involvement	1.3	Environmental Workshop	Pollution Prevention (P2) measure concepts are promoted to industries to reduce waste generated and potential sources of stormwater pollution.	Yes. Surveys indicate that information helps facilities comply.
1: Public Education, Outreach, and Involvement	1.4	Commercial/Industrial Floatables Education	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections.	Yes. Educational materials discuss methods for reducing floatables. Reaches the appropriate audience as brochures are distributed during inspections, classes, workshops, and at the Development Center.
1: Public Education, Outreach, and Involvement	1.5	Information for ARBs	Awareness of the impact of the automotive sector's pollutants on water quality will be integrated into existing activities through the distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.	Yes. Compliance has increased.

1: Public Education, Outreach, and Involvement	1.6	School Curriculum	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.	Yes. The City purchased 69 English and 27 Spanish replacement Major Rivers Educational Packets for GPISD. This program emphasizes the importance of stormwater pollution controls to young students who in turn may relay this information to their older parents/guardians.
1: Public Education, Outreach, and Involvement	1.7	Interactive Watershed Model	Demonstrate to multiple age groups the effects of various residential and commercial pollutants on stormwater quality.	Yes. Effective method of teaching the concept of a watershed; however, the model has limited outreach capabilities.
1: Public Education, Outreach, and Involvement	1.8	Utility Bill Insert	Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.	Yes. This is the most widely read city publication. Nineteen (19) stormwater related articles were published and distributed during this reporting period.
1: Public Education, Outreach, and Involvement	1.9	Multimedia Education	Promote watershed awareness for citizens, City staff, and visitors using multiple types of media, including a website, City's cable channel, and Facebook.	Yes. Promotes watershed awareness to Grand Prairie citizens through Grand Prairie TV, the City's website, and Facebook.
1: Public Education, Outreach, and Involvement	1.10	Non-English	Ensure educational materials are translated into Spanish, as needed.	Yes. There is a high population of only Spanish speaking citizens in Grand Prairie.
1: Public Education, Outreach, and Involvement	1.11	Visitor Education	Provide education featuring water quality issues for Grand Prairie visitors.	Yes. Website visited by anyone with access to the internet.
1: Public Education, Outreach, and Involvement	1.12	Drain Markers	Install storm drain markers "Protect Our Water, Don't Dump" to promote awareness of the storm drain system.	Yes. Increases awareness of the storm drain system to citizens and to those installing markers. 140 storm drain makers were placed during this reporting period.
1: Public Education, Outreach, and Involvement	1.13	Educational Event	Hold an interactive educational event that promotes stormwater BMPs.	Yes. Event brings awareness to stormwater issues and reaches hundreds of residents in one day.

1: Public Education, Outreach, and Involvement	1.14	HHW Events	Encourage citizens to dispose of HHW properly by participating in City hosted events.	Yes. Actively allows citizens to participate and dispose of HHW properly. The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period. During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.
1: Public Education, Outreach, and Involvement	1.15	Mailing Lists	Maintain mailing list of ARB and industrial facilities and mail out informative material.	Yes. Increases ability to reach targeted audiences consistently.
1: Public Education, Outreach, and Involvement	1.16	Annual Awards	Encourage industrial facilities to obtain industrial permit as required by the SIC code.	Yes. Mandates stormwater compliance to achieve recognition.
1: Public Education, Outreach, and Involvement	1.17	Clean Rivers on Website	Stream monitoring information is made available for review on the Clean Rivers Program website. Access to this site will be provided through the City's website.	Yes. Reaches only those perusing the City's stream monitoring website; however, once on the Clean Rivers site, citizens are able to better understand water quality issues.
1: Public Education, Outreach, and Involvement	1.18	Lawn and Garden	Efforts will be made to encourage lawn and garden low maintenance concept into existing education programs throughout the city through the purchase and distribution of educational materials and other promotions. Low maintenance garden concepts will be maintained and/or created on City properties.	Yes. Reaches only those perusing website or seeking to understand SmartScape demonstration gardens, but increases awareness of alternative chemicals and benefits to planting native species.
1: Public Education, Outreach, and Involvement	1.19	Don't Bag It	Encourage participants to mulch grass and yard clippings as a compost instead of application of commercial fertilizers.	Yes. Encourages a reduction in potential storm water contaminants such as fertilizers, insecticides and herbicides, while preserving valuable landfill space.

1: Public Education, Outreach, and Involvement	1.20	H2O Line	Produce and distribute a newsletter to selected industrial sectors and automotive related businesses featuring stormwater topics.	Yes. Reminds industrial facilities of reporting deadlines and gives them BMP information to increase compliance with industrial stormwater permit. Newsletters were distributed to 453 industrial businesses during this reporting period.
1: Public Education, Outreach, and Involvement	1.21	Auto Watch	Create and distribute a water quality and code enforcement publication featuring environmental issues specific to automotive related businesses.	Yes. Newsletter containing targeted information, including stormwater BMPs, for automotive sector was distributed to 601 automotive businesses twice a year.
1: Public Education, Outreach, and Involvement	1.22	Construction BMPs	Provide educational materials on BMPs and erosion control for construction site personnel.	Yes. Reaches developers seeking out educational information.
1: Public Education, Outreach, and Involvement	1.23	Public Notice	Comply with federal, state, and local public notice requirements when implementing the SWMP.	Yes. Not applicable.
1: Public Education, Outreach, and Involvement	1.24	Texas Stream Team	Involve volunteers in the stream monitoring process through Texas Stream Team.	Yes. Stream monitors sample at different locations and/or times than the City's stream monitoring. Data collected has the potential to reveal areas needing further monitoring, remediation, and/or enforcement. Three monitors were trained during this reporting period.
1: Public Education, Outreach, and Involvement	1.25	Master Composter	Involve the public in lawn and garden compost waste training that will encourage reductions in fertilizer and pesticide use. Participants receive hands-on training and can become a Certified Master Composter.	Yes. Provides students with practical alternatives to over-applying fertilizer, potentially reducing the amount of excessive nutrients to local waterways. There were eight (8) graduates who completed the requirements of the program in 2018.

1: Public Education, Outreach, and Involvement	1.26	Illegal Dumping Hotline	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 2.10)	Yes. City staffs are made aware of polluted areas that they may have otherwise missed.
1: Public Education, Outreach, and Involvement	1.27	Stakeholder Meetings	Keep citizens and other stakeholders involved in the decision process for managing the Stormwater Management Program.	Yes. Citizens and City staff come together to make most appropriate decisions for SWMP.
1: Public Education, Outreach, and Involvement	1.28	Neighborhood Outreach	Program encourages the involvement of neighborhood associations for the purpose of educating them about stormwater related issues.	Yes. Neighborhood associations are encouraged to form cleanup committees.
1: Public Education, Outreach, and Involvement	1.29	School Outreach	Partnership between the City's Keep Grand Prairie Beautiful Program and a local school district that encourages student and campus participation.	Yes. Gets students and faculty involved in stewardship oriented activities, including Adopt-A-Stream cleanup efforts, storm drain marking projects, water quality monitoring programs and watershed education programs, resulting in the reduction of storm water pollutants.
1: Public Education, Outreach, and Involvement	1.30	Advisory Committees/Task Force Groups	Share information and help develop stormwater programs by participating in stormwater related committees or task force groups through NCTCOG.	Yes. City staffs participate in committees and task force groups in order to share information and develop stormwater programs.
2. Illicit Discharge Detection and Elimination	2.1	GIS MS4 Database	Maintain an updated map of the locations of all outfalls and the names of all receiving US surface waters.	Yes. Map used to trace illicit discharges to waterbodies. Allows for effective remediation of spills, illicit discharges, and SSOs.
2. Illicit Discharge Detection and Elimination	2.2	Priority Areas	Identify priority areas within the city likely to have an illicit discharge.	Yes. Areas within the city that are likely to have an illicit discharge are identified so that monitoring efforts in these areas may increase.



2. Illicit Discharge Detection and Elimination	2.3	Dry Weather Field Screening	Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, into the storm sewer system.	Yes. The City has 463 outfalls that are within the priority area and meet the criteria for a dry weather screening inspection. The City is to inspect 1/3 or approximately 155 of these outfalls during Years 3, 4 and 5 of the permit. In 2016, 219 outfalls were screened for illicit discharges, far exceeding the required number of screened outfalls for Year 3. As a result, 122 outfalls were planned for screening in both Years 4 and 5. In Year 4, 143 outfalls were screened (exceeding goal). In 2018, 57 of the City's outfalls were inspected for anomalies during dry weather screening. Of those screened, 5 were observed with flow; however, only 2 of the outfalls with flow were determined to be illicit discharges requiring remediation.
2. Illicit Discharge Detection and Elimination	2.4	Complaint database	A database is kept of all citizen complaints regarding illicit discharges.	Yes. Tracks spills and creates historical information for assessment.
2. Illicit Discharge Detection and Elimination	2.5	Complaint response	All citizen complaints are to be investigated.	Yes. Creates response mechanism. Incidents such as spills, illicit discharges, or sanitary sewer overflows are mitigated. Thirty (30) spills and two (2) SSOs were investigated and resolved during this reporting period.
2. Illicit Discharge Detection and Elimination	2.6	Illicit Discharge/Spill Procedures	Develop and maintain procedures for responding to illicit discharges and spills.	Yes. Standard operating procedures used for responding to spills. Stormwater pollution incidents are mitigated.
2. Illicit Discharge Detection and Elimination	2.7	Source Investigation and Elimination	Identify and locate the source of illicit discharges and/or spills. Require responsible parties to perform all necessary corrective actions to eliminate the illicit discharge and/or spills.	Yes. Investigation and elimination of polluting sources.

2. Illicit Discharge Detection and Elimination	2.8	Spill response	Coordinate with the Fire Department on emergency spill response, using a private contractor for clean-up and remediation.	Yes. Abates pollutants in our waterbodies.
2. Illicit Discharge Detection and Elimination	2.9	Building Project Review Process	Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.	Yes. Mandates compliance prior to operation.
2. Illicit Discharge Detection and Elimination	2.10	Illegal Dumping Hotline	Encourage citizens to report illicit discharges or violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 1.26)	Yes. City staffs are made aware of polluted areas that they may have otherwise missed.
2. Illicit Discharge Detection and Elimination	2.11	Streams Sampling	Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge.	Yes. Atypical results are investigated and mitigated. Pollutants are reduced to the MEP.
2. Illicit Discharge Detection and Elimination	2.12	SSO Response	Follow the plan created and implemented for the response of Water Utilities and Environmental Services to SSOs. ESD's response ensures the protection of the waterways through professional advice and field testing.	Yes. Ensures the protection of our waterways following an SSO.
2. Illicit Discharge Detection and Elimination	2.13	IDDE Education	Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.	Yes. Stormwater BMP posters, brochures, and videos are used to target the appropriate audience.
2. Illicit Discharge Detection and Elimination	2.14	Educating and Training City Field Staff	Ensure City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training (see also BMP 5.7).	Yes. Ensures City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training.

2. Illicit Discharge Detection and Elimination	2.15	Stormwater Ordinance	Review the stormwater ordinance for necessary revisions and update as needed. The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions. The ordinance also includes a description of local controls and conditions established for common and incidental non-stormwater discharges not considered illicit.	Yes. The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions.
2. Illicit Discharge Detection and Elimination	2.16	Litter Collection	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	Yes. The Litter Crew collected 175.94 tons of litter in 2018, 163.74 tons of litter during 2017, 198.11 tons of litter during 2016, 185.85 tons of litter during 2015, and approximately 129.98 tons of litter in 2014. By preventing litter from remaining in the environment, both surface and groundwater are protected from potential contamination associated with it.
2. Illicit Discharge Detection and Elimination	2.17	Illegal Dumping Clean-up	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	Yes. Clean-up reduces potential pollutants. The City responded to approximately 91 illegal dumping complaints in 2018, 60 illegal dumping complaints in 2017, 139 illegal dumping complaints in 2016, 135 illegal dumping complaints in 2015, and 123 illegal dumping complaints in 2014.
2. Illicit Discharge Detection and Elimination	2.18	Beach Sampling Program	Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water.	Yes. Reduces health risks to citizens. Pollutants are reduced to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels.

2. Illicit Discharge Detection and Elimination	2.19	On Site Sewage System Permitting	On Site sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.	Yes. Failing septic systems are identified and abated. In 2018, zero OSSF complaint was received and no permits were issued. In 2017, one OSSF permit was issued and one complaint was received. In 2016, no OSSFs were permitted and one (1) complaint was received. One (1) permit was issued and one (1) complaint was received during 2015.
2. Illicit Discharge Detection and Elimination	2.20	Auto Inspection Program	Inspect auto-related businesses for water quality issues on an annual basis.	Yes. Enforcement and education encourages businesses to prevent pollutants from coming into contact with stormwater.
2. Illicit Discharge Detection and Elimination	2.21	Grease Trap Pumping	Ensure grease traps are being pumped as required.	Yes. Pumping helps to reduce the number of illicit discharges. During 2016, twenty-five (25) charges were issued to health permit holders for not pumping grease traps, during 2017, fifty-eight (58) charges. In 2018, it was determined that 67 facilities were not in full compliance; these facilities were subjected to further enforcement. During 2018, thirty nine (39) charges were issued to health permit holders for not pumping grease traps.
2. Illicit Discharge Detection and Elimination	2.22	Horse Stables	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.	Yes. Ensures private horse stables are maintained properly so that sources of bacteria are reduced. In 2018, seventeen (17) horse stables were inspected.
2. Illicit Discharge Detection and Elimination	2.23	Sanitary Sewer Systems	Ensure sanitary sewers are functioning properly in order to reduce overflows.	Yes. Maintenance of sanitary sewer systems and lift stations reduces SSOs.

3. Construction Site Stormwater Runoff Control	3.1	Review Construction Plans and Designs	Require designers to include erosion and sediment control measures with approved BMPs in plans and specifications in all projects in accordance with the TPDES Construction General Permit and all local and State regulations.	Yes. Determines the effectiveness of the drainage and erosion control measures in plans and provides comments for revisions to reduce to the maximum extent practicable potential site specific erosion control concerns. During this reporting period there were 91 plan submittals.
3. Construction Site Stormwater Runoff Control	3.2	Earthwork Permit	Issue earthwork permit to grade, grub, clear, fill, or any other form of earth disturbing activity as necessary, to minimize the discharge of pollutants that may impact neighboring properties.	Yes. Prior to any land disturbing activity, all erosion controls must be in place according to the plan. By tracking the number of earthwork permits issued, the City monitors sites and maintains compliance before activities begin. A total of 64 earthwork permits were issued in 2018, 77 earthwork permits issued in 2017, 123 earthwork permits were issued in 2016, and 81 earthwork permits were issued in 2015.
3. Construction Site Stormwater Runoff Control	3.3	Construction Inspection and Enforcement	Assess and revise as needed the current inspection program. Review current staffing and training capabilities and adjust accordingly to comply with the new MS4 General Permit and to the extent allowable by state, federal, and local law. Compliance with the Stormwater Ordinance will be ensured by the use of non-monetary penalties, citations, permit denial, stop work orders, and holding of Certificate of Occupancy until full compliance has been achieved. Inspect construction sites to determine the condition and effectiveness of the required control measures that have been selected, installed, implemented and maintained in accordance with Federal, State, and Local requirements.	Yes. During this reporting period construction site inspections consisted of 3,202 on-site inspections. Of the sites inspected, 67 were found to have compliance issues which were brought into compliance in the regulated time frame.

3. Construction Site Stormwater Runoff Control	3.4	Construction Ordinance	Review current Stormwater Construction Ordinance and Unified Development Code. Revise, modify, and implement as needed to meet the requirements as described in the Small MS4 General Permit.	Yes. In Year 3, the City reviewed the stormwater ordinance and Unified Development Code (UDC) to ensure sediment and erosion control requirements addressed permit requirements. The UDC was revised and implemented in Year 2.
3. Construction Site Stormwater Runoff Control	3.5	Public Input	Implement a program for receiving calls or input regarding sediment, erosion, and/or other construction related activities, routing calls to appropriate personnel for proper response, documenting subject of call for future analysis, and training of staff to follow reporting and response procedures.	Yes. City investigator ensures problem areas are brought back into compliance, thus reducing pollution runoff. City staff conducted sixty (60) drainage complaints in this reporting period.
3. Construction Site Stormwater Runoff Control	3.6	Construction Site Inventory	Develop and maintain a list or inventory of all permitted active construction sites that result in a total land disturbance of one acre or more or that result in a total land disturbance of less than one acre if part of a larger common plan of development or sale that results in a total land disturbance of one acre or more.	Yes. Construction site inventory is developed and maintained. During this reporting period, a total of forty eight (48) construction site activities were inventoried and documented. Forty three (43) of these were non-municipal sites.

4. Post-Construction Management in New Development and Redevelopment	4.1	Development Review Process	Require designers of new site development and redevelopments to include water quality considerations and proposed approved BMPs. Any and all amendments to the site plan review procedures shall be in accordance to the Stormwater Ordinance and post construction operation and maintenance requirements.	Yes. Review of plans is used for the mitigation of impact. The numbers of plans that have been approved reflect the impact on post construction runoff will be minimal to the detention areas as well as to floodplains associated with the site, if applicable. The review process may require several modifications of a drainage plan by the engineer to allow the BMPs to operate at the maximum extent practicable. During this reporting period, the Engineering Division reviewed 32 new and re-development plan submittals.
4. Post-Construction Management in New Development and Redevelopment	4.2	Unified Development Code and Stormwater Ordinance	Re-evaluate and revise the current Unified Development Code and/or Stormwater Ordinances as needed to include requirements and revisions to support water quality objectives and post construction BMP maintenance initiatives.	Yes. In 2015, revisions were made to enhance article 14 of the Unified Development Code (UDC). Council adopted the revisions. The revisions are currently being implemented.
4. Post-Construction Management in New Development and Redevelopment	4.3	Post-Construction Control Measures	Identify, inventory, and inspect post-construction stormwater controls (i.e., detention/retention pond facilities) for City and privately owned properties. Document the results of the inspections including follow-up and/or enforcement actions, as applicable.	Yes. Following guidelines set in the previous reporting period City staff conducted 62 pond inspections for post construction control measures during this reporting period. Additionally 21 City owned and maintained detention ponds were inspected during this reporting year.

4. Post-Construction Management in New Development and Redevelopment	4.4	Operation and Maintenance of BMPs	For City owned or operated structural control facilities and privately owned structural control facilities required by the Unified Development Code and/or Stormwater Ordinances, the City will either maintain the structural controls or require a maintenance plan to be filed in real property records of the county by the private entity. For privately owned structural control facilities, the City will evaluate if the structural control facilities are maintained and operated as intended.	Yes. During this reporting period there were 4 private ponds inspected under the O & M agreement that were filed with the City and County. Additionally, retention/detention ponds were inspected at twenty-one (21) City owned facilities and 4 of those needed minor maintenance work were observed during this reporting period.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.1	Storm Sewer Operation and Maintenance	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.	Yes. Maintenance includes cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. In 2018, the City responded to 244 complaints and/or maintenance needs. In 2017, the City responded to 240. In 2016, the City responded to 304, and in 2015, the City responded to 319.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.2	MS4 Waste Disposal	Maintain standard operating procedure for the disposal of waste removed from the MS4.	Yes. Follow a standard operating procedure to clear and dispose of waste collected from the MS4.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.3	DCFCD Storm Sewer and Drainage Maintenance	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	Yes. As situations arise in the DCFCD that require maintenance or waste removal, this BMP helps to reduce the discharge of pollutants.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.4	MS4 Waste Disposal for DCFCD	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1's stormwater system.	Yes. Follow a standard operating procedure to clear and dispose of waste collected from the MS4 located in DCFCD.



5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.5	List Potential Problem Areas for Inspection	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).	Yes. Five (5) major problem areas were identified in Year 2. Monitoring efforts increased in these areas in Years 3, 4 and continued in Year 5.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.6	Street Operation and Maintenance	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	Yes. Street sweeping and litter crews remove contaminants thereby reducing the associated risk to the environment. In 2018, street sweeping operations collected 142.33 tons of litter and the litter crew collected 175.95 tons of litter. In 2017, street sweeping operations collected 102.4 tons of litter and the litter crew collected 163.74 tons of litter. In 2016, street sweeping operations collected 92.73 tons of litter and the litter crew collected 198.11 tons of litter.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.7	Educating and Training City Field Staff	Inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices (see also BMP 2.14).	Yes. Ensures City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.8	Data Tracking	Track all City activities related to the Stormwater Management Program through a data tracking program. Software will be used to assist with the tracking.	Not applicable.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.9	Contractor Compliance	Ensure contractors performing maintenance on City facilities meet program requirements and are provided oversight.	Yes. In Year 3, language was developed to include in contracts for contractors hired by the City whose work has the potential to discharge pollutants into the MS4. In Year 4, contractors were required to comply with the contracts with this new language. In Year 5, list of all active city contractors was compiled. Out of the 55 active city contractors, 6 contractors had ongoing projects at the time and 3 of them were inspected randomly.

5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.10	Pollution Prevention for City Operation and Maintenance (O&M) Activities	Develop pollution prevention measures for City O&M activities. Perform inspections to ensure measures are working properly.	Yes. In Year 5, pollution prevention measures were inspected at City facilities. Inspection forms were used during these inspections.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.11	Structural Control Maintenance	Ensure proper maintenance of structural controls on City owned facilities.	Yes. In Year 5, retention/detention ponds were inspected at twenty-one (21) City owned facilities. In addition, other structural controls, such as vegetative swales and rip-rap, were inspected during City facility inspections. No conditions needing maintenance were observed during this reporting period.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.12	Mapping Facilities	Identify the locations of City owned and operated facilities and stormwater controls.	Yes. The locations of City owned and operated facilities were mapped in GIS in 2016.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.13	Mosquito Management	Maintain mosquito management methods that will not result in illicit discharges to the MS4.	Yes. Controls products used and establishes processes so that applicators remain at a distance from fresh waterbodies.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.14	Facility Inventory	Develop and maintain a facility and stormwater control inventory for City owned and operated facilities.	Yes. A list of stormwater controls for City facilities was developed in 2016. List includes permit numbers, registration numbers, and authorizations for each.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.15	Facility Assessment	Identify high priority facilities and document results.	Yes. In Year 3, an inspection form was created and used at each of the City's one hundred and thirty (130) City owned and operated facilities in order to determine the high priority facilities. Of these 130 facilities, twelve (12) facilities were identified as high priority. The park maintenance compound was originally not on the priority facility list that was created in Year 3; however, it was added in Year 5.

5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.16	Facility Specific SOPs	Develop facility specific stormwater management SOPs to minimize discharge of pollutants in stormwater.	Yes. A SOP was developed to identify, implement and maintain stormwater BMPs in facilities identified in BMP 5.15 to reduce stormwater pollution.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.17	Stormwater Controls for High Priority Facilities	Implement specific stormwater controls at high priority facilities identified in BMP 5.15	Yes. Stormwater controls such as good housekeeping, de-icing and anti-icing material storage, fueling operations and vehicle maintenance, and equipment and vehicle washing were identified, implemented and inspected for proper maintenance at all high priority facilities identified in BMP 5.15.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.18	Inspect City Facilities	Inspect high priority City facilities identified in BMP 5.15 for Best Management Practices.	Yes. An inspection form created in Year 4, was used to inspect BMPs in the City facilities that were identified as high priority.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.19	Pesticide, Herbicide, and Fertilizer Application and Management	Evaluate landscape and pesticide management for City owned and operated areas and ensures proper management techniques are being implemented in order to decrease pollutants to the MS4.	Yes. Pesticide, herbicide, and fertilizers were properly collected and disposed of, preventing their entry into nearby waterbodies. When applicable, chemical application schedules are included in landscape and pesticide contracts to minimize discharges of pollutants due to irrigation or expected precipitation.

6. Industrial Stormwater Sources	6.1	Industrial Inspection Program	Require that facilities comply with any NPDES or TPDES stormwater permit applicable under the SIC code.	Yes. Ensures TPDES compliance.
6. Industrial Stormwater Sources	6.2	Existing SWP3s	The City maintains SWP3s for Multi-Sector General Permit sites, as required by the general permit TXR05000.	Yes. Inspections result in necessary updates to City SWPPPs. Training City staff increases effectiveness of BMPs and help to prevent pollutants from coming into contact with stormwater.

**3. Progress towards reducing the discharge of pollutants to the maximum extent practicable. The following is a summary of the information used to evaluate reductions in the discharge of pollutants.**

<i>MCMs</i>	<i>BMP#</i>	<i>BMP Name</i>	<i>BMP Description</i>	<i>Does BMP Demonstrate a Direct Reduction in Pollutants? (Yes / No / Explain)</i>
1: Public Education, Outreach, and Involvement	1.14	HHW Events	Encourage citizens to dispose of HHW properly by participating in City hosted events.	Yes. The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period. During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.
2. Illicit Discharge Detection and Elimination	2.5	Complaint response	All citizen complaints are to be investigated.	Yes. Incidents such as spills, illicit discharges, or sanitary sewer overflows are mitigated. Thirty (30) spills and two (2) SSOs were investigated and resolved during this reporting period.
2. Illicit Discharge Detection and Elimination	2.11	Streams Sampling	Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge.	Yes. Atypical results are investigated and mitigated. Pollutants are reduced to the MEP. See Appendix A for a summary of the monthly stream sampling results.

2. Illicit Discharge Detection and Elimination	2.16	Litter Collection	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	Yes. In 2018, the litter crew collected 175.95 tons of litter. The Litter Crew collected 163.74 tons of litter during 2017, 198.11 tons of litter 2016, 185.85 tons of litter in 2015, and approximately 129.98 tons of litter in 2014. By preventing litter from remaining in the environment, both surface and groundwater are protected from potential contamination associated with it.
2. Illicit Discharge Detection and Elimination	2.17	Illegal Dumping Clean-up	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	Yes. Clean-up reduces potential pollutants. The City responded to approximately 91 illegal dumping complaints in 2018, approximately 60 illegal dumping complaints in 2017, 139 illegal dumping complaints in 2016, 135 illegal dumping complaints during 2015, and 123 illegal dumping complaints in 2014.
2. Illicit Discharge Detection and Elimination	2.18	Beach Sampling Program	Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water.	Yes. Reduces health risks to citizens. Pollutants are reduced to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels. See Appendix B for results for this reporting period.
2. Illicit Discharge Detection and Elimination	2.19	Onsite Sewage System Permitting	Onsite sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.	Yes. Failing septic systems are identified and abated. No OSSF permit was issued and no complaint was received during this reporting period.
2. Illicit Discharge Detection and Elimination	2.20	Auto Inspection Program	Inspect auto-related businesses for water quality issues on an annual basis.	Yes. Enforcement and education encourages businesses to prevent pollutants from coming into contact with stormwater.
3. Construction Site Stormwater Runoff Control	3.2	Earthwork Permit	Issue earthwork permit to grade, grub, clear, fill, or any other form of earth disturbing activity as necessary, to minimize the discharge of pollutants that may impact neighboring properties.	Yes. Prior to any land disturbing activity, all erosion controls must be in place according to the plan. By tracking the number of earthwork permits issued, the City monitors sites and maintains compliance before activities begin. A total of 64 earthwork permits were issued in 2018, in 2017 there were 77 earthwork permits issued, a total of 123 earthwork permits were issued in 2016, and 81 earthwork permits were issued in 2015.

5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.1	Storm Sewer Operation and Maintenance	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.	Yes. Maintenance includes cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. In 2018, the City responded to 244 complaints and/or maintenance needs, in 2017, the City responded to 240 and, in 2016, the City responded to 304.
5. Pollution Prevention/Good Housekeeping for Municipal Operations	5.6	Street Operation and Maintenance	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	Yes. Street sweeping and litter collection removes contaminants thereby reducing the associated risk to the environment. In 2018, street sweeping operations collected 142.33 tons of litter and the litter crew collected 175.95 tons of litter. In 2017, street sweeping operations collected 102.4 tons of litter and the litter crew collected 163.74 tons of litter. In 2016, street sweeping operations collected 92.73 tons of litter and the litter crew collected 198.11 tons of litter.

#### 4. Measureable Goals Status

MCM/BMP	BMP Description	Measurable Goals	Success
<b>1.1 Household Hazardous Waste (HHW) Program (TMDL)</b>	Reduction of the unauthorized disposal of household hazardous waste will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.	1. Continue pamphlet and/or wheel distribution at the Development Center.	Exceeded goals  <b>12/31/2018</b> <i>HHW Magnets</i>
		2. Discuss hazards of household hazardous waste at least 1 time per year in a City newsletter.	The City distributed approximately 1,300 Household Hazardous Waste magnets. Magnets were distributed during Household Hazardous Waste events, during which we had 1,380 participants, and were made available to visitors at the Development Center, festivals, and during complaint inspections.

		3. Handout HHW magnets to at least 100 citizens per year.	<p><b>12/31/2018</b> <i>HHW Wheel Distribution</i> The City distributed "Earth Saver" wheels at Household Hazardous Waste events.</p> <p><b>12/31/2018</b> <i>Pipeline Articles</i> During this reporting period, nine (9) articles advertising HHW events and/or discussing the hazards of disposing of household hazardous waste improperly were printed in the Pipeline, a City newsletter distributed via water utility bills and available on the City's website.</p>
<b>1.2 Pet Waste Management Education and Involvement (TMDL)</b>	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach.	1. Maintain "Doo the Right Thing" video on the City website and play on cable television annually.	<p>Met goals</p> <p><b>12/31/2018</b> <i>"Doo the Right Thing" Video</i> The "Doo the Right Thing" video is posted on the City's website at <a href="http://www.gptx.org/EnvironmentalQuality/PetWaste">www.gptx.org/EnvironmentalQuality/PetWaste</a>. In addition, this video aired on GPTV once a day, every day in Year 5.</p> <p><b>12/31/2018</b> <i>Display Poster, Banner and brochures</i> The City distributed Pet Waste &amp; Water Quality brochures (in English and Spanish) explaining the environmental issues associated with pet waste and how to dispose of the waste properly. Two-hundred (200), or as many as needed, of these brochures were distributed at the Development Center and Prairie Paws Adoption Center. In addition, the "If you think picking up poop is unpleasant, try drinking it" poster is displayed in Environmental Quality Division's office and the "Doo the Right Thing" banner is displayed at the Prairie Paws adoption center.</p>
		2. Annually distribute at least 200 informative brochures to customers adopting pets at the Prairie Paws Adoption Center and display pet waste poster or banner in the Environmental Services Department (ESD) office.	
		3. Annually distribute a minimum of 200 informative brochures at the Development Center and/or at educational events.	

		4. Install 2 pet waste collection dispensers at any future pet park to promote proper owner disposal of waste.	<b>12/31/2018</b> <i>Pet Waste Collection Dispensers</i> No new pet parks were developed in Grand Prairie during this reporting period.
<b>1.3 Environmental Compliance Workshops (TMDL)</b>	Pollution Prevention (P2) measure concepts are promoted to industries to reduce waste generated and potential sources of stormwater pollution.	1. Encourage P2 measures through semi-annual environmental compliance workshops.	Exceeded goals  <b>9/20/2018</b> <i>Environmental Compliance Workshops</i> The Environmental Quality Division held four Environmental Compliance Workshops during the reporting period. On January 24, 2018, Kristen Fenati with TCEQ presented <i>How to Prepare for RCRA Generator Investigations and Common Violations</i> ; on April 26, 2018, Molly Holden with EnSafe, discussed <i>Preventing and Responding to Petroleum and Chemical Substance Spills</i> ; on July 26, 2018, Cindy Mendez, Environmental Manager with the City of Grand Prairie presented <i>The Unplanned Spill</i> ; and on September 20, 2018 the City hosted the Annual Awards Luncheon where P2 awards were given to three industries.
<b>1.4 Commercial and Industrial Activity Education on the Impacts of Floatables (TMDL)</b>	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections.	1. Distribute informative brochures to 50% of the industrial facilities and food permit holders inspected each calendar year.	Met goals  <b>12/31/2018</b> <i>Brochure Distribution</i> Distributed English and Spanish "Clean It Right" brochures to food permit holders during inspections, at Food School, and at the Development Center. "An Industry's Guide for Protecting Grand Prairie's



		2. Make available on the City website.	Watershed" was distributed during industrial inspections and at the Development Center.  <b>01/1/2018</b> <i>Brochures on Website</i> The "Clean it Right" and "An Industry's Guide for Protecting Grand Prairie's Watershed" brochures are on the City's website. These brochures may be found at <a href="http://www.gptx.org/environmentalquality/FoodService">www.gptx.org/environmentalquality/FoodService</a> and <a href="http://www.gptx.org/environmentalquality/Industrial">www.gptx.org/environmentalquality/Industrial</a> , respectively.
<b>1.5 Informational Material for Automotive Related Businesses (TMDL)</b>	Awareness of the impact of the automotive sector's pollutants on water quality will be integrated into existing activities through the distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.	1. Distribute automotive and stormwater quality informative material during Certificate of Occupancy inspections.	Met goals  <b>12/31/2018</b> <i>ARB Educational Materials</i> Environmental Specialists with the Environmental Quality Division distributed automotive and stormwater quality educational materials during Certificate of Occupancy inspections. Materials included items such as posters, Auto Watch (an Environmental Quality and Code Enforcement publication); a list of State permitted liquid and solid waste haulers, the City's Automotive Related Business ordinance, Operational Requirements for Mobile Wash Vendors, and stormwater and backflow brochures.  <b>1/1/2018</b> <i>BMPs on Website</i> Auto related BMPs are posted on Environmental Quality's Auto Related Business Education webpage. This page may be found at <a href="http://www.gptx.org/ARB">www.gptx.org/ARB</a> .
		2. Maintain auto related business BMPs on the City website.	
<b>1.6 Funding for Elementary School Curriculum on Stormwater Quality (TMDL)</b>	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.	1. Purchase Major Rivers© or similar curriculum as needed for additional Grand Prairie ISD classrooms.	Met goals  <b>03/08/2018</b> <i>Major Rivers Order</i> The City purchased 69 English and 27 Spanish replacement Major Rivers Educational Packets for GPISD.

<p><b>1.7 Interactive Watershed Model Display on Stormwater Quality (TMDL)</b></p>	<p>Demonstrate to multiple age groups the effects of various residential and commercial pollutants on stormwater quality.</p>	<p>1. Annually display an interactive watershed model or similar display during child related educational events.</p>	<p>Exceeded goal</p> <p><b>10/10/2018</b> <i>EnviroScape Demonstration at STEM Camp</i> On October 10, 2018, twenty students attended STEM camp hosted by the City of Grand. Topics discussed included water pollution, litter, and watersheds.</p> <p><b>11/02/2018</b> <i>EnviroScape Demonstration at Arbor Day</i> The EnviroScape was on display at the Arbor Day festival held by the City at Grand Prairie’s Kirby Creek Nature Center on November 2, 2018. Approximately 1,000 children and adults attended the Arbor Day festival.</p>
<p><b>1.8 Utility Bill Insert (TMDL)</b></p>	<p>Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.</p>	<p>1. Annually distribute information about stormwater issues in the water utility bill insert to 80% of the City’s customers.</p>	<p>Exceeded goal</p> <p><b>12/31/2018</b> <i>Pipeline Articles</i> The City distributed stormwater related articles with the water utility bill. Nine (9) Pipeline articles contained information on household hazardous waste issues and events, one (1) contained information on how to properly handle grass clippings, two (2) discussed trash-off events being held by the City, one (1) sought volunteers for a City hosted stream clean-up, two (2) educated the reader on removing standing water to prevent mosquito breeding, one (1) educated the reader on the need to keep grease from the entering the drain, two (2) discussed how to prevent pet waste pollution, and one (1) article included information on the master composter classes offered by the City.</p>
<p><b>1.9 Multimedia Stormwater Public Education (TMDL)</b></p>	<p>Promote watershed awareness for citizens, City staff, and visitors using multiple types of media, including a website, City’s cable channel, and Facebook.</p>	<p>1. Have stormwater quality public service announcement on GPTV at least once per year.</p>	<p>Exceeded goals</p> <p><b>12/15/2018</b> <i>Stormwater Post on Facebook</i> Eight (8) posts with a stormwater quality message were placed on Facebook. Messages discussed how to report</p>

		<p>2. Post stormwater quality message on Facebook at least twice per year.</p>	<p>illicit discharges or pollution, how to keep grease from entering the drain, watershed protection, information about maps of flood zones in Grand Prairie, pet waste, and HHW.</p> <p><b>12/31/2018</b>  <i>Stormwater PSAs on GPTV</i>  The City airs the following stormwater pollution prevention PSA videos on GPTV once a day, seven days a week: Doo the Right Thing, Auto Fluids, Detergents, Yard Waste, Paints, and Fertilizers. A Stormwater to Drinking Water PSA airs four times a day, 7 days a week. (See also BMP 2.13)</p> <p><b>12/25/2018</b>  <i>New Employee Orientation</i>  Presented "Preventing Storm Water Pollution: What We Can Do" video to 406 employees using the City's new Onboard system.</p> <p><b>1/1/2018</b>  <i>Stormwater Information on Website</i>  The Environmental Quality Division maintains stormwater educational material for the Environmental Quality website. This information is updated as needed and includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The address to this website is: <a href="http://www.gptx.org/EnvironmentalQuality/Stormwater">www.gptx.org/EnvironmentalQuality/Stormwater</a>.</p>
<p>3. Provide and maintain Stormwater Pollution Prevention information on the City's website.</p>			
<p>4. Show stormwater related video during new employee orientation.</p>			

<p><b>1.10 Tailor Outreach Programs to non-English languages (TMDL)</b></p>	<p>Ensure educational materials are translated into Spanish, as needed.</p>	<p>1. Provide educational materials in Spanish, when available.</p>	<p>Met goals</p> <p><b>1/1/2018</b> <i>Educational Materials in Spanish</i> The City provides residents with many stormwater educational materials in Spanish. This includes, but is not limited to, the following: Lawn Care Maintenance, Fat Free Sewers, Storm Water Management for Salvage Yard, Steps to Obtain Construction Permits for Storm Water Discharges, Pet Waste &amp; Water Quality, Preventing Stormwater Pollution at Construction Sites, Clean It Right, After the Storm: A Citizen's Guide to Understanding Stormwater, Clean Shop posters, and the Auto Related Business Ordinance.</p>
<p><b>1.11 Stormwater Education for Visitors (TMDL)</b></p>	<p>Provide education featuring water quality issues for Grand Prairie visitors.</p>	<p>1. Provide information about stormwater issues on the City website.</p>	<p>Met goals</p> <p><b>1/1/2018</b> <i>Stormwater Information on Website</i> The Environmental Quality Division maintains stormwater educational material for the Environmental Quality website. This information is updated as needed and includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The address to this website is: <a href="http://www.gptx.org/EnvironmentalQuality/Stormwater">www.gptx.org/EnvironmentalQuality/Stormwater</a>.</p>
<p><b>1.12 Storm Drain Markers (TMDL)</b></p>	<p>Install storm drain markers “Protect Our Water, Don’t Dump” to promote awareness of the storm drain system.</p>	<p>1. Purchase and install 100 of the City’s unmarked storm drain curb inlets annually. Volunteers will be enlisted to help with the installation, when available.</p>	<p>Exceeded goals</p> <p><b>07/17/2018</b> <i>Storm Drain Marker Purchase</i> The Environmental Quality Division purchased 400 plastic curb markers to place on storm inlets.</p> <p><b>12/31/2018</b> <i>Storm Drain Labeling</i> 140 storm drain makers were placed in 2018.</p>

<p><b>1.13 Public Education Event (TMDL)</b></p>	<p>Hold an interactive educational event that promotes stormwater BMPs.</p>	<p>1. Annually hold a public education event that focuses on education through involvement and promotional giveaways.</p>	<p>Met goal</p> <p><b>11/02/2018</b> <i>Arbor Day Festival</i></p> <p>The City hosted an Arbor Day Festival at the City’s Central Park on 11/2/2018. Staff distributed stormwater related educational materials, had interactive games for the attendees, and demonstrated the EnviroScope. Approximately 1,000 children were in attendance.</p>
<p><b>1.14 Household Hazardous Waste (HHW) Collection Events (TMDL)</b></p>	<p>Encourage citizens to dispose of HHW properly by participating in City hosted events</p>	<p>1. Maintain contract with Forth Worth annually to allow Grand Prairie citizens to drop off HHW at the Environmental Collection Center.</p> <p>2. Annually hold at least 1 HHW collection event in Grand Prairie.</p>	<p>Exceeded goals</p> <p><b>12/31/2018</b> <i>HHW Collection Events</i></p> <p>The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period. During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.</p> <p><b>12/31/2018</b> <i>Contract with Fort Worth ECC</i></p> <p>The City of Grand Prairie maintained a contract with the Fort Worth Environmental Collection Center for the proper disposal of household hazardous waste. This contract allows City of Grand Prairie residents to dispose of their household hazardous waste during the regular operating hours of the Collection Center. In addition, the Environmental Quality Division takes all household hazardous waste collected during HHW events to the Collection Center.</p>

<b>1.15 Auto Related Business (ARB) and Industrial Facility Mailing List</b>	Maintain mailing list of ARB and industrial facilities and mail out informative material.	1. Annually mail information regarding stormwater BMPs.	Met goal  <b>12/31/2018</b> <i>Distribution Lists</i> The City currently distributes the H2O Line newsletter quarterly to 453 contacts via email using a maintained e-mail contact list. In addition, the Auto Watch newsletter is distributed semi-annually to 601 contacts using a maintained mailing list.
<b>1.16 Annual Environmental Compliance Achievement Awards</b>	Encourage industrial facilities to obtain industrial permit as required by the SIC code.	1. Annually recognize facilities who achieve 100% compliance.	Met goal  <b>September 20, 2018</b> <i>Annual Compliance Awards</i> The City annually recognizes Grand Prairie industries achieving 100% compliance. The City held one Annual Compliance award meeting during Year 5.
<b>1.17 Clean Rivers Program</b>	Stream monitoring information is made available for review on the Clean Rivers Program website. Access to this site will be provided through the City's website.	1. Maintain link to the Clean Rivers Program's website on the City's website.	Met goal  <b>1/1/2018</b> <i>CRP Link on City Website</i> Provided link to Clean Rivers Program on the City website. The Clean Rivers Program allows the public to search for and view sampling results of the waterways in the area: <a href="http://www.gptx.org/EnvironmentalQuality/StreamMonitoring">www.gptx.org/EnvironmentalQuality/StreamMonitoring</a> .
<b>1.18 Lawn and Garden Education for Homeowners</b>	Efforts will be made to encourage lawn and garden low maintenance concept into existing education programs throughout the city through the purchase and distribution of	1. Provide information about native and adaptive plants on the City website.	Met goals  <b>1/1/2018</b> <i>Native and Adaptive Information on Website</i> Posted information on Texas SmartScape on the City of Grand Prairie's "What is Stormwater" and "Lawn

	educational materials and other promotions. Low maintenance garden concepts will be maintained and/or created on City properties.	2. Maintenance of Texas SmartScape™ Demonstration Garden at the Prairie Paws Adoption Center and Water Utility Operations facility.	Chemicals" webpages.  <b>12/31/2018</b> <i>Maintenance of SmartScape Gardens</i> The Water Utilities and Prairie Paws SmartScape demonstration gardens were maintained during this reporting period.
<b>1.19 Don't Bag It! Program</b>	Encourage participants to mulch grass and yard clippings as a compost instead of application of commercial fertilizers.	1. Distribute public education materials about the program at 3 venues located throughout the city.	Met goals  <b>03/01/18</b> <i>"Don't Bag It" in Pipeline</i> One (1) "Don't Bag It" article was printed in and distributed through the water bill insert (Pipeline).
		2. Provide information about the program in the water bill insert to 80% of the City's water customers.	<b>10/13/2018</b> <i>Distribution of Educational Materials</i> Educational materials about the Don't Bag It! program were distributed at Main St. festival, GPISD Market Days, Pumpkin Run and during the Master Composter class.
<b>1.20 H<sub>2</sub>O Line</b>	Produce and distribute a newsletter to selected industrial sectors and automotive related businesses featuring stormwater topics.	1. Produce and distribute a newsletter promoting pollution prevention awareness to at least 200 businesses biannually.	Exceeded goal  <b>12/31/2018</b> <i>H2O Line</i> City inspectors regularly distributed the H2O Line during industrial inspections. In addition, each H2O Line was sent to 453 industrial contacts via email. The Environmental Quality Division created and distributed four (4) H2O Line newsletters during this reporting period.
<b>1.21 Auto Watch</b>	Create and distribute a water quality and code enforcement publication featuring environmental issues specific to automotive related businesses.	1. Continue to create and distribute publication to at least 300 businesses annually.	Exceeded goal  <b>12/31/2018</b> <i>Auto Watch</i> The Auto Watch newsletter was distributed to 601 automotive businesses during the winter and fall of 2018.

<p><b>1.22 Educational Material for Construction Site Personnel</b></p>	<p>Provide educational materials on BMPs and erosion control for construction site personnel.</p>	<p>1. Distribute 200 construction BMPs and erosion control brochures at the Development Center and/or provide a link to the educational material on the City's website.</p>	<p>Met goal</p> <p><b>1/1/2018</b>  <i>Construction Educational Material</i>  "Steps to Obtain Construction Permits for Storm Water Discharges" brochures were distributed at two locations at the Development Center and were posted on the City's Environmental Services (www.gptx.org/EnvironmentalServices) and Engineering (http://www.gptx.org/index.aspx?page=1296) websites. "Preventing Stormwater Pollution at Construction Sites" brochures were available at the Development Center, on the Environmental Quality Division's Stormwater website (www.gptx.org/EnvironmentalQuality/Stormwater), and on Engineering's Construction General Permit &amp; BMP FAQ website (http://www.gptx.org/index.aspx?page=1296).</p>
<p><b>1.23 Public Notice in Development of SWMP</b></p>	<p>Comply with federal, state, and local public notice requirements when implementing the SWMP.</p>	<p>1. Continue to make the document available for comments on the City website, at the Environmental Services Department office, and at the Grand Prairie Memorial Library Repository.</p> <p>2. Publish notice of the executive director's preliminary decision on the NOI and SWMP and adhere to 30 day public comment period.</p>	<p>Met goals</p> <p><b>1/1/2018</b>  <i>SWMP Available for Review and Comment</i>  A copy of the City's Storm Water Management Program is available for review and comments at the Environmental Quality Division's office, the City's Storm Water Management Program website (www.gptx.org/EnvironmentalQuality/SWMP), and at the Grand Prairie Memorial Library.</p>



<b>1.24 Texas Stream Team Volunteer Stream Monitoring Program</b>	Involve volunteers in the stream monitoring process through Texas Stream Team.	1. Hold Texas Stream Team training sessions for volunteers or corporations, if interest exists.	Met goal  <b>06/13/2018</b> <i>Texas Stream Team Training</i> Three monitors were trained during this reporting period.
<b>1.25 Master Composter Program</b>	Involve the public in lawn and garden compost waste training that will encourage reductions in fertilizer and pesticide use. Participants receive hands-on training and can become a Certified Master Composter.	1. Conduct 1 Master Composter class per year.  2. Distribute yard care educational materials to all class participants.	Met goals  <b>4/28/2018</b> <i>Master Composter Program</i> The STAR-certified Master Composter Course was held in April/ May 2018. The course comprises of 20 hours of classroom times including a 4-hour field trip and 20 hours of volunteer time. There were 8 graduates who completed the requirements of the program in 2018. All students attending received yard care educational materials.
<b>1.26 Illegal Dumping Hotline (TMDL)</b>	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 2.10)	1. Continue to make the Illegal Dumping Hotline available on the City's Code Enforcement website.  2. Maintain the Illegal Dumping Hotline link on the Environmental Services stormwater webpage.	Met goals  <b>1/1/2018</b> <i>Illegal Dumping Hotline on City's Website</i> Information for the City's Illegal Dumping Hotline is posted on the City's Stormwater webpage at <a href="http://www.gptx.org/EnvironmentalQuality/Stormwater">www.gptx.org/EnvironmentalQuality/Stormwater</a> and the Code Enforcement's website at <a href="http://www.gptx.org/index.aspx?page=219">www.gptx.org/index.aspx?page=219</a> .

<p><b>1.27 Stakeholder Meetings</b></p>	<p>Keep citizens and other stakeholders involved in the decision process for managing the Stormwater Management Program.</p>	<p>1. Hold, or participate in through NCTCOG, one stakeholder meeting per year.</p>	<p>Exceeded goal</p> <p><b>12/31/2018</b> <i>Stakeholder Meetings</i> Environmental Quality and Code Enforcement Divisions hosted two Auto Related Business Compliance Meetings for auto-related businesses (ARB) in Grand Prairie. Compliance meetings were held on March 6 and September 25 with attendance record of seventeen (17) and thirty nine (39) respectively. The City showed a stormwater pollution video and presented what ARB facilities need to do to remain in compliance with Environmental and Code regulations. Staff from the Environmental Quality Division attended the Watershed Protection Plan – Joe Pool Lake Information Session at TRA, Clean Rivers Program Steering Committee meeting, Clean Rivers Program Coordinated Monitoring meeting, Greater Trinity River Bacteria TMDL I-Plan Coordination Committee meeting, Regional Stormwater Management Coordinating Council meetings, and Public Education, Pollution Prevention, and IDDE task force meetings.</p>
<p><b>1.28 Neighborhood Outreach Program</b></p>	<p>Program encourages the involvement of neighborhood associations for the purpose of educating them about stormwater related issues.</p>	<p>1. Annually coordinate a neighborhood project, such as stream/wetland cleanups, tree planting projects or awareness events.</p>	<p>Exceeded goal</p> <p><b>12/31/2018</b> <i>Neighborhood Outreach Adopt-a-Stream Events</i> The City held three hundred and thirty six (336) neighborhood outreach events in 2018, during which 30,608 pounds of litter were collected.</p>
<p><b>1.29 School Outreach Programs</b></p>	<p>Partnership between the City’s Keep Grand Prairie Beautiful Program and a local school district that encourages student and campus participation.</p>	<p>1. Annually facilitate at least 1 activity for the campus programs.</p>	<p>Exceeded goal</p> <p><b>12/31/2018</b> <i>School Outreach</i> The City held fifty nine (59) school outreach events in 2018, during which approximately 12,402 pounds of litter were collected.</p>

<b>1.30 Advisory Committees or Task Force Groups</b>	Share information and help develop stormwater programs by participating in stormwater related committees or task force groups through NCTCOG.	1. Sit on at least one stormwater committee or task force group annually.	Exceeded goal  <b>12/31/2018</b> <i>Committees or Task Force Groups</i> Staffs from the Environmental Quality Division were members of the following task force groups, committees, and councils during the reporting period: Clean Rivers Program Steering Committee, Greater Trinity River Bacteria TMDL I-Plan Coordination Committee, Regional Stormwater Management Coordinating Council, and Public Education, Pollution Prevention, and IDDE Task Forces.
<b>2.1 Maintain a GIS Database of the MS4 (TMDL)</b>	Maintain an updated map of the locations of all outfalls and the names of all receiving US surface waters.	1. Maintain current drainage system map, including outfalls, using asbuilts, aerial images, and/or through field verification.	Met goal  <b>12/31/2018</b> <i>Drainage System Map Maintenance</i> The outfall map with receiving US Waters is continuously reviewed and updated primarily using Engineering asbuilts and then error-corrected using orthographic photos (aerials). Differences noted in the field are reported and print corrected.
<b>2.2 Priority Areas (TMDL)</b>	Identify priority areas within the city likely to have an illicit discharge.	1. Determine and document the basis for the selection of priority areas. Identify and list areas.  2. Map priority areas.	Previously met goal. No activities are listed for this BMP for Year 5.
<b>2.3 Dry Weather Field Screening (TMDL)</b>	Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, into the storm sewer system.	1. Develop and implement revised dry weather field screening program.	Exceeded goals  <b>12/31/2018</b> <i>Dry Weather Field Screening</i> The City has 463 outfalls that are within the priority area

		2. Conduct dry weather screening of 1/3 of priority areas as identified in BMP 2.2.	and meet the criteria for a dry weather screening inspection. The City is to inspect 1/3 or approximately 155 of these outfalls during Years 3, 4 and 5 of the permit. In 2016, 219 outfalls were screened for illicit discharges, far exceeding the required number of screened outfalls for Year 3. As a result, 122 outfalls were planned for screening in both Years 4 and 5. In Year 4, 143 outfalls were screened (exceeding goal). In 2018, 57 of the City's outfalls were inspected for anomalies during dry weather screening. Of those screened, 5 were observed with flow; however, only 2 of the outfalls with flow were determined to be illicit discharges requiring remediation.
<b>2.4 Complaint Database (TMDL)</b>	A database is kept of all citizen complaints regarding illicit discharges.	1. Maintain the complaint database.	Met goal <b>1/1/2018</b> <i>Garrison</i> The Environmental Quality Division uses Garrison, a Web based database, to track all citizen complaints regarding stormwater.
<b>2.5 Complaint Response (TMDL)</b>	All citizen complaints are to be investigated.	1. Maintain a response of 80% within 5 days.	Exceeded goal <b>12/31/2018</b> <i>Investigate Complaints</i> The Environmental Quality Division investigated well over 80% of residential complaints within five (5) working days. Thirty (30) spills and two (2) SSOs were investigated and resolved during this reporting period.
<b>2.6 Illicit Discharge and Spill Procedures (TMDL)</b>	Develop and maintain procedures for responding to illicit discharges and spills.	1. Maintain standard operating procedures for responding to spills.	Met goals <b>1/1/2018</b> <i>Spill Response SOPs</i> The City maintained standard operating procedures for

		2. Develop and maintain standard operating procedures for responding to illicit discharges.	<p>the following types of spills: diesel or oil, hazardous materials for transportation incidents, hazardous materials for general materials incidents, hazardous materials for small spills, spill reporting guidelines, gas padsite fracturing fluids, and passenger vehicle fires and fluid spills.</p> <p><b>1/1/2018</b> The City maintained a standard operating procedure for responding to illicit discharges.</p>
<b>2.7 Source Investigation and Elimination (TMDL)</b>	Identify and locate the source of illicit discharges and/or spills. Require responsible parties to perform all necessary corrective actions to eliminate the illicit discharge and/or spill.	1. Conduct source investigations to identify and locate illicit discharges as soon as practicable.	<p>Met goals</p> <p><b>1/1/2018</b> <i>Illicit Discharge/Spill Response</i> The City investigates all illicit discharges and spills that are identified through stream monitoring, complaints, dry weather field screening, or by any other means, as soon as practicable. The source of the illicit discharge or spill is determined through investigation procedures such as screening for the pollutant upstream or up the storm drain line, taking field and /or lab samples to narrow the source possibilities, researching facilities upstream/up the storm drain line to determine their possible role in the discharge/spill, searching the area on foot or in a vehicle to spot the source, and/or any other method necessary. Once the source is identified, and if it is determined there is a responsible party, Environmental Specialists enforce the City ordinances restricting improper discharges of pollutants. The City ensures that illicit discharges/spills are properly remedied, either by the responsible party or, if no party can be identified, through the use of a City contractor. The City reports all discharges/spills to the TCEQ if the discharge/spill is believed to be an immediate threat to human health or</p>
		2. Report to the TCEQ all illicit discharges/spills believed to be an immediate threat to human health or the environment.	
		3. Document the date the discharge was observed, results of the investigation, follow-up investigation details, and the date the investigation was closed.	

		4. Notify the responsible party and require the responsible party to take all corrective actions necessary.	the environment. The City also documents all details of the incident into Garrison (response database). If the discharge/spill reaches or is expected to reach a neighboring MS4, the City notifies the operator of that MS4. Dry weather field screening is performed during follow-up investigations.
		5. Notify adjacent permitted MS4 operator or the TCEQ if an illicit discharge/spill extends outside of Grand Prairie's boundary.	
		6. Perform dry weather field screening during follow-up investigation to ensure discharge has been eliminated.	
<b>2.8 Spill Response (TMDL)</b>	Coordinate with the Fire Department on emergency spill response, using a private contractor for clean-up and remediation.	1. Continue response and training.	<p>Met goal</p> <p><b>1/1/2018</b> <i>Allied International Emergency</i> The City maintained a contract with Allied International Emergency for spill response during Year 5.</p> <p><b>12/31/2018</b> <i>Spill Response and Training</i> Environmental Specialists from the Environmental Quality Division respond to spills, sanitary sewer overflows, and other environmental hazards 24 hours a day, 365 days a year. Specialists are continuously educated through emergency responders meetings and through peer to peer training.</p>

<p><b>2.9 Building Project Review Process (TMDL)</b></p>	<p>Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.</p>	<p>1. Continue to review at least 80% of new commercial construction plans for water quality hazards. 2. Continue to inspect at least 80% of Certificates of Occupancy that have a potential to impact stormwater.</p>	<p>Met goals</p> <p><b>12/31/2018</b> <i>Certificate of Occupancy Inspections and Building</i> The Environmental Quality Division received 691 Certificate of Occupancy applications and 546 Building Projects during this reporting period. 100% of the COs and Building Projects with the potential to impact stormwater were inspected and/or reviewed for water quality hazards.</p>
<p><b>2.10 Illegal Dumping Hotline (TMDL)</b></p>	<p>Encourage citizens to report illicit discharges or violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 1.26)</p>	<p>1. Continue to make the Illegal Dumping Hotline available on the City's Code Enforcement and Environmental Services website. 2. Distribute information on illicit discharges and contacts for reporting illicit discharges in the City's water bill annually.</p>	<p>Exceeded goals</p> <p><b>1/1/2018</b> <i>Illegal Dumping Hotline on City's Website</i> The illegal dumping hotline is included on the City's Stormwater webpage at <a href="http://www.gptx.org/EnvironmentalQuality/Stormwater">www.gptx.org/EnvironmentalQuality/Stormwater</a> and on the Code Enforcement's website at <a href="http://www.gptx.org/index.aspx?page=219">www.gptx.org/index.aspx?page=219</a>.</p> <p><b>12/31/18</b> <i>Article on Reporting Illicit Discharges</i> The City published and distributed an article with information on how to reduce pet waste pollution and grease blockage in the <i>Pipeline</i> (a water bill newsletter insert) on 08/2018 and 11/2018.</p>

<p><b>2.11 Stream Sampling (TMDL)</b></p>	<p>Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge.</p>	<p>1. Monitor and investigate 10 streams for atypical stream results on a monthly basis.</p>	<p>Exceeded goal</p> <p><b>12/31/2018</b> <i>Stream Sampling</i> The Environmental Quality Division has voluntarily conducted stream sampling since 1986. Currently, 23 stream sites are sampled on a monthly, quarterly, and annual basis. The data collected during these monitoring events are used to detect and eliminate illicit discharges or other threats to human and environmental health. Atypical results are identified and researched. All possible attempts are made to mitigate any atypical results. In addition, stream monitoring data are provided to the Clean Rivers Program for water quality monitoring, assessment, and public outreach.</p> <p>This BMP is highly effective at reducing pollutants to the MEP. Over the many years of implementing this program, numerous atypical results have led to the mitigation of illicit discharges, SSOs, or spills. See Appendix A for a discussion and summary of the results.</p>
<p><b>2.12 Sanitary Sewer Overflow Response Plan (TMDL)</b></p>	<p>Follow the plan created and implemented for the response of Water Utilities and Environmental Services to SSOs. ESD's response ensures the protection of the waterways through professional advice and field testing.</p>	<p>1. Maintain the plan for Water Utilities and Environmental Services to respond to SSOs.</p>	<p>Met goal</p> <p><b>01/01/2018</b> <i>Standard Operating Procedure</i> The City's Water Utility and Environmental Quality Divisions respond to all sanitary sewer overflows by following a Standard Operating Procedure (SOP). This SOP was updated on 3/28/2017 and remains current. Water Utility's responsibilities include, but are not limited to, cleaning, containing, and recovering sewage, and clearing, repairing, and/or replacing pipeline failures. Environmental Quality Division's responsibilities include, but are not limited to, noting visual observations and sampling for ammonia nitrogen in receiving waterbodies (if applicable). Water Utility and Environmental Quality work together to determine the cause of the overflow and the appropriate clean up response.</p>



<p><b>2.13 Illicit Discharge Awareness Campaign for Businesses and General Public (TMDL)</b></p>	<p>Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.</p>	<p>1. Educate the general public and 25% of potential polluting businesses annually through the use of brochures, videos, or other methods.</p>	<p>Met goal</p> <p><b>12/31/2018</b>  <i>Educational Brochures, Newsletters, and Posters</i>  Stormwater educational materials addressing illicit discharges were distributed throughout this reporting period. This includes, but is not limited to, the following: An Industry's Guide for Protecting Grand Prairie's Watershed, Fat Free Sewers, Environmental Guide for Auto Repair and Body Shops, Preventing Stormwater Pollution at Construction Sites, Clean It Right, After the Storm: A Citizen's Guide to Understanding Stormwater, the AutoWatch newsletter, the Auto Related Business Ordinance, and the H2O Line. Environmental Specialists also distributed "7 Ways to Keep a Clean Shop" posters to Auto Related Businesses. The posters illustrated best management practices for these facilities and were available in English and Spanish.</p> <p><b>12/31/2018</b>  <i>Stormwater Posts on Facebook</i>  Eight (8) posts with a stormwater quality message were placed on Facebook in 2018. Messages discussed how to report illicit discharges or pollution, pet waste, watershed pollution prevention and littering. (See also BMP 1.9.)</p> <p><b>12/31/2018</b>  <i>Stormwater PSAs on GPTV</i>  The City airs the following stormwater pollution prevention PSA videos on GPTV once a day, seven days a week: Doo the Right Thing, Auto Fluids, Detergents, Yard Waste, Paints, and Fertilizers. A Stormwater to Drinking Water PSA airs four times a day, 7 days a week. (See also BMP 1.9.)</p> <p><b>01/01/2018</b>  <i>Stormwater Information on Website</i>  The Environmental Quality Division maintains stormwater educational material for the Environmental Quality website. This information is updated as needed</p>
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			and includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The address to this website is: <a href="http://www.gptx.org/EnvironmentalQuality/Stormwater">www.gptx.org/EnvironmentalQuality/Stormwater</a> . (See also BMP 1.9.)
<b>2.14 Educating and Training City Field Staff (TMDL)</b>	Ensure City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training (see also BMP 5.7).	1. Determine effective means of disseminating IDDE training video to field staff.	Previously met goals. No activities are listed for this BMP for Year 5.  Exceeded goals  <b>03/06/2018</b> <i>Disseminating IDDE Video</i> Thirty one (31) Parks and Recreation Staff viewed the “How to Spot and Report Stormwater Pollution” video.  <b>12/31/2018</b> <i>Miscellaneous Training</i> City staff participated in many training opportunities throughout Year 5, such as the EPA Stormwater Conference, TCEQ Environmental Trade Fair and Conference, Autumn Environmental Conference and Expo, and more.
		2. Disseminate IDDE training video to field staff and keep materials and attendance lists at the Environmental Quality Division office.	
		3. Create and provide vehicle card or decal with contact information in the event staff observes an illicit discharge.	
		4. Purchase and distribute IDDE posters for display in applicable facility buildings.	
<b>2.15 Stormwater Ordinance (TMDL)</b>	Review the stormwater ordinance for necessary revisions and update as needed. The ordinance effectively prohibits non-stormwater	1. Review the stormwater ordinance for necessary revisions.	Met goal  <b>1/1/2018</b> <i>Ordinance Review</i> The stormwater ordinance was reviewed for necessary

	discharges into the storm sewer system and implements enforcement procedures and actions. The ordinance also includes a description of local controls and conditions established for common and incidental non-stormwater discharges not considered illicit.	2. If revisions are needed, update the stormwater ordinance and prepare for Council approval.	revisions in Year 2. The ordinance provides adequate legal authority, as described in the Small MS4 General Permit, Part III, Section A, 3(a)(2) a-h, to control pollutant discharges into and from the City's MS4; therefore, no revisions were needed. In addition, the City has legal authority to enter into interagency/interlocal agreements or other maintenance agreements, as necessary, as provided by Government Code Chapter 791.
<b>2.16 Litter Collection Program (TMDL)</b>	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	1. Remove litter from major thoroughfares weekly.	Met goal  <b>12/31/2018</b> <i>Litter Collection</i> The litter crew is a five person team that picks litter from the City right-of-way five days a week. They also change out the median trash receptacles that have been set out at some major intersections. In 2018, they collected 175.94 tons of litter. (See also BMP 5.6.)
<b>2.17 Illegal Dumping Clean-Up (TMDL)</b>	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	1. Continue efforts to remove all illegally dumped debris at least 30 days from the day the violation was reported.	Met goal  <b>12/31/2018</b> <i>Illegal Dumping Response</i> The City responded to approximately 91 illegal dumping complaints in 2018. Complaints included illegally dumped brush, trash, tires, furniture, hazardous waste, etc. Once on site, City staff cleaned up the debris or required the property owner or responsible party to do so. Citations and warnings were issued as necessary. Illegally dumped debris was usually removed within a week of receiving the complaint, but was always removed within 30 days.

<p><b>2.18 Beach Sampling Program (TMDL)</b></p>	<p>Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water.</p>	<p>1. Follow an SOP for beach sampling once a month during the summer or swimming months.</p>	<p>Met goal</p> <p><b>09/30/2018</b> <i>Beach Sampling SOP and results</i> The beach sampling standard operation procedure is followed during sampling events.</p> <p>This BMP is effective at reducing pollutants to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels.</p> <p>Sampling for E. coli was conducted during the summer months from May to September. The designated swimming areas in Lynn Creek and Loyd Parks met the <i>primary contact recreation 1</i> criteria (where the recommended limits for the geometric mean is 126 MPN /100 mL and the single sample criterion for E. coli is 399 MPN/100 mL) in accordance with the 2014 Texas Surface Water Quality Standards §307.7(b)(1)(A)(i). See Appendix B for the results of the beach sampling in 2018.</p>
<p><b>2.19 On Site Sewage System Permitting (TMDL)</b></p>	<p>Onsite sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.</p>	<p>1. Maintain the permitting of sewage systems.</p> <p>2. Respond to onsite sewage systems within 10 days of receiving complaint and enforce as necessary.</p>	<p>Met goal</p> <p><b>12/31/2018</b> <i>OSSF complaint and Permit</i> No complaints were received and zero OSSF permits were issued during this reporting period.</p>

<b>2.20 Auto Inspection Program (TMDL)</b>	Inspect auto-related businesses for water quality issues on an annual basis.	1. Inspect at least 75% of auto-related businesses annually.	Exceeded goal <b>12/31/2018</b> <i>ARB Inspections</i> The Environmental Quality Division inspected ~99.3% of the auto-related businesses in Grand Prairie in during this reporting period. Inspectors ensured ARBs were in compliance with local, state, and federal stormwater regulations.
<b>2.21 Grease Trap Pumping (TMDL)</b>	In order to reduce the number of illicit discharges, ensure grease traps are being pumped as required.	1. Run report in LINKO to ensure frequency of pumping requirements is met.	Met goal <b>12/31/2018</b> <i>Grease Trap Compliance Report</i> Pumping helps to reduce the number of illicit discharges. During 2016, twenty-five (25) charges were issued to health permit holders for not pumping grease traps, during 2017, fifty-eight (58) charges. In 2018, it was determined that 67 facilities were not in full compliance; these facilities were subjected to further enforcement. During 2018, thirty nine (39) charges were issued to health permit holders for not pumping grease traps.
<b>2.22 Horse Stables (TMDL)</b>	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.	1. Create inspection form.  2. Perform annual inspections of private horse stables and ensure good housekeeping practices are implemented.	Met goal  <b>12/04/2018</b> <i>Horse Stable Inspections</i> Seventeen (17) horse stables were inspected (using a previously created form) for possible sources of pollutants including manure, chemicals, debris, trash, muds, etc.
<b>2.23 Sanitary Sewer Systems (TMDL)</b>	Ensure sanitary sewers are functioning properly in order to reduce overflows.	1. Make improvements to sanitary sewers and lift stations, as needed.	Met goals  <b>12/31/2018</b> <i>Sanitary Sewer and Lift Station Improvements and Overflow Reporting</i> Improvements were made to sanitary sewer systems and

		2. Ensure reporting of overflows is in compliance with state requirements.	lift stations, as needed. Sewer overflows were reported as required by the State.
		3. Update the Certificate of Occupancy SOP for food manufacturers and restaurants.	
<b>3.1 Review Construction Plans and Designs</b>	Require designers to include erosion and sediment control measures with approved BMPs in plans and specifications in all projects in accordance with the TPDES Construction General Permit and all local and State regulations.	1. Require erosion and sediment control plans including BMP details in engineering plan submittals.	<p>Met goals</p> <p><b>12/31/2018</b> <i>Require Erosion &amp; Sediment Control Submittals</i> Engineering requires all submittal plans to include erosion control plans during the review process. With the erosion control plans submitted Engineering can effectively comment and make any necessary changes to meet potential concerns. During this reporting period there were 91 plan reviews.</p> <p><b>12/04/2018</b> <i>Training</i> David McKee, an Environmental Specialist with the City's Stormwater Department, was recertified as Stormwater Inspector on May 5, 2018. He also attended iSWM Stormwater BMP Maintenance Workshop on December 4, 2018. Frank Eichberger with City's Storm water Department completed Stormwater management trainings to become qualified compliance inspector and preparer of storm water pollution prevention plans on October 14, 2018.</p>
		2. Add program to document training for sediment and erosion control plan reviewers.	

<p><b>3.2 Earthwork Permit</b></p>	<p>Issue earthwork permit to grade, grub, clear, fill, or any other form of earth disturbing activity as necessary, to minimize the discharge of pollutants that may impact neighboring properties.</p>	<p>1. Review current earthwork permit to amend, modify, or change to reflect any new requirements if needed.</p>	<p>Met goals</p> <p><b>12/31/2018</b> <i>Issue Earthwork Permits</i> Earthwork permits are issued when plan reviews of erosion controls and drainage proposals have been met and accepted by the City. During this review period 64 earthwork permits were issued.</p>
<p><b>3.3 Construction Site Inspection and Enforcement Program</b></p>	<p>Assess and revise as needed the current inspection program. Review current staffing and training capabilities and adjust accordingly to comply with the new MS4 General Permit and to the extent allowable by state, federal, and local law. Compliance with the Stormwater Ordinance will be ensured by the use of non-monetary penalties, citations, permit denial, stop work orders, and holding of Certificate of Occupancy until full compliance has been achieved. Inspect construction sites to determine the condition and effectiveness of the required control measures that have been selected, installed, implemented and maintained in accordance with Federal, State, and Local requirements.</p>	<p>1. Revise and implement, as necessary, written procedures outlining the inspection, enforcement, and staffing requirements.</p>	<p>Met goals</p> <p><b>12/31/2018</b> <i>Inspection and Enforcement</i> During this reporting period construction site inspections consisted of 3,202 on-site inspections. Of the sites inspected, 67 were found to have compliance issues which were brought into compliance in the regulated time frame.</p> <p><b>8/19/2016</b> <i>Training</i> Erosion control training was provided for all engineering inspectors in Year 3.</p> <p><b>12/04/2018</b> <i>Training</i> David McKee, an Environmental Specialist with the City's Stormwater Department, was recertified as Stormwater Inspector on May 5, 2018. He also attended iSWM Stormwater BMP Maintenance Workshop on December 4, 2018. Frank Eichberger with City's Storm water Department completed Stormwater management trainings to become qualified compliance inspector and preparer of stormwater pollution prevention plans on October 14, 2018.</p>
		<p>2. Issue permits as required.</p>	
		<p>2. Complete training of all departmental construction site inspectors. Initiate a program to formally train new inspectors by the end of their first year of their inspection assignment.</p>	
		<p>3. Conduct construction site inspections, document observed violations, and provide follow-up inspections within 7 days of the notice of violation, ensuring enforcement of permit provisions.</p>	

<b>3.4 Construction Ordinance</b>	Review current Stormwater Construction Ordinance and Unified Development Code. Revise, modify, and implement as needed to meet the requirements as described in the Small MS4 General Permit.	1. Conduct review of Stormwater Ordinance and Unified Development Code to evaluate if sediment and erosion control requirements address Small MS4 General Permit requirements.	Activities for this BMP were performed and met in Years 2 and 3  <b>1/1/2018</b> <i>Ordinance and UDC Review</i> In Year 3, the City reviewed the stormwater ordinance and Unified Development Code (UDC) to ensure sediment and erosion control requirements addressed permit requirements. The UDC was revised and implemented in Year 2.
		2. Finalize Ordinance UDC Article 14 revisions, if applicable.	
<b>3.5 Public Input for Stormwater Construction Activity</b>	Implement a program for receiving calls or input regarding sediment, erosion, and/or other construction related activities, routing calls to appropriate personnel for proper response, documenting subject of call for future analysis, and training of staff to follow reporting and response procedures.	1. Revise and implement, as necessary, written procedures for receiving input, responding to input, and documenting input.	Met goal  <b>12/31/2018</b> <i>Public Input Response</i> Staff was trained and implemented the new procedure in Year 2. City investigator ensures problem areas are brought back into compliance, thus reducing pollution runoff. City staff conducted sixty (60) drainage complaints in this reporting period.
		2. Train staff on reporting and response procedures.	
		3. Implement procedures.	
<b>3.6 Construction Site Inventory</b>	Develop and maintain a list or inventory of all permitted active construction sites that result in a total land disturbance of one acre or more or that result in a total land disturbance of less	1. Develop procedures to develop and maintain an inventory of applicable construction sites.	Met goals  <b>12/31/2018</b> <i>Construction Site Inventory</i> In accordance with the City of Grand Prairie Unified Development Code 14, the Owner/Operator of a



	than one acre if part of a larger common plan of development or sale that results in a total land disturbance of one acre or more.	2. Retain the construction site inventory so an active inventory can be made available to TCEQ upon request.	construction site must provide the City a copy of the SWP3, NOI and/or Construction Site Notice. Construction site inventory is developed and maintained. During this reporting period, a total of forty eight (48) construction site activities were inventoried and documented. Forty three (43) of these were non-municipal sites.
<b>4.1 Review New Site Development and Redevelopment Plans</b>	Require designers of new site development and redevelopments to include water quality considerations and proposed approved BMPs. Any and all amendments to the site plan review procedures shall be in accordance to the Stormwater Ordinance and post construction operation and maintenance requirements.	1. Review water quality considerations and proposed approved BMPs in engineering plan submittals.	Met goal  <b>12/31/2018</b> <i>Review New Site Development and Redevelopment Plans</i> The City requires designers of new site development and redevelopments to include water quality considerations and proposed approved BMPs. During this reporting period, the Engineering Division reviewed 32 new and re-development plan submittals.
<b>4.2 Stormwater Policies for Development and Redevelopment in the Unified Development Code and Stormwater Ordinances</b>	Re-evaluate and revise the current Unified Development Code and/or Stormwater Ordinances as needed to include requirements and revisions to support water quality objectives and post construction BMP maintenance initiatives.	1. Review, evaluate and revise current Unified Development Code and/or Stormwater Ordinances and make recommendations, as needed.	This activity was completed in Year 2.

<p><b>4.3 Inspections of Post-Construction Control Measures</b></p>	<p>Identify, inventory, and inspect post-construction stormwater controls (i.e., detention/retention pond facilities) for City and privately owned properties. Document the results of the inspections including follow-up and/or enforcement actions, as applicable.</p>	<p>1. Review and update inspection program as necessary to ensure inspectors are trained, facility inspections are documented in an inspection report, and identified issues are resolved with follow-up and/or enforcement action taken to confirm resolution. Retain documentation of follow-up and/or enforcement actions to be made available to TCEQ upon request.</p>	<p>Met goal</p> <p><b>12/31/2018</b>  <i>Post-Construction Control Measures</i>  Following guidelines set in the previous reporting period City staff conducted 62 pond inspections for post construction control measures during this reporting period. Additionally 21 City owned and maintained detention ponds were inspected during this reporting year.</p>
<p><b>4.4 Long Term Operation and Maintenance of BMPs</b></p>	<p>For City owned or operated structural control facilities and privately owned structural control facilities required by the Unified Development Code and/or Stormwater Ordinances, the City will either maintain the structural controls or require a maintenance plan to be filed in real property records of the county by the private entity. For privately owned structural control facilities, the City will evaluate if the structural control facilities are maintained and operated as intended.</p>	<p>1. Maintain City owned or operated structural control facilities, as needed, to maintain their function, and document the maintenance activities. Review water quality protection considerations in maintenance plans required to be filed in the real property records by the Unified Development Code and/or Stormwater Ordinances.</p>	<p>Met goal</p> <p><b>12/31/2018</b>  <i>Long Term Operation and Maintenance of BMPs</i>  The Engineering Division reviews water quality protection considerations in maintenance plans and also requires that these plans be filed in the real property records through the City's Operation and Maintenance Agreement. During this reporting period there were 4 private ponds inspected under the O &amp; M agreement that were filed with the City and County. Additionally, retention/detention ponds were inspected at twenty-one (21) City owned facilities and 4 of those needed minor maintenance work were observed during this reporting period.</p>

<p><b>5.1 Storm Sewer System Operation and Maintenance for the City of Grand Prairie (TMDL)</b></p>	<p>Implement an O&amp;M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.</p>	<p>1. Maintain a computer maintenance and management system to track maintenance and complaint responses.</p> <p>2. Respond to 80% of citizen complaints and input information into City Works Management System.</p> <p>3. Track storm sewer and drainage maintenance through City Works Management System.</p>	<p>Met goals</p> <p><b>12/31/2018</b>  <i>Complaint and Maintenance Response and Tracking</i>  The City used the City Works Management System to track complaints and maintenance activities. During this reporting period, the City responded to 244 complaints and/or maintenance needs</p>
<p><b>5.2 Disposal of Waste Removed from the MS4 for the City of Grand Prairie (TMDL)</b></p>	<p>Maintain standard operating procedure for the disposal of waste removed from the MS4.</p>	<p>1. Maintain SOP for waste disposal.</p> <p>2. Ensure compliance with 30 TAC Chapters 330 and 335.</p>	<p>Met goals</p> <p><b>1/1/2018</b>  <i>SOP for Waste Removal</i>  The City maintained a Standard Operating Procedure for the disposal of waste removed from the MS4. The SOP defines the responsibilities of Streets Division personnel for clearing and disposing of waste collected from the MS4.</p> <p><b>1/1/2018</b>  <i>30 TAC Chapters 330 and 335</i>  The City's Municipal Solid Waste (MSW) facility receives waste in accordance with their Site Operating Plan, which is located in MSW permit number 996C, Attachment 14. The City's Garbage collection and disposal ordinance (Article VI) also contains provisions that outline citizens' responsibility in the waste collection process.</p>

<b>5.3 Storm Sewer and Drainage Maintenance Program for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.1) (TMDL)</b>	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	1. Respond to written complaints within the District.	Met goals  <b>1/4/2019</b> <i>Complaints, Reviews, and Repairs</i> No written complaints were filed in year 5. The annual maintenance review was conducted in October and November 2018, the draft report was prepared in December 2018, and the final will be submitted in January 2019. There are no known necessary repairs to District facilities in Grand Prairie at this time.
		2. Perform annual maintenance reviews and prepare report	
		3. Make necessary repairs to District facilities	
<b>5.4 Disposal of Waste Removed from the MS4 for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.2) (TMDL)</b>	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1's stormwater system.	1. Maintain a SOP for waste disposal	Met goal  <b>1/1/2018</b> <i>DCFCD SOP for Waste Disposal</i> The DCFCD #1 developed a standard operating procedure (SOP) for waste removed from the storm water system in 2009 as a measurable goal for the 2008 TPDES General Permit TXR040000. The 2009 SOP remains current. It includes an introduction, purpose, district general response capabilities, and procedures for clearing and collecting debris from the MS4.
<b>5.5 List Potential Problem Areas for Inspection (TMDL)</b>	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).	1. Develop a list of potential problem areas	Met goal  <b>12/31/2018</b> <i>Identify and Prioritize Problem Areas</i> A list of potential problem areas was created in Year 2. Five (5) major problem areas were identified including vacant and park land owned by the City, a City right-of-way located along an infrequently traveled road, vacant land owned/controlled by the US Army Corps of Engineers, and undeveloped, privately owned property. Five (5) major problem areas were identified in Year 2. Monitoring efforts increased in these areas in Years 3, 4 and continued in Year 5.
		2. Identify and prioritize problem areas for increased inspection	

<b>5.6 Street Operation and Maintenance (TMDL)</b>	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	1. Sweep business district, thoroughfares and some public parking lots on an annual basis and more often on high traffic roads	Met goal  <b>12/31/2018</b> <i>Street Sweeping</i> Mr. Dirt is the city’s contractor to sweep the business district, major thoroughfares and some public parking lots on an annual basis. In 2018, they collected 142.33 of sand/debris/ waste from our city streets. They also sweep up the roads after the MLK Day Parade, Juneteenth Parade and Cinco de Mayo Parade.
		2. For paved areas outside of the sweeping program, the City will focus implementation of other trash and litter control procedures or provide inlet protection measures	<b>12/31/2018</b> <i>Additional Trash and Litter Control Measures</i> The litter crew is a five person team that picks litter from the City right-of-way five days a week. They also change out the median trash receptacles that have been set out at some major intersections. In 2018, they collected 175.94 tons of litter. (See also BMP 2.16)
		3. The City will require that all non-prohibited materials be disposed of at a Type I landfill	<b>1/1/2018</b> <i>Type I Landfill</i> The code of ordinances, Article VI- Garbage Collection and Disposal, Sec. 26-101(a) states that: “All municipal solid waste generated within the City of Grand Prairie not prohibited by law for disposal in Grand Prairies Type I landfill shall be transported to the landfill for proper disposal.” All materials collected within city limits are disposed of at the Grand Prairie Municipal Landfill.
<b>5.7 Educating and Training City Field Staff (TMDL)</b>	Inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices (see also BMP 2.14).	1. Determine effective means of disseminating stormwater training video to field staff	Previously met goals. No activities are listed for this BMP for Year 5.  Exceeded goals

		<p>2. Disseminate stormwater training video to field staff and keep materials and attendance lists at the Environmental Quality Division office</p>	<p><b>03/06/2018</b> <i>Disseminating IDDE Video</i> Thirty one (31) Parks and Recreation Staff viewed the “How to Spot and Report Stormwater Pollution” video.</p> <p><b>12/31/2018</b> <i>Miscellaneous Training</i> City staff participated in many training opportunities throughout Year 5, such as the EPA Stormwater Conference, TCEQ Environmental Trade Fair and Conference, Autumn Environmental Conference and Expo, and more.</p>
		<p>3. Create and provide vehicle card or decal with contact information in the event staff observes an illicit discharge</p>	
		<p>4. Purchase and distribute IDDE posters for display in applicable facility buildings</p>	
<b>5.8 Stormwater Management Program Data Tracking</b>	Track all City activities related to the Stormwater Management Program through a data tracking program. Software will be used to assist with the tracking.	<p>1. Purchase and use software</p>	<p>Met goal</p> <p><b>12/31/2018</b> <i>MS4 Web Software</i> The City purchased "MS4 Web Software" from CBI Systems in Year 1. In Year 5, the City kept track MS4 activities and created annual report.</p>
		<p>2. Create annual report</p>	
<b>5.9 Contractor Compliance</b>	Ensure contractors performing maintenance on City facilities meet program requirements and are provided oversight.	<p>1. Create a contract for contractors hired by the City whose work has the potential to discharge pollutants into the MS4</p>	<p>Met goals</p> <p><b>12/20/2018</b> <i>Contractor Compliance</i> In Year 3, language was developed to include in contracts for contractors hired by the City whose work has the potential to discharge pollutants into the MS4. In Year 4, contractors were required to comply with the</p>

		2. Contractually require contractors to comply with stormwater controls, good housekeeping practices, and facility specific stormwater management procedures	contracts with this new language. In Year 5, SOPs were also developed for Fertilizer and Pesticide Application, Road and Bridge Maintenance and Repair. A list of all active city contractors was compiled and random inspections were conducted to ensure contractors are using appropriate control measures and SOPs.
		3. Develop oversight procedures to ensure contractors are using appropriate control measures and SOPs.	
<b>5.10 Pollution Prevention for City Operation and Maintenance (O&amp;M) Activities</b>	Develop pollution prevention measures for City O&M activities. Perform inspections to ensure measures are working properly.	1. Determine and list City O&M activities that have the potential to discharge pollutants into the MS4	Met goals  <b>12/31/2018</b> <i>P2 Measures</i> In Year 4 and 5, pollution prevention measures were inspected at City facilities. Inspection forms were used during these inspections. In Year 3, the City maintained or created and implemented pollution prevention measures for potential pollutants identified in Year 2.
		2. Identify and list possible pollutants of concern from aforementioned O&M activities	
		3. Develop and implement pollution prevention measures for the O&M activities	
		4. Annually inspect pollution prevention measures and keep a log of inspections	

<b>5.11 Structural Control Maintenance</b>	Ensure proper maintenance of structural controls on City owned facilities.	1. Annually inspect structural controls and maintain as needed to ensure effectiveness	Met goal <b>12/31/2018</b> <i>Annual inspections</i> In 2018, retention/detention ponds were inspected at twenty-one (21) City owned facilities. In addition, other structural controls, such as vegetative swales and rip-rap, were inspected during City facility inspections. No conditions needing maintenance were observed during this reporting period.
<b>5.12 Mapping Facilities</b>	Identify the locations of City owned and operated facilities and stormwater controls.	1. Determine locations of City owned and operated facilities and stormwater controls	Completed goal in Year 3. No activities are listed for this BMP for Year 5.
		2. Map locations in GIS	
<b>5.13 Mosquito Management Program</b>	Maintain mosquito management methods that will not result in illicit discharges to the MS4.	1. Maintain integrated mosquito management methods when handling and applying pesticides	Met goals <b>12/31/2018</b> <i>Bio-Controls</i> The City used Altosid, Gambusia affinis fish, and BTi Briquettes for managing the mosquito population during



		2. Use low toxicity bio-controls for larvae control	<p>this reporting period. Altosid XR ((S)-Methoprene), EPA registration No. 2724-375, is a larviciding agent that interferes with the ability of mosquito larvae to become adults, but does not kill them. Altosid has a toxicity category of “Caution”. Gambusia affinis fish were used in bodies of water with mosquito breeding problems. This biological control provides an abatement program directed primarily toward the prevention, elimination, or control of mosquitoes capable of disease transmission. BTi Briquettes (mosquito dunks) were also used. BTi Briquettes are biological larvicides containing Bacillus thuringiensis israelensis, which kills only mosquito larvae (EPA registration No. 6218-47) and has a toxicity category of “Caution”.</p> <p><b>12/31/2018</b> <i>Integrated Mosquito Management</i> The Environmental Quality Division's mosquito control plan is based on comprehensive Integrated Pest Management which includes, but is not limited to, mosquito and disease surveillance, source reduction, complaint investigations, public education, biological control (mosquito fish production), larval and adult mosquito control, and insecticide resistance management.</p>
<b>5.14 Facility Inventory</b>	Develop and maintain a facility and stormwater control inventory for City owned and operated facilities.	1. Develop a list of City facilities that have the potential to discharge pollutants into the MS4	<p>Completed goal in Year 3. No activities are listed for this BMP for Year 5.</p> <p><b>12/31/2016</b> <i>Stormwater Controls</i> A list of City facilities that have the potential to discharge pollutants into the MS4 was developed in Year 2. A list of stormwater controls for City facilities was developed in Year 3. The list includes permit numbers, registration numbers, and authorizations for each.</p>
		2. Develop a list of stormwater controls for each facility	

		3. Include applicable permit numbers, registration numbers, and authorizations for each facility or control	
<b>5.15 Facility Assessment</b>	Identify high priority facilities and document results.	1. Review facilities identified in BMP 5.14 for potential to discharge pollutants into stormwater	<p>Completed goal in Year 4. No activities are listed for this BMP for Year 5.</p> <p><b>2/22/2016</b> <i>High Priority Facilities</i></p> <p>In Year 3, an inspection form was created and used at each of the City's one hundred and thirty (130) City owned and operated facilities in order to determine the high priority facilities. Of these 130 facilities, twelve (12) facilities were identified as high priority. This list includes the City of Grand Prairie Airport, golf courses, landfill, Loyd and Lynn Creek parks, park maintenance compound, service center, and water/wastewater facilities. Site evaluation checklists/inspections were maintained for each of these facilities in Year 4.</p>
		2. Identify high priority facilities, including City maintenance yards and fuel storage locations. Use checklist during assessment	
		3. Document results. Maintain copies of site evaluation checklists and any identified deficiencies and corrective actions taken	

<b>5.16 Facility Specific SOPs</b>	Develop facility specific stormwater management SOPs to minimize discharge of pollutants in stormwater.	1. Develop SOP, or maintain equivalent existing plan, for each facility identified in BMP 5.15. SOP or plan will identify BMPs to be installed, implemented, and maintained.	Met goal (late)  <b>02/15/2019</b> <i>High priority Facility Specific SOP</i> This BMP was scheduled in Year 5 but completed in February 2019, due to change in personnel.  Yes. A SOP was developed to identify, implement and maintain stormwater BMPs in facilities identified in BMP 5.15.
		2. Update the plan and make available for review by the TCEQ	
<b>5.17 Stormwater Controls for High Priority Facilities</b>	Implement specific stormwater controls at high priority facilities identified in BMP 5.15.	Include in SOP (5.16) stormwater controls for 1) good housekeeping, 2) de-icing and anti-icing material storage, 3) fueling operations and vehicle maintenance, and 4) equipment and vehicle washing	Met goal (late)  <b>02/15/2019</b> <i>High Priority Facility Specific SOP</i> This BMP was scheduled in Year 5 but completed in February 2019, due to change in personnel.  Yes. SOP includes inspection of stormwater controls for good housekeeping, de-icing and anti-icing material storage, fueling operations and vehicle maintenance, and equipment and vehicle washing in all high priority city facilities.
<b>5.18 Inspect City Facilities</b>	Inspect high priority City facilities identified in BMP 5.15 for Best Management Practices.	1. Create inspection form for City facilities	Met goal

		<p>2. Inspect high priority facilities identified in BMP 5.15 annually</p>	<p><b>12/31/2018</b>  <i>High Priority Facility Inspection Form and Inspections</i>  A previously created inspection form was used to inspect the City facilities that were identified as high priority. In Year 5, inspections were performed at the City of Grand Prairie Airport, golf courses, landfill, Loyd and Lynn Creek parks, service center, and water/wastewater facilities.</p> <p><b>2/8/2019</b>  The park maintenance compound was added to the high priority list in Year 5 and was inspected on 3/7/2018. A second annual inspection was scheduled at this facility in Year 5 but completed in February 2019, due to change in personnel.</p>
<p><b>5.19 Pesticide, Herbicide, and Fertilizer Application and Management</b></p>	<p>Evaluate landscape and pesticide management for City owned and operated areas and ensures proper management techniques are being implemented in order to decrease pollutants to the MS4.</p>	<p>1. Evaluate materials used and activities performed for pollution prevention opportunities</p> <p>2. Educate pesticide, fertilizer, and herbicide applicators and distributors on proper management techniques and ensure necessary certifications and permits are obtained</p> <p>3. Maintain SmartScape gardens at Water Utilities and Prairie Paws facilities</p>	<p>Met goal</p> <p><b>12/31/2018</b>  <i>Management and Application of Pesticide, Herbicide, and Fertilizer</i>  Pesticide, herbicide, and fertilizers were properly collected and disposed of, preventing their entry into nearby waterbodies. SmartScape gardens were maintained. The City distributed a flyer to applicable City contractors and personnel. The City requires that contractors provide permits and certifications that are necessary to their profession. Pesticide, herbicide, and fertilizer materials and activities were evaluated in 2016. This included implementing a revised standard operating procedure for application. When applicable, chemical application schedules are included in landscape and pesticide contracts to minimize discharges of pollutants due to irrigation or expected precipitation. The schedules followed are outlined in the Texas Department of Agriculture Pesticide Laws and Regulations.</p>

		4. When applicable, include chemical application schedule in landscape and pesticide contracts to minimize discharges of pollutants due to irrigation or expected precipitation	
		5. Properly collect and dispose of unused pesticide, herbicide, and fertilizer	
<b>6.1 Stormwater Industrial Inspection Program</b>	Require that facilities comply with any NPDES or TPDES stormwater permit applicable under the SIC code.	1. Continue to provide 75% of industries the applications for coverage, when applicable	Exceeded goals  <b>12/31/2018</b> <i>Applications, Enforcement and Inspections</i> 100% of industries were provided applications for NPDES or TPDES coverage, when applicable. Notices of Violations and/or citations were given to facilities that failed to apply for or obtain stormwater coverage. Inspections of industrial facilities are performed at least once every 3 years.
		2. Enforce failure to apply for or obtain permit coverage	
		3. Perform inspections once every 3 years to ensure compliance with the stormwater permit and to ensure control measures for discharges are met	
<b>6.2 Existing SWP3s</b>	The City maintains SWP3s for Multi-Sector General Permit sites, as required by the general permit TXR05000.	1. Ensure compliance with, maintain, and update SWP3s for permits at existing regulated facilities	Met goals  <b>12/31/2018</b> <i>SWP3 Requirements</i> All SWP3 requirements were met in Year 5.

		2. Review the SWP3s annually for any changes required	<p><b>12/18/2018</b>  <i>Annual Inspections</i>  Annual comprehensive compliance inspections were conducted for each MSGP City facility. The Landfill was inspected on 12/18/18 and the Airport was inspected on 12/17/18.</p> <p><b>10/17/2018</b>  <i>Training for City MSGP Sites</i>  A training video was shown to City staff at the two MSGP facilities. Three (3) Airport personnel watched <i>Preventing Storm Water Pollution – What We Can Do</i> on 10/17/18 and twenty three (23) Landfill personnel watched <i>Preventing Storm Water Pollution – What We Can Do</i> on 09/27/18.</p>
		3. Inspect sites annually	
		4. Ensure that required annual SWP3 training is conducted	

### C. Stormwater Data Summary

#### 1. The MS4 has conducted analytical monitoring of stormwater quality.

- a. See Appendix A and Appendix B for the discussion and summary of stream and Joe Pool Lake beach monitoring results, respectively

### D. Impaired Waterbodies and Total Maximum Daily Loads

The City of Grand Prairie discharges to a waterbody for which there is a TCEQ approved TMDL for bacteria. The City has also determined that it may be a source of bacteria for impaired waterbodies (as listed on the CWA 303(d) list) that do not have an approved TMDL. As such, the City has implemented the BMPs described in the SWMP and, where applicable, the TCEQ approved Implementation Plan for Seventeen Total Maximum Daily Loads for Bacteria in the Greater Trinity River Region (I-Plan) throughout these and all other areas of Grand Prairie where bacteria is a pollutant of concern (as described in the City’s approved SWMP).

**1. If applicable, explain below or attach a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern:**

The following is a summary of BMPs used to address bacteria, the pollutant of concern in the impaired waterbodies in Grand Prairie. Please see Appendix A and Appendix B for stream and beach sampling results, respectively.

<b>MCM/BMP</b>	<b>BMP Description</b>
<b>1.1 Household Hazardous Waste (HHW) Program (TMDL)</b>	Reduction of the unauthorized disposal of household hazardous waste will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.
<b>1.2 Pet Waste Management Education and Involvement (TMDL)</b>	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach.
<b>1.3 Environmental Compliance Workshops (TMDL)</b>	Pollution Prevention (P2) measure concepts are promoted to industries to reduce waste generated and potential sources of stormwater pollution.
<b>1.4 Commercial and Industrial Activity Education on the Impacts of Floatables (TMDL)</b>	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections.
<b>1.5 Informational Material for Automotive Related Businesses (TMDL)</b>	Awareness of the impact of the automotive sector's pollutants on water quality will be integrated into existing activities through the distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.
<b>1.6 Funding for Elementary School Curriculum on Stormwater Quality (TMDL)</b>	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.
<b>1.7 Interactive Watershed Model Display on Stormwater Quality (TMDL)</b>	Demonstrate to multiple age groups the effects of various residential and commercial pollutants on stormwater quality.
<b>1.8 Utility Bill Insert (TMDL)</b>	Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.
<b>1.9 Multimedia Stormwater Public Education (TMDL)</b>	Promote watershed awareness for citizens, City staff, and visitors using multiple types of media, including a website, City's cable channel, and Facebook.
<b>1.10 Tailor Outreach Programs to non-English languages (TMDL)</b>	Ensure educational materials are translated into Spanish, as needed.

<b>1.11 Stormwater Education for Visitors (TMDL)</b>	Provide education featuring water quality issues for Grand Prairie visitors.
<b>1.12 Storm Drain Markers (TMDL)</b>	Install storm drain markers “Protect Our Water, Don’t Dump” to promote awareness of the storm drain system.
<b>1.13 Public Education Event (TMDL)</b>	Hold an interactive educational event that promotes stormwater BMPs.
<b>1.14 Household Hazardous Waste (HHW) Collection Events (TMDL)</b>	Encourage citizens to dispose of HHW properly by participating in City hosted events
<b>1.26 Illegal Dumping Hotline (TMDL)</b>	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 2.10)
<b>2.1 Maintain a GIS Database of the MS4 (TMDL)</b>	Maintain an updated map of the locations of all outfalls and the names of all receiving US surface waters.
<b>2.2 Priority Areas (TMDL)</b>	Identify priority areas within the city likely to have an illicit discharge.
<b>2.3 Dry Weather Field Screening (TMDL)</b>	Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, into the storm sewer system.
<b>2.4 Complaint Database (TMDL)</b>	A database is kept of all citizen complaints regarding illicit discharges.
<b>2.5 Complaint Response (TMDL)</b>	All citizen complaints are to be investigated.
<b>2.6 Illicit Discharge and Spill Procedures (TMDL)</b>	Develop and maintain procedures for responding to illicit discharges and spills.
<b>2.7 Source Investigation and Elimination (TMDL)</b>	Identify and locate the source of illicit discharges and/or spills. Require responsible parties to perform all necessary corrective actions to eliminate the illicit discharge and/or spill.
<b>2.8 Spill Response (TMDL)</b>	Coordinate with the Fire Department on emergency spill response, using a private contractor for clean-up and remediation.
<b>2.9 Building Project Review Process (TMDL)</b>	Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.
<b>2.10 Illegal Dumping Hotline (TMDL)</b>	Encourage citizens to report illicit discharges or violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 1.26)
<b>2.11 Stream Sampling (TMDL)</b>	Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge. See Appendix A for results.
<b>2.12 Sanitary Sewer Overflow Response Plan</b>	Follow the plan created and implemented for the response of Water Utilities and



<i>(TMDL)</i>	Environmental Services to SSOs. ESD's response ensures the protection of the waterways through professional advice and field testing.
<b>2.13 Illicit Discharge Awareness Campaign for Businesses and General Public (TMDL)</b>	Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.
<b>2.14 Educating and Training City Field Staff (TMDL)</b>	Ensure City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training (see also BMP 5.7).
<b>2.15 Stormwater Ordinance (TMDL)</b>	Review the stormwater ordinance for necessary revisions and update as needed. The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions. The ordinance also includes a description of local controls and conditions established for common and incidental non-stormwater discharges not considered illicit.
<b>2.16 Litter Collection Program (TMDL)</b>	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.
<b>2.17 Illegal Dumping Clean-Up (TMDL)</b>	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.
<b>2.18 Beach Sampling Program (TMDL)</b>	Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water. See Appendix B for results.
<b>2.19 On Site Sewage System Permitting (TMDL)</b>	Onsite sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.
<b>2.20 Auto Inspection Program (TMDL)</b>	Inspect auto-related businesses for water quality issues on an annual basis.
<b>2.21 Grease Trap Pumping (TMDL)</b>	In order to reduce the number of illicit discharges, ensure grease traps are being pumped as required.
<b>2.22 Horse Stables (TMDL)</b>	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.
<b>2.23 Sanitary Sewer Systems (TMDL)</b>	Ensure sanitary sewers are functioning properly in order to reduce overflows.
<b>5.1 Storm Sewer System Operation and Maintenance for the City of Grand Prairie (TMDL)</b>	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.
<b>5.2 Disposal of Waste Removed from the MS4 for the City of Grand Prairie (TMDL)</b>	Maintain standard operating procedure for the disposal of waste removed from the MS4.
<b>5.3 Storm Sewer and Drainage Maintenance Program for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.1) (TMDL)</b>	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.

<b>5.4 Disposal of Waste Removed from the MS4 for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.2) (TMDL)</b>	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1’s stormwater system.
<b>5.5 List Potential Problem Areas for Inspection (TMDL)</b>	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).
<b>5.6 Street Operation and Maintenance (TMDL)</b>	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.
<b>5.7 Educating and Training City Field Staff (TMDL)</b>	Inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices (see also BMP 2.14).

**2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL:**

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.1 Household Hazardous Waste (HHW) Program (TMDL)</b>	Reduction of the unauthorized disposal of household hazardous waste will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.	1. Continue pamphlet and/or wheel distribution at the Development Center	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Discuss hazards of household hazardous waste at least 1 time per year in a City newsletter		Years 1 – 5
		3. Handout HHW magnets to at least 100 citizens per year		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.1 Activities Completed

**12/31/2018**

*HHW Magnets*

The City distributed approximately 1,300 Household Hazardous Waste magnets. Magnets were distributed during Household Hazardous Waste and were made available to visitors at the Development Center, festivals, and during complaint inspections.

**12/31/2018**

*HHW Wheel Distribution*

The City distributed "Earth Saver" wheels at Household Hazardous Waste events.

**12/31/2018**

*Pipeline Articles*

During this reporting period, nine (9) articles advertising HHW events and/or discussing the hazards of disposing of household hazardous waste improperly were printed in the Pipeline, a City newsletter distributed via water utility bills and available on the City's website.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.2 Pet Waste Management Education and Involvement (TMDL)</b>	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach.	1. Maintain "Doo the Right Thing" video on the City website and play on cable television annually	Environmental Services Department, Environmental Quality Division and Animal Services Division	Years 1 – 5
		2. Annually distribute at least 200 informative brochures to customers adopting pets at the Prairie Paws Adoption Center and display pet waste poster or banner in the Environmental Services Department (ESD) office		Years 1 – 5

	3. Annually distribute a minimum of 200 informative brochures at the Development Center and/or at educational events	Years 1 – 5
	4. Install 2 pet waste collection dispensers at any future pet park to promote proper owner disposal of pet waste	Year 4

All activities for this BMP are complete for Year 5.

BMP 1.2 Activities Completed

**12/31/2018**

*"Doo the Right Thing" Video*

The "Doo the Right Thing" video is posted on the City's website at [www.gptx.org/EnvironmentalQuality/PetWaste](http://www.gptx.org/EnvironmentalQuality/PetWaste). In addition, this video aired on GPTV once a day, every day in Year 5.

**12/31/2018**

*Display Poster, Banner and brochures*

The City distributed Pet Waste & Water Quality brochures (in English and Spanish) explaining the environmental issues associated with pet waste and how to dispose of the waste properly. Two-hundred (200), or as many as needed, of these brochures were distributed at the Development Center and Prairie Paws Adoption Center. In addition, the "If you think picking up poop is unpleasant, try drinking it" poster is displayed in Environmental Quality Division's office and the "Doo the Right Thing" banner is displayed at the Prairie Paws adoption center.

**12/31/2018**

*Pet Waste Collection Dispensers*

No new pet parks were developed in Grand Prairie during this permit term.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.3 Environmental Compliance Workshops (TMDL)</b>	Pollution Prevention (P2) measure concepts are promoted to industries to reduce waste generated and potential sources of stormwater pollution.	1. Encourage P2 measures through semi-annual environmental compliance workshops	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City met the goals for this Year 5 BMP.

BMP 1.3 Activities Completed

**9/20/2018**

*Environmental Compliance Workshops*

The Environmental Quality Division held four Environmental Compliance Workshops during the reporting period. On January 24, 2018, Kristen Fenati with TCEQ presented *How to Prepare for RCRA Generator Investigations and Common Violations*; on April 26, 2018, Molly Holden with EnSafe, discussed *Preventing and Responding to Petroleum and Chemical Substance Spills*; on July 26, 2018, Cindy Mendez, Environmental Manager with the City of Grand Prairie presented *The Unplanned Spill*; and on September 20, 2018 the City hosted the Annual Awards Luncheon where P2 awards were given to three industries.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.4 Commercial and Industrial Activity Education on the Impacts of Floatables (TMDL)</b>	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections.	1. Distribute informative brochures to 50% of the industrial facilities and food permit holders inspected each calendar year	Environmental Services Department, Environmental Quality Division	Year 1-5
		2. Make available on the City website		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.4 Activities Completed

**12/31/2018**

*Brochure Distribution*

Distributed English and Spanish "Clean It Right" brochures to food permit holders during inspections, at Food School, and at the Development Center. "An Industry's Guide for Protecting Grand Prairie's Watershed" was distributed during industrial inspections and at the Development Center.

**01/1/2018**

*Brochures on Website*

The "Clean it Right" and "An Industry's Guide for Protecting Grand Prairie's Watershed" brochures are on the City's website. These brochures may be found at [www.gptx.org/environmentalquality/FoodService](http://www.gptx.org/environmentalquality/FoodService) and [www.gptx.org/environmentalquality/Industrial](http://www.gptx.org/environmentalquality/Industrial), respectively.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.5 Informational Material for Automotive Related Businesses (TMDL)</b>	Awareness of the impact of the automotive sector’s pollutants on water quality will be integrated into existing activities through the distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.	1. Distribute automotive and stormwater quality informative material during Certificate of Occupancy inspections	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Maintain auto related business BMPs on the City website		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.5 Activities Completed

**12/31/2018**

*ARB Educational Materials*

Environmental Specialists with the Environmental Quality Division distributed automotive and stormwater quality educational materials during Certificate of Occupancy inspections. Materials included items such as posters, Auto Watch (an Environmental Quality and Code Enforcement publication), a list of State permitted liquid and solid waste haulers, the City's Automotive Related Business ordinance, Operational Requirements for Mobile Wash Vendors, and stormwater and backflow brochures.

**1/1/2018**

*BMPs on Website*

Auto related BMPs are posted on Environmental Quality's Auto Related Business Education webpage. This page may be found at [www.gptx.org/ARB](http://www.gptx.org/ARB).

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.6 Funding for Elementary School Curriculum on Stormwater Quality (TMDL)</b>	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.	1. Purchase Major Rivers© or similar curriculum as needed for additional Grand Prairie ISD classrooms	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.6 Activities Completed

**03/08/2018**

*Major Rivers Order*

The City purchased 69 English and 27 Spanish replacement Major Rivers Educational Packets for GPISD.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.7 Interactive Watershed Model Display on Stormwater Quality (TMDL)</b>	Demonstrate to multiple age groups the effects of various residential and commercial pollutants on stormwater quality.	1. Annually display an interactive watershed model or similar display during child related educational events	Environmental Services Department, Environmental Quality Division	Year 2-5

The City exceeded the goals for this Year 5 BMP.

BMP 1.7 Activities Completed

**10/10/2018**

*EnviroScape Demonstration at STEM Camp*

On October 10, 2018, twenty students attended STEM camp hosted by the City of Grand. Topics discussed included water pollution, litter, and watersheds.

**11/02/2018**

*EnviroScape Demonstration at Arbor Day*

The EnviroScape was on display at the Arbor Day festival held by the City at Grand Prairie’s Kirby Creek Nature Center on November 2, 2018. Approximately 1,000 children and adults attended the Arbor Day festival.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.8 Utility Bill Insert (TMDL)</b>	Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.	1. Annually distribute information about stormwater issues in the water utility bill insert to 80% of the City’s customers	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.8 Activities Completed

**12/31/2018**

*Pipeline Articles*

The City distributed stormwater related articles with the water utility bill. Nine (9) Pipeline articles contained information on household hazardous waste issues and events, one (1) contained information on how to properly handle grass clippings, two (2) discussed trash-off events being held by the City, one (1) sought volunteers for a City hosted stream clean-up, two (2) educated the reader on removing standing water to prevent mosquito breeding, one (1) educated the reader on the need to keep grease from the entering the drain, Two (2) discussed how to prevent pet waste pollution, and one (1) article included information on the master composter classes offered by the City.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.9 Multimedia Stormwater Public Education (TMDL)</b>	Promote watershed awareness for citizens, City staff, and visitors using multiple types of media, including a website, City’s cable channel, and Facebook.	1. Have stormwater quality public service announcement on GPTV at least once per year	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Post stormwater quality message on Facebook at least twice per year		Years 2 – 5
		3. Provide and maintain Stormwater Pollution Prevention information on the City's website		Years 1 – 5
		4. Show stormwater related video during new employee orientation		Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 1.9 Activities Completed

**12/15/2018**

*Stormwater Post on Facebook*

Eight (8) posts with a stormwater quality message were placed on Facebook. Messages discussed how to report illicit discharges or pollution, how to keep grease from entering the drain, watershed protection, information about maps of flood zones in Grand Prairie, pet waste, and HHW.



**12/31/2018**

*Stormwater PSAs on GPTV*

The City airs the following stormwater pollution prevention PSA videos on GPTV once a day, seven days a week: Doo the Right Thing, Auto Fluids, Detergents, Yard Waste, Paints, and Fertilizers. A Stormwater to Drinking Water PSA airs four times a day, 7 days a week. (See also BMP 2.13)

**12/25/2018**

*New Employee Orientation*

Presented "Preventing Storm Water Pollution: What We Can Do" video to 406 employees using the City's new Onboard system.

**1/1/2018**

*Stormwater Information on Website*

The Environmental Quality Division maintains stormwater educational material for the Environmental Quality website. This information is updated as needed and includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The address to this website is: [www.gptx.org/EnvironmentalQuality/Stormwater](http://www.gptx.org/EnvironmentalQuality/Stormwater).

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.10 Tailor Outreach Programs to non-English languages (TMDL)</b>	Ensure educational materials are translated into Spanish, as needed.	1. Provide educational materials in Spanish, when available.	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.10 Activities Completed

**1/1/2018**

*Educational Materials in Spanish*

The City provides residents with many stormwater educational materials in Spanish. This includes, but is not limited to, the following: Lawn Care Maintenance, Fat Free Sewers, Storm Water Management for Salvage Yard, Steps to Obtain Construction Permits for Storm Water Discharges, Pet Waste & Water Quality, Preventing Stormwater Pollution at Construction Sites, Clean It Right, After the Storm: A Citizen's Guide to Understanding Stormwater, Clean Shop posters, and the Auto Related Business Ordinance.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.11 Stormwater Education for Visitors (TMDL)</b>	Provide education featuring water quality issues for Grand Prairie visitors.	1. Provide information about stormwater issues on the City website	Environmental Services Department, Environmental Quality Division	Years 1-5

All activities for this BMP are complete for Year 5.

BMP 1.11 Activities Completed

**1/1/2018**

*Stormwater Information on Website*

The Environmental Quality Division maintains stormwater educational material for the Environmental Quality website. This information is updated as needed and includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The address to this website is: [www.gptx.org/EnvironmentalQuality/Stormwater](http://www.gptx.org/EnvironmentalQuality/Stormwater).

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.12 Storm Drain Markers (TMDL)</b>	Install storm drain markers “Protect Our Water, Don’t Dump” to promote awareness of the storm drain system.	1. Purchase and install 100 of the City’s unmarked storm drain curb inlets annually. Volunteers will be enlisted to help with the installation, when available	Environmental Services Department, Environmental Quality Division	Years 2 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.12 Activities Completed

**07/17/2018**

*Storm Drain Marker Purchase*

The Environmental Quality Division purchased 400 plastic curb markers to place on storm inlets.

**12/31/2018**

*Storm Drain Labeling*

140 storm drain makers were placed in 2018.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.13 Public Education Event (TMDL)</b>	Hold an interactive educational event that promotes stormwater BMPs.	1. Annually hold a public education event that focuses on education through involvement and promotional giveaways	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 1.13 Activities Completed

**11/02/2018**

*Arbor Day Festival*

The City hosted an Arbor Day Festival at the City’s Central Park on 11/2/2018. Staff distributed stormwater related educational materials, had interactive games for the attendees, and demonstrated the EnviroScape. Approximately 1,000 children were in attendance.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.14 Household Hazardous Waste (HHW) Collection Events (TMDL)</b>	Encourage citizens to dispose of HHW properly by participating in City hosted events	1. Maintain contract with Forth Worth annually to allow Grand Prairie citizens to drop off HHW at the Environmental Collection Center	Environmental Services Department, Environmental Quality Division	Years 1– 5
		2. Annually hold at least 1 HHW collection event in Grand Prairie		Years 1– 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.14 Activities Completed

**12/31/2018**

*HHW Collection Events*

The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period. During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.

**12/31/2018**

*Contract with Fort Worth ECC*

The City of Grand Prairie maintained a contract with the Fort Worth Environmental Collection Center for the proper disposal of household hazardous waste. This contract allows City of Grand Prairie residents to dispose of their household hazardous waste during the regular operating hours of the Collection Center. In addition, the Environmental Quality Division takes all household hazardous waste collected during HHW events to the Collection Center.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>1.26 Illegal Dumping Hotline (TMDL)</b>	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 2.10)	1. Continue to make the Illegal Dumping Hotline available on the City's Code Enforcement website	Planning and Development Department, Code Enforcement Division, Environmental Services Department,	Years 1 – 5
		2. Maintain the Illegal Dumping Hotline link on the Environmental Services stormwater webpage	Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.26 Activities Completed

**1/1/2018**

*Illegal Dumping Hotline on City's Website*

Information for the City's Illegal Dumping Hotline is posted on the City's Stormwater webpage at [www.gptx.org/EnvironmentalQuality/Stormwater](http://www.gptx.org/EnvironmentalQuality/Stormwater) and the Code Enforcement's website at [www.gptx.org/index.aspx?page=219](http://www.gptx.org/index.aspx?page=219).

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.1 Maintain a GIS Database of the MS4 (TMDL)</b>	Maintain an updated map of the locations of all outfalls and the names of all receiving US surface waters.	1. Maintain current drainage system map, including outfalls, using asbuilts, aerial images, and/or through field verification	Environmental Services Department, Environmental Quality Division and Information Technology Department, GIS Division	Year 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.1 Activities Completed

**12/31/2018**

*Drainage System Map Maintenance*

The outfall map with receiving US Waters is continuously reviewed and updated primarily using Engineering asbuilts and then error-corrected using orthographic photos (aerials). Differences noted in the field are reported and print corrected.

<i><b>BMP</b></i>	<i><b>BMP Description</b></i>	<i><b>Measurable Goals</b></i>	<i><b>Responsibility</b></i>	<i><b>Target Date</b></i>
<b>2.2 Priority Areas (TMDL)</b>	Identify priority areas within the city likely to have an illicit discharge.	1. Determine and document the basis for the selection of priority areas. Identify and list areas	Environmental Services Department, Environmental Quality Division	Year 2
		2. Map priority areas		Year 2

No activities are listed for this BMP for Year 5.

<i><b>BMP</b></i>	<i><b>BMP Description</b></i>	<i><b>Measurable Goals</b></i>	<i><b>Responsibility</b></i>	<i><b>Target Date</b></i>
<b>2.3 Dry Weather Field Screening (TMDL)</b>	Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, into the storm sewer system.	1. Develop and implement revised dry weather field screening program	Environmental Services Department, Environmental Quality Division	Year 2
		2. Conduct dry weather screening of 1/3 of priority areas as identified in BMP 2.2		Years 3-5

The City exceeded the goals for this Year 5 BMP.

### BMP 2.3 Activities Completed

**12/31/2018**

#### *Dry Weather Field Screening*

The City has 463 outfalls that are within the priority area and meet the criteria for a dry weather screening inspection. The City is to inspect 1/3 or approximately 155 of these outfalls during Years 3, 4 and 5 of the permit. In 2016, 219 outfalls were screened for illicit discharges, far exceeding the required number of screened outfalls for Year 3. As a result, 122 outfalls were planned for screening in both Years 4 and 5. In Year 4, 143 outfalls were screened (exceeding goal). In 2018, 57 of the City's outfalls were inspected for anomalies during dry weather screening. Of those screened, 5 were observed with flow; however, only 2 of the outfalls with flow were determined to be illicit discharges requiring remediation.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.4 Complaint Database (TMDL)</b>	A database is kept of all citizen complaints regarding illicit discharges.	1. Maintain the complaint database	Environmental Services Department	Years 1 – 5

All activities for this BMP are complete for Year 5.

### BMP 2.4 Activities Completed

The Environmental Quality Division uses Garrison, a Web based database, to track all citizen complaints regarding stormwater.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.5 Complaint Response (TMDL)</b>	All citizen complaints are to be investigated.	1. Maintain a response of 80% within 5 days	Environmental Services Department	Years 1 – 5

All activities for this BMP are complete for Year 5.

### BMP 2.5 Activities Completed

**12/31/2018**

#### *Investigate Complaints*

The Environmental Quality Division investigated well over 80% of residential complaints within five (5) working days. Thirty (30) spills and two (2) SSOs were investigated and resolved during this reporting period.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.6 Illicit Discharge and Spill Procedures (TMDL)</b>	Develop and maintain procedures for responding to illicit discharges and spills.	1. Maintain standard operating procedures for responding to spills	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Develop and maintain standard operating procedures for responding to illicit discharges		Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 2.6 Activities Completed

**1/1/2018**

*Spill Response SOPs*

The City maintained standard operating procedures for the following types of spills: diesel or oil, hazardous materials for transportation incidents, hazardous materials for general materials incidents, hazardous materials for small spills, spill reporting guidelines, gas padsite fracturing fluids, and passenger vehicle fires and fluid spills.

**1/1/2018**

The City maintained a standard operating procedure for responding to illicit discharges.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.7 Source Investigation and Elimination (TMDL)</b>	Identify and locate the source of illicit discharges and/or spills. Require responsible parties to perform all necessary corrective actions to eliminate the illicit discharge and/or spill.	1. Conduct source investigations to identify and locate illicit discharges as soon as practicable	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Report to the TCEQ all illicit discharges/spills believed to be an immediate threat to human health or the environment		Years 1 – 5
		3. Document the date the discharge was observed, results of the investigation, follow-up investigation details, and the date the investigation was closed		Years 1 – 5
		4. Notify the responsible party and require the responsible party to take all corrective actions necessary		Years 1 – 5
		5. Notify adjacent permitted MS4 operator or the TCEQ if an illicit discharge/spill extends outside of Grand Prairie's boundary		Years 1 – 5
		6. Perform dry weather field screening during follow-up investigation to ensure discharge has been eliminated		Years 2 – 5



All activities for this BMP are complete for Year 5.

BMP 2.7 Activities Completed

**1/1/2018**

*Illicit Discharge/Spill Response*

The City investigates all illicit discharges and spills that are identified through stream monitoring, complaints, dry weather field screening, or by any other means, as soon as practicable. The source of the illicit discharge or spill is determined through investigation procedures such as screening for the pollutant upstream or up the storm drain line, taking field and /or lab samples to narrow the source possibilities, researching facilities upstream/up the storm drain line to determine their possible role in the discharge/spill, searching the area on foot or in a vehicle to spot the source, and/or any other method necessary. Once the source is identified, and if it is determined there is a responsible party, Environmental Specialists enforce the City ordinances restricting improper discharges of pollutants. The City ensures that illicit discharges/spills are properly remedied, either by the responsible party or, if no party can be identified, through the use of a City contractor. The City reports all discharges/spills to the TCEQ if the discharge/spill is believed to be an immediate threat to human health or the environment. The City also documents all details of the incident into Garrison (response database). If the discharge/spill reaches or is expected to reach a neighboring MS4, the City notifies the operator of that MS4. Dry weather field screening is performed during follow-up investigations.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.8 Spill Response (TMDL)</b>	Coordinate with the Fire Department on emergency spill response, using a private contractor for clean-up and remediation.	1. Continue response and training	Environmental Services Department	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.8 Activities Completed

**1/1/2018**

*Allied International Emergency*

The City maintained a contract with Allied International Emergency for spill response during Year 5.

**12/31/2018**

*Spill Response and Training*

Environmental Specialists from the Environmental Quality Division respond to spills, sanitary sewer overflows, and other environmental hazards 24 hours a day, 365 days a year. Specialists are continuously educated through emergency responders meetings and through peer to peer training.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.9 Building Project Review Process (TMDL)</b>	Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.	<ol style="list-style-type: none"> <li>1. Continue to review at least 80% of new commercial construction plans for water quality hazards</li> <li>2. Continue to inspect at least 80% of Certificates of Occupancy that have a potential to impact stormwater</li> </ol>	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.9 Activities Completed

**12/31/2018**

*Certificate of Occupancy Inspections and Building*

The Environmental Quality Division received 691 Certificate of Occupancy applications and 546 Building Projects during this reporting period. 100% of the COs and Building Projects with the potential to impact stormwater were inspected and/or reviewed for water quality hazards.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.10 Illegal Dumping Hotline (TMDL)</b>	Encourage citizens to report illicit discharges or violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 1.26)	<ol style="list-style-type: none"> <li>1. Continue to make the Illegal Dumping Hotline available on the City’s Code Enforcement and Environmental Services website</li> <li>2. Distribute information on illicit discharges and contacts for reporting illicit discharges in the City’s water bill annually</li> </ol>	Planning and Development Department, Code Enforcement Division, Environmental Services Department, Environmental Quality Division	<p>Years 1 – 5</p> <p>Years 2 – 5</p>

The City exceeded the goal for this Year 5 BMP.

BMP 2.10 Activities Completed

**1/1/2018**

*Illegal Dumping Hotline on City's Website*

The illegal dumping hotline is included on the City's Stormwater webpage at [www.gptx.org/EnvironmentalQuality/Stormwater](http://www.gptx.org/EnvironmentalQuality/Stormwater) and on the Code Enforcement's website at [www.gptx.org/index.aspx?page=219](http://www.gptx.org/index.aspx?page=219).

**12/31/2018**

*Article on Reporting Illicit Discharges*

The City published and distributed an article with information on how to reduce pet waste pollution and grease blockage in the *Pipeline* (a water bill newsletter insert) on 08/2018 and 11/2018.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.11 Stream Sampling (TMDL)</b>	Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge.	1. Monitor and investigate 10 streams for atypical stream results on a monthly basis	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City exceeded the goal for this Year 5 BMP.

BMP 2.11 Activities Completed

**Date: 12/31/2018**

*Stream Sampling*

The Environmental Quality Division has voluntarily conducted stream sampling since 1986. Currently, 23 stream sites are sampled on a monthly, quarterly, and annual basis. The data collected during these monitoring events are used to detect and eliminate illicit discharges or other threats to human and environmental health. Atypical results are identified and researched. All possible attempts are made to mitigate any atypical results. In addition, stream monitoring data are provided to the Clean Rivers Program for water quality monitoring, assessment, and public outreach.

This BMP is highly effective at reducing pollutants to the MEP. Over the many years of implementing this program, numerous atypical results have led to the mitigation of illicit discharges, SSOs, or spills. See Appendix A for a discussion and summary of the results.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.12 Sanitary Sewer Overflow Response Plan (TMDL)</b>	Follow the plan created and implemented for the response of Water Utilities and Environmental Services to SSOs. ESD's response ensures the protection of the waterways through professional advice and field testing.	1. Maintain the plan for Water Utilities and Environmental Services to respond to SSOs	Environmental Services Department, Public Works Department, Water Utilities Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.12 Activities Completed

**1/1/2018**

*Standard Operating Procedure*

The City's Water Utility and Environmental Quality Divisions respond to all sanitary sewer overflows by following a Standard Operating Procedure (SOP). This SOP was updated on 3/28/2017 and remains current. Water Utility's responsibilities include, but are not limited to, cleaning, containing, and recovering sewage, and clearing, repairing, and/or replacing pipeline failures. Environmental Quality Division's responsibilities include, but are not limited to, noting visual observations and sampling for ammonia nitrogen in receiving waterbodies (if applicable). Water Utility and Environmental Quality work together to determine the cause of the overflow and the appropriate clean up response.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.13 Illicit Discharge Awareness Campaign for Businesses and General Public (TMDL)</b>	Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.	1. Educate the general public and 25% of potential polluting businesses annually through the use of brochures, videos, or other methods	Environmental Services Department, Environmental Quality Division	Year 2 – 5

All activities for this BMP are complete for Year 5.

BMP 2.13 Activities Completed

**12/31/2018**

*Educational Brochures, Newsletters, and Posters*

Stormwater educational materials addressing illicit discharges were distributed throughout this reporting period. This includes, but is not limited to, the following: An Industry's Guide for Protecting Grand Prairie's Watershed, Fat Free Sewers, Environmental Guide for Auto Repair and Body Shops, Preventing Stormwater Pollution at Construction Sites, Clean It Right, After the Storm: A Citizen's Guide to Understanding

Stormwater, the AutoWatch newsletter, the Auto Related Business Ordinance, and the H2O Line. Environmental Specialists also distributed "7 Ways to Keep a Clean Shop" posters to Auto Related Businesses. The posters illustrated best management practices for these facilities and were available in English and Spanish.

**12/31/2018**

*Stormwater Posts on Facebook*

Eight (8) posts with a stormwater quality message were placed on Facebook in 2018. Messages discussed how to report illicit discharges or pollution, pet waste, watershed pollution prevention and littering. (See also BMP 1.9.)

**12/31/2018**

*Stormwater PSAs on GPTV*

The City airs the following stormwater pollution prevention PSA videos on GPTV once a day, seven days a week: Doo the Right Thing, Auto Fluids, Detergents, Yard Waste, Paints, and Fertilizers. A Stormwater to Drinking Water PSA airs four times a day, 7 days a week. (See also BMP 1.9.)

**01/01/2018**

*Stormwater Information on Website*

The Environmental Quality Division maintains stormwater educational material for the Environmental Quality website. This information is updated as needed and includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The address to this website is: [www.gptx.org/EnvironmentalQuality/Stormwater](http://www.gptx.org/EnvironmentalQuality/Stormwater). (See also BMP 1.9.)

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.14 Educating and Training City Field Staff (TMDL)</b>	Ensure City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training (see also BMP 5.7).	1. Determine effective means of disseminating IDDE training video to field staff	Environmental Services Department, Environmental Quality Division	Year 2
		2. Disseminate IDDE training video to field staff and keep materials and attendance lists at the Environmental Quality Division office		Year 3

3. Create and provide vehicle card or decal with contact information in the event staff observes an illicit discharge	Year 3
4. Purchase and distribute IDDE posters for display in applicable facility buildings	Year 3

Previously met goals. No activities are listed for this BMP for Year 5.

BMP 2.14 Activities Completed

**03/06/2018**

*Disseminating IDDE Video*

Thirty one (31) Parks and Recreation Staff viewed the “How to Spot and Report Stormwater Pollution” video.

**12/31/2018**

*Miscellaneous Training*

City staff participated in many training opportunities throughout Year 5, such as the EPA Stormwater Conference, TCEQ Environmental Trade Fair and Conference, Autumn Environmental Conference and Expo, and more.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
<b>2.15 Stormwater Ordinance (TMDL)</b>	Review the stormwater ordinance for necessary revisions and update as needed. The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions. The ordinance also includes a description of local controls and conditions established for common and incidental non-stormwater discharges not considered illicit.	1. Review the stormwater ordinance for necessary revisions	Environmental Services Department, Environmental Quality Division	Year 2
		2. If revisions are needed, update the stormwater ordinance and prepare for Council approval		Year 3
		3. If revised, implement revised ordinance		Years 4 – 5

All activities for this BMP are complete for Year 5

BMP 2.15 Activities Completed

**1/1/2018**

*Ordinance Review*

The stormwater ordinance was reviewed for necessary revisions in Year 2. The ordinance provides adequate legal authority, as described in the Small MS4 General Permit, Part III, Section A, 3(a)(2) a-h, to control pollutant discharges into and from the City’s MS4; therefore, no revisions were needed. In addition, the City has legal authority to enter into interagency/interlocal agreements or other maintenance agreements, as necessary, as provided by Government Code Chapter 791.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.16 Litter Collection Program (TMDL)</b>	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	1. Remove litter from major thoroughfares weekly	Environmental Services Department, Solid Waste Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.16 Activities Completed

**12/31/2018**

*Litter Collection*

The litter crew is a five person team that picks litter from the City right-of-way five days a week. They also change out the median trash receptacles that have been set out at some major intersections. In 2018, they collected 175.94 tons of litter. (See also BMP 5.6.)

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.17 Illegal Dumping Clean-Up (TMDL)</b>	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	1. Continue efforts to remove all illegally dumped debris at least 30 days from the day the violation was reported	Planning and Development Department, Code Enforcement Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.17 Activities Completed

**12/31/2018**

*Illegal Dumping Response*

The City responded to approximately 91 illegal dumping complaints in 2018. Complaints included illegally dumped brush, trash, tires, furniture, hazardous waste, etc. Once on site, City staff cleaned up the debris or required the property owner or responsible party to do so. Citations and warnings were issued as necessary. Illegally dumped debris was usually removed within a week of receiving the complaint, but was always removed within 30 days.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.18 Beach Sampling Program (TMDL)</b>	Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water.	1. Follow an SOP for beach sampling once a month during the summer or swimming months	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.18 Activities Completed

**09/30/2018**

*Beach Sampling SOP and results*

The beach sampling standard operation procedure is followed during sampling events.

This BMP is effective at reducing pollutants to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels.

Sampling for E. coli was conducted during the summer months from May to September. The designated swimming areas in Lynn Creek and Loyd Parks met the *primary contact recreation 1* criteria (where the recommended limits for the geometric mean is 126 MPN /100 mL and the single sample criterion for E. coli is 399 MPN/100 mL) in accordance with the 2014 Texas Surface Water Quality Standards §307.7(b)(1)(A)(i). See Appendix B for the results of the beach sampling in 2018.



<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.19 On Site Sewage System Permitting (TMDL)</b>	Onsite sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.	1. Maintain the permitting of sewage systems	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Respond to onsite sewage systems within 10 days of receiving complaint and enforce as necessary		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.19 Activities Completed

**12/31/2018**

*Complaints and Enforcement*

Zero complaint was received in Year 5.

**12/31/2018**

*Permitted OSSFs*

Zero OSSF was permitted in Year 5.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.20 Auto Inspection Program (TMDL)</b>	Inspect auto-related businesses for water quality issues on an annual basis.	1. Inspect at least 75% of auto-related businesses annually	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 2.20 Activities Completed

**12/31/2018**

*ARB Inspections*

The Environmental Quality Division inspected 99.3% of the auto-related businesses in Grand Prairie in during this reporting period. Inspectors ensured ARBs were in compliance with local, state, and federal stormwater regulations.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.21 Grease Trap Pumping (TMDL)</b>	In order to reduce the number of illicit discharges, ensure grease traps are being pumped as required.	1. Run report in LINKO to ensure frequency of pumping requirements are met	Environmental Services Department, Environmental Quality Division	Years 3-5

All activities for this BMP are complete for Year 5.

BMP 2.21 Activities Completed

**12/31/2018**

*Grease Trap Compliance Report*

Pumping helps to reduce the number of illicit discharges. During 2016, twenty-five (25) charges were issued to health permit holders for not pumping grease traps, during 2017, fifty-eight (58) charges. In 2018, it was determined that 67 facilities were not in full compliance; these facilities were subjected to further enforcement. During 2018, thirty nine (39) charges were issued to health permit holders for not pumping grease traps.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.22 Horse Stables (TMDL)</b>	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.	1. Create inspection form	Environmental Services Department, Environmental Quality Division, Animal Services Division,	Year 2
		2. Perform annual inspections of private horse stables and ensure good housekeeping practices are implemented	Planning and Development Department, Code Enforcement Division	Years 3-5

All activities for this BMP are complete for Year 5.

BMP 2.22 Activities Completed

**12/04/2018**

*Horse Stable Inspections*

Seventeen horse stables were inspected (using a previously created form) for possible sources of pollutants including manure, chemicals, debris, trash, muds, etc.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>2.23 Sanitary Sewer Systems (TMDL)</b>	Ensure sanitary sewers are functioning properly in order to reduce overflows.	1. Make improvements to sanitary sewers and lift stations, as needed	Environmental Services Department, Environmental Quality Division, Public Works	Years 1-5
		2. Ensure reporting of overflows is in compliance with state requirements	Department, Water Utilities Division	Years 1-5
		3. Update the Certificate of Occupancy SOP for food manufacturers and restaurants		Year 4

All activities for this BMP are complete for Year 5.

BMP 2.23 Activities Completed

**12/31/2018**

*Sanitary Sewer and Lift Station Improvements and Overflow Reporting*

Improvements were made to sanitary sewer systems and lift stations, as needed. Sewer overflows were reported as required by the State.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.1 Storm Sewer System Operation and Maintenance for the City of Grand Prairie (TMDL)</b>	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.	1. Maintain a computer maintenance and management system to track maintenance and complaint responses	Public Works Department, Streets Division	Years 1 – 5
		2. Respond to 80% of citizen complaints and input information into City Works Management System		Years 1 – 5
		3. Track storm sewer and drainage maintenance through City Works Management System		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.1 Activities Completed

**12/31/2018**

*Complaint and Maintenance Response and Tracking*

The City used the City Works Management System to track complaints and maintenance activities. During this reporting period, the City responded to 244 complaints and/or maintenance needs

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.2 Disposal of Waste Removed from the MS4 for the City of Grand Prairie (TMDL)</b>	Maintain standard operating procedure for the disposal of waste removed from the MS4.	1. Maintain SOP for waste disposal	Environmental Services, Environmental Quality and Solid Waste Division	Years 1 – 5
		2. Ensure compliance with 30 TAC Chapters 330 and 335		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.2 Activities Completed

**1/1/2018**

*SOP for Waste Removal*

The City maintained a Standard Operating Procedure for the disposal of waste removed from the MS4. The SOP defines the responsibilities of Streets Division personnel for clearing and disposing of waste collected from the MS4.

**1/1/2018**

*30 TAC Chapters 330 and 335*

The City’s Municipal Solid Waste (MSW) facility receives waste in accordance with their Site Operating Plan, which is located in MSW permit number 996C, Attachment 14. The City’s Garbage collection and disposal ordinance (Article VI) also contains provisions that outline citizens’ responsibility in the waste collection process.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.3 Storm Sewer and Drainage Maintenance Program for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.1) (TMDL)</b>	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	1. Respond to written complaints within the District	Dallas County Flood Control District #1	Years 1 – 5
		2. Perform annual maintenance reviews and prepare report		Years 1 – 5
		3. Make necessary repairs to District facilities		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.3 Activities Completed

**1/4/2019**      **Responsible Party: Dallas County Flood Control District #1**

*Complaints, Reviews, and Repairs*

No written complaints were filed in year 5. The annual maintenance review was conducted in October and November 2018, the draft report was prepared in December 2018, and the final will be submitted in January 2019. There are no known necessary repairs to District facilities in Grand Prairie at this time.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.4 Disposal of Waste Removed from the MS4 for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.2) (TMDL)</b>	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1’s stormwater system.	1. Maintain a SOP for waste disposal	Dallas County Flood Control District #1	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.4 Activities Completed

**1/1/2018**      *Responsible Party: Dallas County Flood Control District #1*  
*DCFCD #1 SOP for Waste Disposal*

The DCFCD #1 developed a standard operating procedure (SOP) for waste removed from the storm water system in 2009 as a measurable goal for the 2008 TPDES General Permit TXR040000. The 2009 SOP remains current. It includes an introduction, purpose, district general response capabilities, and procedures for clearing and collecting debris from the MS4.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.5 List Potential Problem Areas for Inspection (TMDL)</b>	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).	1. Develop a list of potential problem areas  2. Identify and prioritize problem areas for increased inspection	Planning and Development Department, Code Enforcement Division	Year 2  Year 3-5

All activities for this BMP are complete for Year 5.

BMP 5.5 Activities Completed

**12/31/2018**  
*Identify and Prioritize Problem Areas*

A list of potential problem areas was created in Year 2. Five (5) major problem areas were identified including vacant and park land owned by the

City, a City right-of-way located along an infrequently traveled road, vacant land owned/controlled by the US Army Corps of Engineers, and undeveloped, privately owned property. Five (5) major problem areas were identified in Year 2. Monitoring efforts increased in these areas in Years 3, 4 and continued in Year 5.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.6 Street Operation and Maintenance (TMDL)</b>	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	1. Sweep business district, thoroughfares and some public parking lots on an annual basis and more often on high traffic roads	Environmental Services Department, Solid Waste Division	Years 1 – 5
		2. For paved areas outside of the sweeping program, the City will focus implementation of other trash and litter control procedures or provide inlet protection measures		Years 1 – 5
		3. The City will require that all non-prohibited materials be disposed of at a Type I landfill		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.6 Activities Completed

**12/31/2018**

*Street Sweeping*

Mr. Dirt is the city’s contractor to sweep the business district, major thoroughfares and some public parking lots on an annual basis. In 2018 they collected 142.33 of sand/debris/ waste from our city streets. They also sweep up the roads after the MLK Day Parade, Juneteenth Parade and Cinco de Mayo Parade.

**12/31/2018**

*Additional Trash and Litter Control Measures*

The litter crew is a five person team that picks litter from the City right-of-way five days a week. They also change out the median trash receptacles that have been set out at some major intersections. In 2018, they collected 175.94 tons of litter. (See also BMP 2.16)

**1/1/2018**

*Type I Landfill*

The code of ordinances, Article VI- Garbage Collection and Disposal, Sec. 26-101(a) states that: “All municipal solid waste generated within the City of Grand Prairie not prohibited by law for disposal in Grand Prairies Type I landfill shall be transported to the landfill for proper disposal.” All materials collected within city limits are disposed of at the Grand Prairie Municipal Landfill.

<b>BMP</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Responsibility</b>	<b>Target Date</b>
<b>5.7 Educating and Training City Field Staff (TMDL)</b>	Inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices (see also BMP 2.14).	1. Determine effective means of disseminating stormwater training video to field staff	Environmental Services Department, Environmental Quality Division	Year 2
		2. Disseminate stormwater training video to field staff and keep materials and attendance lists at the Environmental Quality Division office		Year 3
		3. Create and provide vehicle card or decal with contact information in the event staff observes an illicit discharge		Year 3
		4. Purchase and distribute IDDE posters for display in applicable facility buildings		Year 3



Previously met goals. No activities are listed for this BMP for Year 5.

BMP 5.7 Activities Completed

**03/06/2018**

*Disseminating IDDE Video*

Thirty one (31) Parks and Recreation Staff viewed the “How to Spot and Report Stormwater Pollution” video.

**12/31/2018**

*Miscellaneous Training*

City staff participated in many training opportunities throughout Year 5, such as the EPA Stormwater Conference, TCEQ Environmental Trade Fair and Conference, Autumn Environmental Conference and Expo, and more.

**3. Report the benchmark identified by the MS4 and assessment activities:**

<b>Benchmark Parameter</b>	<b>Benchmark Value</b>	<b>Description of additional sampling or other assessment activities</b>	<b>Year(s) conducted</b>
Bacteria	0841_01, Lower West Fork Trinity River, 589.6 billions MPN/day	No other activities were conducted in addition to those listed above.	Not applicable
Bacteria	0841B, Bear Creek, 1,085 billions MPN/day	No other activities were conducted in addition to those listed above.	Not applicable
Bacteria	0841C, Arbor Creek, 47.59 billions MPN/day	No other activities were conducted in addition to those listed above.	Not applicable
Bacteria	0841E, Copart Branch Mountain Creek, 24.62 billions MPN/day	No other activities were conducted in addition to those listed above.	Not applicable
Bacteria	0841G, Dalworth Creek, 56.41 billions MPN/day	No other activities were conducted in addition to those listed above.	Not applicable
Bacteria	0841L, Johnson Creek, 491.0 billions MPN/day	No other activities were conducted in addition to those listed above.	Not applicable

**4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark:**

<i>Benchmark Parameter</i>	<i>BMP#</i>	<i>BMP Name</i>	<i>BMP Description</i>	<i>How is BMP effective in contributing to achieving the benchmark?</i>
Bacteria	1.1	HHW Program	Reduction of the unauthorized disposal of household hazardous waste will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.	Encourages the proper disposal of hazardous waste and informs citizens of when and where they can dispose of waste.
Bacteria	1.2	Pet Waste	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach.	Give-a-ways, PSAs, and brochures target the appropriate audience and encourage proper disposal of pet waste.
Bacteria	1.3	Environmental Workshop	Pollution Prevention (P2) measure concepts are promoted to industries to reduce waste generated and potential sources of stormwater pollution.	Surveys indicate that information helps facilities comply.
Bacteria	1.4	Commercial/Industrial Floatables Education	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections.	Educational materials discuss methods for reducing floatables. Reaches the appropriate audience as brochures are distributed during inspections, classes, workshops, and at the Development Center.

Bacteria	1.5	Information for Auto Related Businesses	Awareness of the impact of the automotive sector's pollutants on water quality will be integrated into existing activities through the distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.	Compliance has increased.
Bacteria	1.6	School Curriculum	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.	The City purchased 69 English and 27 Spanish replacement Major Rivers Educational Packets for GPISD. This program emphasizes the importance of stormwater pollution controls to young students who in turn may relay this information to their older parents/guardians.
Bacteria	1.7	Interactive Watershed Model	Demonstrate to multiple age groups the effects of various residential and commercial pollutants on stormwater quality.	Effective method of teaching the concept of a watershed; however, the model has limited outreach capabilities.
Bacteria	1.8	Utility Bill Insert	Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.	This is the most widely read city publication. Nineteen (19) stormwater related articles were published and distributed during this reporting period.
Bacteria	1.9	Multimedia Education	Promote watershed awareness for citizens, City staff, and visitors using multiple types of media, including a website, City's cable channel, and Facebook.	Promotes watershed awareness to Grand Prairie citizens through Grand Prairie TV, the City's website, and Facebook.
Bacteria	1.10	Non-English	Ensure educational materials are translated into Spanish, as needed.	There is a high population of only Spanish speaking citizens in Grand Prairie.
Bacteria	1.11	Visitor Education	Provide education featuring water quality issues for Grand Prairie visitors.	Website visited by anyone with access to the internet.
Bacteria	1.12	Drain Markers	Install storm drain markers "Protect Our Water, Don't Dump" to promote awareness of the storm drain system.	Increases awareness of the storm drain system to citizens and to those installing markers. 140 storm drain makers were placed during this reporting period.

Bacteria	1.13	Educational Event	Hold an interactive educational event that promotes stormwater BMPs.	Event brings awareness to stormwater issues and reaches hundreds of residents in one day.
Bacteria	1.14	HHW Events	Encourage citizens to dispose of HHW properly by participating in City hosted events	Actively allows citizens to participate and dispose of HHW properly. The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.
Bacteria	1.26	Illegal Dumping Hotline	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 2.10)	City staffs are made aware of polluted areas that they may have otherwise missed.
Bacteria	2.1	GIS MS4 Database	Maintain an updated map of the locations of all outfalls and the names of all receiving US surface waters.	Map used to trace illicit discharges to waterbodies. Allows for effective remediation of spills, illicit discharges, and SSOs.
Bacteria	2.2	Priority Areas	Identify priority areas within the city likely to have an illicit discharge.	Areas within the city that are likely to have an illicit discharge are identified so that monitoring efforts in these areas may increase.

Bacteria	2.3	Dry Weather Field Screening	Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, into the storm sewer system.	The City has 463 outfalls that are within the priority area and meet the criteria for a dry weather screening inspection. The City is to inspect 1/3 or approximately 155 of these outfalls during Years 3, 4 and 5 of the permit. In 2016, 219 outfalls were screened for illicit discharges, far exceeding the required number of screened outfalls for Year 3. As a result, 122 outfalls were planned for screening in both Years 4 and 5. In Year 4, 143 outfalls were screened (exceeding goal). In 2018, 57 of the City's outfalls were inspected for anomalies during dry weather screening. Of those screened, 5 were observed with flow; however, only 2 of the outfalls with flow were determined to be illicit discharges requiring remediation.
Bacteria	2.4	Complaint database	A database is kept of all citizen complaints regarding illicit discharges.	Tracks spills and creates historical information for assessment.
Bacteria	2.5	Complaint response	All citizen complaints are to be investigated.	Creates response mechanism. Incidents such as spills, illicit discharges, or sanitary sewer overflows are mitigated. Thirty (30) spills and two (2) SSOs were investigated and resolved in 2018. Fourteen (14) spills and seven (7) SSOs were investigated and resolved during 2017. Seventeen (17) spills and five (5) SSOs were investigated and resolved in 2016. Nine (9) spills and five (5) SSOs were investigated and resolved in 2015. Sixteen (16) spills and ten (10) SSOs were investigated and resolved in 2014.
Bacteria	2.6	Illicit Discharge/Spill Procedures	Develop and maintain procedures for responding to illicit discharges and spills.	Standard operating procedures used for responding to spills. Stormwater pollution incidents are mitigated.

Bacteria	2.7	Source Investigation and Elimination	Identify and locate the source of illicit discharges and/or spills. Require responsible parties to perform all necessary corrective actions to eliminate the illicit discharge and/or spill.	Investigation and elimination of polluting sources.
Bacteria	2.8	Spill response	Coordinate with the Fire Department on emergency spill response, using a private contractor for clean-up and remediation.	Abates pollutants in our waterbodies.
Bacteria	2.9	Building Project Review Process	Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.	Mandates compliance prior to operation.
Bacteria	2.10	Illegal Dumping Hotline	Encourage citizens to report illicit discharges or violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 1.26)	City staffs are made aware of polluted areas that they may have otherwise missed.
Bacteria	2.11	Streams Sampling	Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge.	Atypical results are investigated and mitigated. Pollutants are reduced to the MEP.
Bacteria	2.12	SSO Response	Follow the plan created and implemented for the response of Water Utilities and Environmental Services to SSOs. ESD's response ensures the protection of the waterways through professional advice and field testing.	Ensures the protection of our waterways following an SSO.

Bacteria	2.13	IDDE Education	Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.	Stormwater BMP posters, brochures, and videos are used to target the appropriate audience.
Bacteria	2.14	Educating and Training City Field Staff	Ensure City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training (see also BMP 5.7).	Ensures City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training.
Bacteria	2.15	Stormwater Ordinance	Review the stormwater ordinance for necessary revisions and update as needed. The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions. The ordinance also includes a description of local controls and conditions established for common and incidental non-stormwater discharges not considered illicit.	The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions.
Bacteria	2.16	Litter Collection	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	The Litter Crew collected 175.94 tons of litter in 2018, 163.74 tons of litter during 2017, 198.11 tons of litter during 2016, 185.85 tons of litter during 2015, and approximately 129.98 tons of litter in 2014. By preventing litter from remaining in the environment, both surface and groundwater are protected from potential contamination associated with it.
Bacteria	2.17	Illegal Dumping Clean-up	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	Clean-up reduces potential pollutants. The City responded to approximately 91 illegal dumping complaints in 2018, approximately 60 illegal dumping complaints in 2017, 139 illegal dumping complaints in 2016, 135 illegal dumping complaints during 2015, and 123 illegal dumping complaints in 2014.

Bacteria	2.18	Beach Sampling Program	Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water.	Reduces health risks to citizens. Pollutants are reduced to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels.
Bacteria	2.19	On Site Sewage System Permitting	On site sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.	Failing septic systems are identified and abated. In 2018, zero OSSF complaint was received and no permit was issued. In 2017, one OSSF permit was issued and one complaint was received. In 2016, no OSSFs were permitted and one (1) complaint was received. One (1) permit was issued and one (1) complaint was received during 2015
Bacteria	2.20	Auto Inspection Program	Inspect auto-related businesses for water quality issues on an annual basis.	Enforcement and education encourages businesses to prevent pollutants from coming into contact with stormwater.
Bacteria	2.21	Grease Trap Pumping	In order to reduce the number of illicit discharges, ensure grease traps are being pumped as required.	Pumping helps to reduce the number of illicit discharges. In 201, it was determined that 67 facilities were not in full compliance in 2018; these facilities were subjected to further enforcement. During 2018, thirty nine (39) charges were issued to health permit holders for not pumping grease traps.
Bacteria	2.22	Horse Stables	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.	Ensures private horse stables are maintained properly so that sources of bacteria are reduced. In 2018, seventeen (17) horse stables were inspected.
Bacteria	2.23	Sanitary Sewer Systems	Ensure sanitary sewers are functioning properly in order to reduce overflows.	Maintenance of sanitary sewer systems and lift stations reduces SSOs.
Bacteria	5.1	Storm Sewer Operation and Maintenance	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.	Maintenance includes cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. In 2018, the City responded to 244 complaints and/or maintenance needs, in 2017, the City responded to 240 and, in 2016, City responded to 304.



Bacteria	5.2	MS4 Waste Disposal	Maintain standard operating procedure for the disposal of waste removed from the MS4.	Follow a standard operating procedure to clear and dispose of waste collected from the MS4.
Bacteria	5.3	DCFCD Storm Sewer and Drainage Maintenance	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	As situations arise in the DCFCD that require maintenance or waste removal, this BMP helps to reduce the discharge of pollutants.
Bacteria	5.4	MS4 Waste Disposal for DCFCD	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1's stormwater system.	Follow a standard operating procedure to clear and dispose of waste collected from the MS4 located in DCFCD.
Bacteria	5.5	List Potential Problem Areas for Inspection	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).	Five (5) major problem areas were identified in Year 2. Monitoring efforts increased in these areas in Years 3, 4 and continued in Year 5.
Bacteria	5.6	Street Operation and Maintenance	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	Street sweeping and litter crews remove contaminants thereby reducing the associated risk to the environment. In 2018, street sweeping operations collected 142.33 tons of litter and the litter crew collected 175.95 tons of litter. In 2017, street sweeping operations collected 102.4 tons of litter and the litter crew collected 163.74 tons of litter. In 2016, street sweeping operations collected 92.73 tons of litter and the litter crew collected 198.11 tons of litter.
Bacteria	5.7	Educating and Training City Field Staff	Inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices (see also BMP 2.14).	Ensures City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training.

**5. If applicable, report on focused BMPs to address impairment:**

<b>Benchmark Parameter</b>	<b>BMP#</b>	<b>BMP Name</b>	<b>BMP Description</b>	<b>Comments</b>
Bacteria	1.1	HHW Program	Reduction of the unauthorized disposal of household hazardous waste will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.	Encourages the proper disposal of hazardous waste and informs citizens of when and where they can dispose of waste.
Bacteria	1.2	Pet Waste	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach.	Give-a-ways, PSAs, and brochures target the appropriate audience and encourage proper disposal of pet waste.
Bacteria	1.4	Commercial/Industrial Floatables Education	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections.	Educational materials discuss methods for reducing floatables. Reaches the appropriate audience as brochures are distributed during inspections, classes, workshops, and at the Development Center.
Bacteria	1.6	School Curriculum	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.	The City purchased 69 English and 27 Spanish replacement Major Rivers Educational Packets for GPISD. This program emphasizes the importance of stormwater pollution controls to young students who in turn may relay this information to their older parents/guardians.
Bacteria	1.7	Interactive Watershed Model	Demonstrate to multiple age groups the effects of various residential and commercial pollutants on stormwater quality.	Effective method of teaching the concept of a watershed; however, the model has limited outreach capabilities.

Bacteria	1.8	Utility Bill Insert	Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.	This is the most widely read city publication. Nineteen (19) stormwater related articles were published and distributed during this reporting period.
Bacteria	1.9	Multimedia Education	Promote watershed awareness for citizens, City staff, and visitors using multiple types of media, including a website, City's cable channel, and Facebook.	Promotes watershed awareness to Grand Prairie citizens through Grand Prairie TV, the City's website, and Facebook.
Bacteria	1.10	Non-English	Ensure educational materials are translated into Spanish, as needed.	There is a high population of only Spanish speaking citizens in Grand Prairie.
Bacteria	1.12	Drain Markers	Install storm drain markers "Protect Our Water, Don't Dump" to promote awareness of the storm drain system.	Increases awareness of the storm drain system to citizens and to those installing markers. 140 storm drain makers were placed during this reporting period.
Bacteria	1.13	Educational Event	Hold an interactive educational event that promotes stormwater BMPs.	Event brings awareness to stormwater issues and reaches hundreds of residents in one day.
Bacteria	1.14	HHW Events	Encourage citizens to dispose of HHW properly by participating in City hosted events	Actively allows citizens to participate and dispose of HHW properly. The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.
Bacteria	1.26	Illegal Dumping Hotline	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 2.10)	City staffs are made aware of polluted areas that they may have otherwise missed.
Bacteria	2.1	GIS MS4 Database	Maintain an updated map of the locations of all outfalls and the names of all receiving US surface waters.	Map used to trace illicit discharges to waterbodies. Allows for effective remediation of spills, illicit discharges, and SSOs.

Bacteria	2.3	Dry Weather Field Screening	Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, into the storm sewer system.	The City has 463 outfalls that are within the priority area and meet the criteria for a dry weather screening inspection. The City is to inspect 1/3 or approximately 155 of these outfalls during Years 3, 4 and 5 of the permit. In 2016, 219 outfalls were screened for illicit discharges, far exceeding the required number of screened outfalls for Year 3. As a result, 122 outfalls were planned for screening in both Years 4 and 5. In Year 4, 143 outfalls were screened (exceeding goal). Of those screened, 16 were observed with flow; however, only 3 of the outfalls with flow were determined to be illicit discharges requiring remediation. In 2018, 57 of the City's outfalls were inspected for anomalies during dry weather screening. Of those screened, 5 were observed with flow; however, only 2 of the outfalls with flow were determined to be illicit discharges requiring remediation.
Bacteria	2.5	Complaint response	All citizen complaints are to be investigated.	Creates response mechanism. Incidents such as spills, illicit discharges, or sanitary sewer overflows are mitigated. Thirty (30) spills and two (2) SSOs were investigated and resolved in 2018. Fourteen (14) spills and seven (7) SSOs were investigated and resolved during 2017. Seventeen (17) spills and five (5) SSOs were investigated and resolved in 2016. Nine (9) spills and five (5) SSOs were investigated and resolved in 2015. Sixteen (16) spills and ten (10) SSOs were investigated and resolved in 2014.
Bacteria	2.6	Illicit Discharge/Spill Procedures	Develop and maintain procedures for responding to illicit discharges and spills.	Standard operating procedures used for responding to spills. Stormwater pollution incidents are mitigated.

Bacteria	2.7	Source Investigation and Elimination	Identify and locate the source of illicit discharges and/or spills. Require responsible parties to perform all necessary corrective actions to eliminate the illicit discharge and/or spill.	Investigation and elimination of polluting sources.
Bacteria	2.8	Spill response	Coordinate with the Fire Department on emergency spill response, using a private contractor for clean-up and remediation.	Abates pollutants in our waterbodies.
Bacteria	2.9	Building Project Review Process	Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.	Mandates compliance prior to operation.
Bacteria	2.10	Illegal Dumping Hotline	Encourage citizens to report illicit discharges or violators of dumping by participating in an inter-local response to an illegal dumping hotline (see also BMP 1.26)	City staffs are made aware of polluted areas that they may have otherwise missed.
Bacteria	2.11	Streams Sampling	Assess water quality of streams through monthly stream monitoring of 10 sites within or near the city limits. Investigate atypical results for an illicit discharge.	Atypical results are investigated and mitigated. Pollutants are reduced to the MEP.
Bacteria	2.12	SSO Response	Follow the plan created and implemented for the response of Water Utilities and Environmental Services to SSOs. ESD's response ensures the protection of the waterways through professional advice and field testing.	Ensures the protection of our waterways following an SSO.
Bacteria	2.13	IDDE Education	Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.	Stormwater BMP posters, brochures, and videos are used to target the appropriate audience.

Bacteria	2.14	Educating and Training City Field Staff	Ensure City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training (see also BMP 5.7).	Ensures City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training.
Bacteria	2.15	Stormwater Ordinance	Review the stormwater ordinance for necessary revisions and update as needed. The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions. The ordinance also includes a description of local controls and conditions established for common and incidental non-stormwater discharges not considered illicit.	The ordinance effectively prohibits non-stormwater discharges into the storm sewer system and implements enforcement procedures and actions.
Bacteria	2.16	Litter Collection	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	The Litter Crew collected 175.94 tons of litter in 2018, 163.74 tons of litter during 2017, 198.11 tons of litter during 2016, 185.85 tons of litter during 2015, and approximately 129.98 tons of litter in 2014. By preventing litter from remaining in the environment, both surface and groundwater are protected from potential contamination associated with it.
Bacteria	2.17	Illegal Dumping Clean-up	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	Clean-up reduces potential pollutants. The City responded to approximately 91 illegal dumping complaints in 2018, approximately 60 illegal dumping complaints in 2017, 139 illegal dumping complaints in 2016, 135 illegal dumping complaints during 2015, and 123 illegal dumping complaints in 2014.

Bacteria	2.18	Beach Sampling Program	Help reduce health risk to the visitors of Joe Pool Lake swim beaches by minimizing the public's exposure to diseases in the water.	Reduces health risks to citizens. Pollutants are reduced to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels.
Bacteria	2.19	On Site Sewage System Permitting	Onsite sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.	Failing septic systems are identified and abated. In 2018, zero OSSF complaint was received and no permits were issued. In 2017, one OSSF permit was issued and one complaint was received. In 2016, no OSSFs were permitted and one (1) complaint was received. One (1) permit was issued and one (1) complaint was received during 2015.
Bacteria	2.20	Auto Inspection Program	Inspect auto-related businesses for water quality issues on an annual basis.	Enforcement and education encourages businesses to prevent pollutants from coming into contact with stormwater.
Bacteria	2.21	Grease Trap Pumping	In order to reduce the number of illicit discharges, ensure grease traps are being pumped as required.	Pumping helps to reduce the number of illicit discharges. In 2018, a report was created to determine if grease trap pumping requirements were met which determined that 67 facilities were not in full compliance; these facilities were subjected to further enforcement. During 2018, thirty nine (39) charges were issued to health permit holders for not pumping grease traps.
Bacteria	2.22	Horse Stables	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.	Ensures private horse stables are maintained properly so that sources of bacteria are reduced.
Bacteria	2.23	Sanitary Sewer Systems	Ensure sanitary sewers are functioning properly in order to reduce overflows.	Maintenance of sanitary sewer systems and lift stations reduces SSOs.
Bacteria	5.1	Storm Sewer Operation and Maintenance	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.	Maintenance includes cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. In 2018, the City responded to 244 complaints and/or maintenance needs, in 2017, the City responded to 240 and, in 2016, City responded to 304.

Bacteria	5.2	MS4 Waste Disposal	Maintain standard operating procedure for the disposal of waste removed from the MS4.	Follow a standard operating procedure to clear and dispose of waste collected from the MS4.
Bacteria	5.3	DCFCD Storm Sewer and Drainage Maintenance	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	As situations arise in the DCFCD that require maintenance or waste removal, this BMP helps to reduce the discharge of pollutants.
Bacteria	5.4	MS4 Waste Disposal for DCFCD	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1's stormwater system.	Follow a standard operating procedure to clear and dispose of waste collected from the MS4 located in DCFCD.
Bacteria	5.5	List Potential Problem Areas for Inspection	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).	Five (5) major problem areas were identified in Year 2. Monitoring efforts increased in these areas in Years 3, 4 and continued in Year 5.
Bacteria	5.6	Street Operation and Maintenance	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	Street sweeping and litter crews remove contaminants thereby reducing the associated risk to the environment. In 2018, street sweeping operations collected 142.33 tons of litter and the litter crew collected 175.95 tons of litter. In 2017, street sweeping operations collected 102.4 tons of litter and the litter crew collected 163.74 tons of litter. In 2016, street sweeping operations collected 92.73 tons of litter and the litter crew collected 198.11 tons of litter.
Bacteria	5.7	Educating and Training City Field Staff	Inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices (see also BMP 2.14).	Ensures City staff that may come into contact with or otherwise observe an illicit discharge or illicit connection has the proper education and training.



**6. Describe progress in achieving the benchmark:**

<b>Benchmark Parameter</b>	<b>BMP#</b>	<b>BMP Name</b>	<b>BMP Description</b>	<b>Comments</b>
Bacteria	1.1-1.14, 1.26	Multiple BMPs	Educational opportunities	In addition to BMPs 1.6, 1.8, 1.12, and 1.14 listed below, the City performed 11 other BMPs that addressed bacteria through educational opportunities.
Bacteria	1.6	School Curriculum	Education on stormwater quality and pollution prevention will be provided as needed to elementary schools in Grand Prairie ISD through the purchase of curriculum.	The City purchased 69 English and 27 Spanish replacement Major Rivers Educational Packets for GPISD. This program emphasizes the importance of stormwater pollution controls to young students who in turn may relay this information to their older parents/guardians.
Bacteria	1.8	Utility Bill Insert	Raise awareness of stormwater issues for citizens by placing articles in the water utility bill insert.	This is the most widely read city publication. Nineteen (19) stormwater related articles were published and distributed during this reporting period.
Bacteria	1.12	Drain Markers	Install storm drain markers “Protect Our Water, Don’t Dump” to promote awareness of the storm drain system.	Increases awareness of the storm drain system to citizens and to those installing markers. 140 storm drain makers were placed during this reporting period.
Bacteria	1.14	HHW Events	Encourage citizens to dispose of HHW properly by participating in City hosted events	Actively allows citizens to participate and dispose of HHW properly. The Environmental Quality Division held nine (9) Household Hazardous Waste events during the reporting period. During this time 1,311 households participated in the events and 431 took HHW to Fort Worth ECC. Approximately 85,117 pounds of hazardous waste products were recycled.
Bacteria	2.5	Complaint response	All citizen complaints are to be investigated.	Creates response mechanism. Incidents such as spills, illicit discharges, or sanitary sewer overflows are mitigated. Thirty (30) spills and two (2) SSOs were investigated and resolved in 2018. Fourteen (14) spills and seven (7) SSOs were investigated and resolved in 2017. Seventeen (17) spills and five (5) SSOs were investigated and resolved in 2016. Nine (9) spills and five (5) SSOs were investigated and resolved in 2015. Sixteen (16) spills and ten (10) SSOs were investigated and resolved in 2014.

Bacteria	2.16	Litter Collection	Keeping the major thoroughfares clean and free of litter will reduce the amount of floatables that reach water ways. A contractor is employed to clear litter from these roadways.	The Litter Crew collected 175.94 tons of litter in 2018, 163.74 tons of litter, during 2017, 198.11 tons of litter during 2016, 185.85 tons of litter during 2015, and approximately 129.98 tons of litter in 2014. By preventing litter from remaining in the environment, both surface and groundwater are protected from potential contamination associated with it.
Bacteria	2.17	Illegal Dumping Clean-up	Cleaning up debris in a timely fashion reduces the amount of illegal dumping. The City investigates all illegal dumping and ensures the removal of debris.	Clean-up reduces potential pollutants. The City responded to approximately 91 illegal dumping complaints in 2018, approximately 60 illegal dumping complaints in 2017, 139 illegal dumping complaints in 2016, 135 illegal dumping complaints during 2015, and 123 illegal dumping complaints in 2014.
Bacteria	2.19	On Site Sewage System Permitting	Onsite sewage systems are regulated through an ordinance and permitted by the City. Failing septic systems are identified and abated.	Failing septic systems are identified and abated. In 2018, zero OSSF complaint was received and no permit was issued. In 2017, one OSSF permit was issued and one complaint was received. In 2016, no OSSFs were permitted and one (1) complaint was received. One (1) permit was issued and one (1) complaint was received during 2015.
Bacteria	2.21	Grease Trap Pumping	In order to reduce the number of illicit discharges, ensure grease traps are being pumped as required.	Pumping helps to reduce the number of illicit discharges. During 2016, twenty-five (25) charges were issued to health permit holders for not pumping grease traps, during 2017, fifty-eight (58) charges. In 2018, it was determined that 67 facilities were not in full compliance; these facilities were subjected to further enforcement. During 2018, thirty nine (39) charges were issued to health permit holders for not pumping grease traps.
Bacteria	2.22	Horse Stables	Ensure private horse stables are maintained properly so that sources of bacteria are reduced.	In 2018, seventeen horse stables were inspected to ensure proper maintenance so that sources of bacteria are reduced.

Bacteria	5.1	Storm Sewer Operation and Maintenance	Implement an O&M program to reduce pollutants in the MS4. Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations.	Maintenance includes cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. In 2018, the City responded to 244 complaints and/or maintenance needs, in 2017, the City responded to 240 and, in 2016, City responded to 304.
Bacteria	5.5	List Potential Problem Areas for Inspection	Develop a list of potential problem areas, then identify and prioritize areas for increased inspection (i.e. illegal dumping).	Five (5) major problem areas were identified in Year 2. Monitoring efforts increased in these areas in Years 3, 4 and continued in Year 5.
Bacteria	5.6	Street Operation and Maintenance	Remove solid pollutants from the streets to avoid contamination of the storm sewer system and dispose of properly to avoid reentry into the MS4.	Street sweeping and litter crews remove contaminants thereby reducing the associated risk to the environment. In 2018, street sweeping operations collected 142.33 tons of litter and the litter crew collected 175.95 tons of litter. In 2017, street sweeping operations collected 102.4 tons of litter and the litter crew collected 163.74 tons of litter. In 2016, street sweeping operations collected 92.73 tons of litter and the litter crew collected 198.11 tons of litter.

## E. Stormwater Activities

**Describe any stormwater activities the MS4 operator has planned for the next reporting year.**

The City of Grand Prairie and Dallas County Flood Control District (DCFCD) #1 have implemented all best management practices included in their SWMP and are in full compliance with the TPDES General Permit No. TXR040065 and TXR040255, respectively. The City and DCFCD #1 will evaluate any and all new requirements in the updated TXR040000 and will create a new Storm Water Management Plan. Please refer to the new SWMP that will be submitted in 2019 for all stormwater activities planned for the next reporting year.

## F. SWMP Modifications

1. **Have there been any changes made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ's Review?** NA

2. Explain additional changes or proposed changes not previously mentioned (i.e. dates, contacts, procedures, annexation of land etc.): NA

**G. Additional BMPs**

1. Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans: NA

**H. Additional Information**

1. Is the permittee relying on another entity/ies to satisfy some of its permit obligations? Yes

If ‘Yes,’ provide the name(s) of other entity/ies and an explanation of their responsibilities:

Dallas County Flood Control District #1/ TXR040255

DCFCFD is solely responsible for only two (2) BMPs (BMP 5.3 and 5.4):

<b>5.3 Storm Sewer and Drainage Maintenance Program for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.1) (TMDL)</b>	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	1. Respond to written complaints within the District	Dallas County Flood Control District #1	Years 1 – 5
		2. Perform annual maintenance reviews and prepare report		Years 1 – 5
		3. Make necessary repairs to District facilities		Years 1 – 5

<b>5.4 Disposal of Waste Removed from the MS4 for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see BMP 5.2) (TMDL)</b>	Maintain a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1’s stormwater system.	1. Maintain a SOP for waste disposal	Dallas County Flood Control District #1	Years 1 – 5
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2.a. Is the named permittee sharing a SWMP with other entities? Yes

2.b. If ‘yes,’ is this a system-wide annual report including information for all permittees? Yes

If ‘Yes,’ list all associated permit numbers and permittee names (add additional spaces or pages if needed):

Authorization Number: TXR040065 Permittee: City of Grand Prairie  
Authorization Number: TXR040255 Permittee: Dallas County Flood Control District #1

**I. Construction Activities**

1. The number of construction projects in the jurisdiction of the MS4 where the permittee was not the construction site operator (as provided in submittals to the MS4 operator via notices of intent or site notices): 43

2. Does the permittee utilize the optional seventh MCM related to construction? No

## J. Certification

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

Name (printed): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of MS4 *City of Grand Prairie*

Name (printed): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of MS4 *Dallas County Flood Control District #1*

## **APPENDIX A: Monthly Stream Summary**

## BMP 2.11 Activities Completed

***Date: 12/31/2018***

### *Stream Sampling*

The Environmental Quality Division has voluntarily conducted stream sampling since 1986. Currently, 23 stream sites are sampled on a monthly, quarterly, and annual basis. The data collected during these monitoring events are used to detect and eliminate illicit discharges or other threats to human and environmental health. Atypical results are identified and researched. All possible attempts are made to mitigate any atypical results. In addition, stream monitoring data are provided to the Clean Rivers Program for water quality monitoring, assessment, and public outreach.

This BMP is highly effective at reducing pollutants to the MEP. Over the many years of implementing this program, numerous atypical results have led to the mitigation of illicit discharges, SSOs, or spills; however, no atypical results were observed in Year 5. The following is a summary of the monthly stream sampling performed in 2018.



2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
12	12/18/2018	14	11.67	7.65	1.9	9.57	0.29	21
11	12/19/2018	12	11.04	7.63	14	9.69	0.18	137
5	12/19/2018	12	10.79	7.82	3.3	10.61	0.04	255
7	12/19/2018	12	11.02	7.5	4.9	9.37	0.06	731
24	12/19/2018	12	11.02	7.81	4.1	9.49	0.08	24
19	12/19/2018	12	14.02	7.76	9.2	9.95	0.73	2
6	12/19/2018	12	13.22	7.7	8.5	9.71	0.17	15
3	12/19/2018	12	10.13	7.81	6.3	10.72	0.04	20
23	12/19/2018	12	11.2	7.81	4.9	10.73	0.11	12
8	12/19/2018	12	14.59	7.76	2.47	9.34	0.21	10
18	12/19/2018	12	10.41	7.98	6	12.68	0	13
30	12/18/2018	13	8.09	7.55	5.7	11.38	0	21
31	12/18/2018	13	7.68	7.45	4.4	11.3	0	21
28	12/18/2018	9	9.39	7.42	3.6	11.23	0	44
22	12/18/2018	4	8.17	6.72	4.5	8.33	0	405
9	12/18/2018	6	8.64	6.96	2.8	10.97	0	138
20	12/18/2018	13	9.37	7.73	8.9	10.11	0.03	4
29	12/18/2018	13	10.01	7.58	1.5	11.61	0.03	25
26	12/18/2018	7	8.52	7.08	1	11.82	0.01	44
27	12/18/2018	8	7.63	7.26	1.6	11.12	0.04	4
17	12/18/2018	14	11.05	7.53	12	10.8	0.04	110
15	12/18/2018	14	10.18	7.47	8.7	9.66	0.05	8
25	12/18/2018	7	10.18	6.8	1.4	8.96	0.01	16

2018 Stream Sampling Results									
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli	
24	11/14/2018	1	8.45	6.43	9.4	9.93	0.04	542	
8	11/14/2018	4	13.41	7.25	5.1	9.46	0.09	8	
18	11/14/2018	3	9.14	7.55	32	11.46	0	226	
19	11/14/2018	3	8.92	7.69	36	11.62	0	1844	
6	11/14/2018	1	12.32	6.63	22	10.15	0.01	92	
5	11/14/2018	1	6.1	6.47	6.6	10.36	0	252	
7	11/14/2018	0	6.15	7.69	2.6	11.62	0	582	
23	11/14/2018	2	7.1	6.99	6	11.15	0	102	
3	11/14/2018	2	7.7	6.72	12	11.46	0.08	80	
30	11/13/2018	1	4.85	8.18	55	12.04	0	4813	
15	11/13/2018	2	9.17	8	34	9.84	0	6212	
20	11/13/2018	1	8.11	8.19	11	11.4	0.03	587	
31	11/13/2018	1	7.53	8.03	45	10.85	0	744	
9	11/13/2018	-1	6.33	7.96	7.7	11.05	0.07	7945	
22	11/13/2018	-1	8.84	7.93	7.1	7.98	0	215	
26	11/13/2018	0	7.23	8.04	4.6	11.55	0	2318	
27	11/13/2018	0	7.92	8.17	13	11.27	0.01	9678	
28	11/13/2018	0	6.79	8.04	11	11.43	0.06	3266	
17	11/13/2018	2	12.71	7.97	18	10.81	0	8	
12	11/13/2018	-1	9.13	7.97	11	10.41	0	25	
11	11/13/2018	2	9.02	7.78	7.6	10.74	0	890	
25	11/13/2018	0	8.95	8.04	7.7	9.95	0	1954	
29	11/13/2018	1	8.56	8.11	4.3	11.26	0	63	

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
18	10/24/2018	14	14.89	7.81	31	10.04	0.04	222
24	10/24/2018	14	17.45	7.06	8.2	7.74	0.19	285
7	10/24/2018	14	15.87	7.64	6.4	8.75	0.24	234
19	10/24/2018	14	15.22	7.87	50	10.01	0.07	198
5	10/24/2018	14	16.1	7.12	3.4	7.93	0.16	29
6	10/24/2018	14	17.09	7.16	55	8.76	0.33	229
8	10/24/2018	14	19.01	7.57	2.9	7.81	0.24	8
23	10/24/2018	14	16.007	7.62	12	8.96	0.17	54
3	10/24/2018	14	17.02	7.31	16	8.36	0.14	68
15	10/23/2018	14	17.01	7.23	17	7.81	0.13	293
22	10/23/2018	13	17.37	7.15	3.7	6.61	0.12	316
30	10/23/2018	19	17.09	8.01	39	9.01	0.09	136
20	10/23/2018	19	19.67	7.85	11	6.89	0.11	39
12	10/23/2018	14	17.31	7.21	7	8.28	0.23	79
31	10/23/2018	17	16.82	7.98	15	8.47	0.08	54
17	10/23/2018	19	18.3	7.99	39	8.18	0.05	133
29	10/23/2018	20	18.1	7.96	8.6	9.04	0.06	92
27	10/23/2018	15	16.7	7.87	1.6	8.93	0.15	122
26	10/23/2018	16	16.22	7.95	1.5	9.6	0.02	245
28	10/23/2018	17	17.82	7.81	3	8.69	0.22	215
9	10/23/2018	13	15.63	7.18	3.1	8.85	0.1	5654
11	10/23/2018	14	16.04	7.56	7.6	8.5	0.06	258
25	10/23/2018	15	17.02	7.75	2.3	8.18	0.11	428

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
18	9/19/2018	31	30.5	7.07	24	7.63	0.11	4
6	9/19/2018	27	29.08	6.5	18	7.05	0.16	140
24	9/19/2018	27	28.73	7.06	8.1	5.69	0.17	44
5	9/19/2018	27	28.5	6.45	4.7	5.35	0.21	102
7	9/19/2018	27	25.13	7.37	3.1	6.86	0.15	115
3	9/19/2018	31	27.34	6.58	11	6.91	0.17	91
23	9/19/2018	29	28.78	7.31	7.6	7.13	0.16	77
8	9/19/2018	31	27.2	6.9	6.5	5.13	0.19	91
30	9/18/2018	29	27.02	7.86	29	5.94	0.11	34
29	9/18/2018	0	0	0	0	0	0	0
28	9/18/2018	27	26.32	7.77	1.8	6.65	0.15	80
27	9/18/2018	27	26.4	7.76	0.9	6.49	0.1	326
9	9/18/2018	25	26.41	7.64	4	5.52	0.38	1642
22	9/18/2018	25	25.6	7.3	2.9	4.49	0.32	713
31	9/18/2018	29	25.91	7.71	3.7	4.98	0.17	4
25	9/18/2018	27	26.8	7.66	1.4	5.32	0.23	582
19	9/18/2018	32	34.55	7.73	33	7.98	0.17	192
11	9/18/2018	32	28.56	7.66	5.3	4.68	0.25	334
12	9/18/2018	32	26.46	7.64	3	5.888	0.2	68
15	9/18/2018	31	28.7	7.55	7.7	3.84	0.18	252
17	9/18/2018	31	29.14	8	12	8.85	0.12	43
20	9/18/2018	31	29.13	7.58	4.4	3.7	0.35	21
26	9/18/2018	27	26.4	7.74	1.9	7.42	0.16	494

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
23	8/23/2018	28	28.87	7.78	6.7	8.05	0.04	97
3	8/23/2018	28	28.31	7.72	12	6.86	0.05	104
6	8/23/2018	28	29.12	7.71	13	7.53	0	63
24	8/23/2018	28	29.24	7.48	5.7	4.39	0.02	54
5	8/23/2018	27	28.09	7.66	9.4	4.26	0.09	215
7	8/23/2018	27	25.35	7.79	6.8	6.46	0.77	9678
29	8/22/2018	0	0	0	0	0	0	0
19	8/22/2018	31	31.39	7.79	27	9.3	0.09	53
18	8/22/2018	31	30.27	7.88	25	9.99	0.11	8
8	8/22/2018	31	27.95	7.45	3.6	5.4	0.11	252
31	8/22/2018	0	0	0	0	0	0	0
30	8/22/2018	0	0	0	0	0	0	0
27	8/22/2018	0	0	0	0	0	0	0
11	8/22/2018	31	27.45	7.54	5.7	4.76	0.29	265
20	8/22/2018	27	27.7	7.56	7.2	2.63	0.76	72
22	8/22/2018	24	25.26	7.41	8.6	4.7	0.35	593
9	8/22/2018	24	25.19	7.41	4.8	4.24	0.006	606
25	8/22/2018	25	27.05	7.47	3.3	4.51	0.21	406
26	8/22/2018	25	25.99	7.79	2.4	8.35	0.08	337
15	8/22/2018	28	28.68	7.56	6.9	4.81	0.13	43
28	8/22/2018	25	25.23	7.83	2.8	7.89	0.19	30
12	8/22/2018	29	25.72	7.58	8.2	5.78	0.34	146
17	8/22/2018	28	28.92	7.78	20	7.46	0.05	498

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
3	7/25/2018	30	29.22	7.59	16	6.97	0.12	34
7	7/25/2018	0	0	0	0	0	0	0
5	7/25/2018	30	28.91	7.31	14	6.36	0.27	39
24	7/25/2018	30	30.39	6.92	7.4	6.36	0.03	12
6	7/25/2018	31	30.13	7.26	26	6.71	0.26	16
23	7/25/2018	31	28.38	7.32	8.2	6.32	0.12	12
19	7/25/2018	32	29.5	7.22	29	6.49	0.08	48
18	7/24/2018	32	31.25	8.06	50	7.37	0.07	4
22	7/24/2018	28	27.16	7.32	8.3	3.22	0.3	744
8	7/24/2018	32	28.25	7.53	4.6	6.03	0.03	542
26	7/24/2018	28	27.26	7.57	1.3	6.65	0.01	70
25	7/24/2018	28	28.89	7.96	3	7.51	0.02	39
20	7/24/2018	31	29.13	7.84	6.5	3.01	0.06	215
28	7/24/2018	29	26.68	8.01	4.3	7.88	0.05	84
31	7/24/2018	0	0	0	0	0	0	0
27	7/24/2018	29	28.11	8.82	180	7.2	0.44	25
30	7/24/2018	0	0	0	0	0	0	0
9	7/24/2018	28	28.35	7.64	4.2	6.29	0.03	58
29	7/24/2018	0	0	0	0	0	0	0
17	7/24/2018	31	30.11	7.58	16	7.18	0.06	8
15	7/24/2018	32	30.6	7.32	6.6	2.93	0.01	21
12	7/24/2018	32	29.04	7.64	2.9	10.01	0.06	90
11	7/24/2018	32	28.62	7.75	7.6	5.86	0.09	58

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
5	6/28/2018	27	27.76	7.32	19	6.33	0.63	153
3	6/28/2018	28	28.35	7.72	12	6.33	0.19	517
23	6/28/2018	29	29.43	7.58	7.6	6.66	0.04	228
19	6/28/2018	29	28.66	7.56	36	7.1	0.77	42
6	6/28/2018	28	29.87	7.57	24	7.24	0.42	30
24	6/28/2018	28	29.28	7.22	8.4	0	0.23	11
7	6/28/2018	0	0	0	0	0	0	0
15	6/27/2018	33	31.07	7.54	16	3.72	0.42	24
17	6/27/2018	33	30.55	8	15.6	7.66	0.07	2
20	6/27/2018	31	28.74	7.71	4.9	6.54	0.17	2
27	6/27/2018	29	29.01	7.49	10.76	6.49	0.03	204
28	6/27/2018	29	28.16	7.87	4.98	6.92	0.71	47
31	6/27/2018	0	0	0	0	0	0	0
9	6/27/2018	28	28.32	7.74	7.34	5.09	0.01	69
30	6/27/2018	0	0	0	0	0	0	0
18	6/27/2018	35	32.13	8.44	65	8.75	0.1	8
29	6/27/2018	0	0	0	0	0	0	0
8	6/27/2018	35	29.72	7.4	27	4.77	0.66	977
26	6/27/2018	0	0	0	0	0	0	0
11	6/27/2018	35	28.78	7.56	12	3.85	0.93	192
25	6/27/2018	28	28.8	7.44	3.49	5.49	0.66	65
22	6/27/2018	27	25.9	7.37	16.7	1.97	0.7	126
12	6/27/2018	33	30.68	7.62	4.89	9.59	0.79	156

2018 Stream Sampling Results									
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli	
6	5/23/2018	26	27.8	7.4	28.3	7.72	0.13	90	
19	5/23/2018	30	29.7	7.82	18.7	9.61	0.25	44	
18	5/23/2018	29	30.9	8.11	26	8.41	0.2	4	
11	5/23/2018	25	25.1	7.84	12	5.59	0.28	458	
5	5/23/2018	25	27.4	7.35	6.2	4.4	0.22	1549	
3	5/23/2018	28	27.9	7.78	8.6	9.55	0.13	97	
23	5/23/2018	29	28.9	7.86	8.28	8.4	0.23	164	
24	5/23/2018		27.8	7.4	7	5.84	0.28	104	
7	5/23/2018	25	24	7.61	6.9	7.22	0.34	1462	
8	5/23/2018	30	28.8	7.99	5.61	8.42	0.41	12	
15	5/22/2018	28	27	7.63	17.8	5.53	0.3	198	
17	5/22/2018	27	27.2	8.1	17	8.45	0.2	54	
29	5/22/2018	27	25	7.88	11	8.93	0.1	144	
20	5/22/2018	26	26.8	7.27	9.2	6.02	0.49	113	
26	5/22/2018	24	24.3	7.89	2.3	8.8	2.24	176	
27	5/22/2018	25	24.3	7.44	2.5	6.45	0.35	140	
30	5/22/2018	26	25.7	7.22	50	6.44	0.23	427	
25	5/22/2018	23	24.8	7.19	5	3.23	0.2	498	
22	5/22/2018	22	22.74	7.38	7.7	4.08	0.07	1844	
12	5/22/2018	28	24.3	7.45	12.2	4.61	0.31	461	
31	5/22/2018	26	23.9	7.71	38	6.94	0.22	2452	
28	5/22/2018	25	24.03	7.41	5.2	6.21	0.13	154	
9	5/22/2018	22	24.5	8.13	14	6.76	0.06	300	



2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
26	4/18/2018	20	17.32	8.19	1.8	9.82	0.11	430
31	4/18/2018	0	0	0	0	0	0	0
30	4/18/2018	22	17.74	7.96	8.9	8.66	0.09	8
12	4/18/2018	24	19.65	7.71	3.7	7.76	0.24	174
9	4/18/2018	20	17.44	7.7	3.2	7.97	0.13	87
29	4/18/2018	22	19.31	7.96	4.6	9.74	0.15	147
20	4/18/2018	22	20.87	7.96	16	6.74	0.26	124
27	4/18/2018	20	17.73	7.84	2.1	7.98	0.11	560
25	4/18/2018	20	18.79	7.93	2.4	11.4	0.18	21
17	4/18/2018	23	20.37	8.32	13	9.3	0.28	49
28	4/18/2018	21	17.87	7.79	3.3	7.73	0.17	195
22	4/18/2018	18	17.62	7.57	7.8	4.38	0.27	587
19	4/17/2018	26	22.25	7.65	7.2	8.22	1.08	9678
11	4/17/2018	19	17.19	7.47	3.7	7.12	0.08	162
23	4/17/2018	25	20.91	7.88	4.2	8.8	0.03	48
8	4/17/2018	26	22.94	8.97	2.4	12.41	0.24	8
15	4/17/2018	19	18.02	7.73	11	7.72	0.19	34
18	4/17/2018	26	21.99	8.55	11	10.51	0.07	146
6	4/17/2018	24	22.06	7.77	7	9.71	0.15	30
24	4/17/2018	23	26.42	7.56	2.7	8.74	0.13	8
3	4/17/2018	24	19.62	7.97	4.7	9.56	0.01	62
7	4/17/2018	23	16.71	7.95	4.3	9.23	0.22	2190
5	4/17/2018	23	18.37	7.55	2.5	8.55	0	58
22	4/12/2018	8	12.6	7.33	4.4	7.16	0.07	489

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
24	3/22/2018	19	17	7.4	2.8	7.9	0	333
6	3/22/2018	12	18	7.56	8.1	8.69	0.07	44
3	3/22/2018	12	15.5	7.87	7.5	9.36	0	25
5	3/22/2018	19	16.3	7.55	2.2	7.77	0.05	85
23	3/22/2018	12	16.5	7.53	5.2	9.4	0.01	98
26	3/21/2018	12	15.6	7.71	2.4	10.47	0.05	58
19	3/21/2018	18	19.6	9.07	9.3	8.93	0.37	899
18	3/21/2018	18	19.3	9.3	36	9.94	0.18	4
8	3/21/2018	18	19.9	8.48	1.6	11.45	0.4	4
22	3/21/2018	8	12.6	7.33	4.4	7.16	0.07	489
29	3/21/2018	12	14.6	7.88	15	10.63	0.09	49
25	3/21/2018	12	15.7	7.57	4.3	8.36	0.03	404
20	3/21/2018	12	16.3	7.92	6.7	8.78	0.1	63
27	3/21/2018	12	12.8	7.83	20	9.27	0.02	30
28	3/21/2018	12	13.8	7.69	3.4	9.66	0.04	87
31	3/21/2018	12	13.1	7.84	4.7	8.94	0.07	154
15	3/21/2018	16	18.7	7.67	14	6.08	0.09	202
12	3/21/2018	16	15.6	7.63	1.9	9.11	0.43	233
9	3/21/2018	8	14.5	7.58	24	8.74	0.02	198
30	3/21/2018	12	15.1	7.99	16	9.25	0.04	302
7	3/21/2018	19	13.6	7.98	2.3	8.76	0.15	115
11	3/21/2018	18	21.3	7.88	5.5	9.13	0.17	168
17	3/21/2018	16	18.9	8.05	14	9.52	0.2	16

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
23	2/26/2018	16	13.6	7.71	65	9.75	0.14	0
28	2/26/2018	9	11.9	7.71	6.5	9.87	0.34	538
15	2/26/2018	12	15.3	7.83	37	8.35	0.1	801
12	2/26/2018	13	14.4	7.87	7	9.47	0.08	771
11	2/26/2018	16	13.7	7.94	16	9.94	0.09	2143
6	2/26/2018	12	12.7	7.93	80	9.64	0.33	1500
25	2/26/2018	9	11.86	7.8	5.3	8.6	0.45	0
26	2/26/2018	9	11.7	7.86	5.6	10.63	0.06	0
27	2/26/2018	9	11.66	7.77	2.3	9.64	0.15	0
19	2/26/2018	16	12.4	7.92	60	9.55	0.19	0
8	2/26/2018	16	17.3	7.48	13	9.16	0.41	0
17	2/26/2018	11	12.2	8.25	90	11.48	0.02	0
3	2/26/2018	13	13.2	8.07	60	9.37	0.07	0
29	2/26/2018	11	12.8	8.03	9.2	10.49	0.01	0
24	2/26/2018	12	12.1	8.02	45	9.09	0.34	0
5	2/26/2018	12	12.2	8.19	45	9.9	0.19	0
7	2/26/2018	0	11.3	7.62	75	9.48	0.11	0
18	2/26/2018	0	13.5	7.93	50	10.33	0.31	0
31	2/26/2018	9	12.3	7.78	29	9.77	0.13	0
20	2/26/2018	11	12.5	7.91	25	10.19	0.12	0
30	2/26/2018	9	13.5	7.99	70	9.92	0.05	0
9	2/26/2018	9	11.86	7.8	5.3	8.6	0.45	960
22	2/26/2018	8	11.8	7.77	3.1	7.57	0.09	249

2018 Stream Sampling Results								
Stream Site Number	Date	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	E.Coli
9	1/26/2018	8	11.89	7.66	6.8	10.12	0.06	960
7	1/24/2018	8	6.02	8.26	2.41	10.08	0.15	211
5	1/24/2018	11	8.86	8	2.13	11.59	0.02	63
18	1/24/2018	2	8.44	8.28	9.95	11.85	0.06	4
8	1/24/2018	2	8.9	7.75	4.78	10.5	0.26	4
23	1/24/2018	11	9.26	7.78	49.5	10.76	0.03	307
3	1/24/2018	11	10.18	7.69	42.4	11.27	0.02	600
24	1/24/2018	11	10.24	7.47	8.58	8.52	0.08	198
6	1/24/2018	11	12.73	7.58	11.5	10.18	0.09	316
12	1/23/2018	18	8.7	7.6	3.27	6.61	0.02	9678
11	1/23/2018	11	8.76	8.81	2.59	7.97	0.39	2595
20	1/23/2018	7	8.8	8.07	3.54	9.19	0	4
25	1/23/2018	4	8.09	9.58	8.57	11.56	0	4
26	1/23/2018	4	6.96	8.4	14.6	11.5	0.1	0
14	1/23/2018	4	7.04	8.22	4.11	12.67	0.02	34
29	1/23/2018	7	9.86	7.97	2.38	9.47	0.1	69
15	1/23/2018	8	9.57	8.11	9.78	12.69	0	25
27	1/23/2018	4	5.25	8.2	1.16	10.47	0.24	21
9	1/23/2018	5	7.69	11.58	3.29	12.44	0.05	4
22	1/23/2018	4	6.8	8.18	19.6	7.45	0.29	4
22	1/23/2018	5	7.69	11.58	3.29	12.44	0.05	4
30	1/23/2018	7	5.74	10.15	17.8	11.12	0.1	8
22	1/23/2018	4	6.8	8.18	19.6	7.45	0.29	4
19	1/23/2018	11	12.24	7.97	17.8	9.28	0.16	162
17	1/23/2018	8	10.27	8.3	27.1	10.81	0.01	20

## **APPENDIX B: Beach Sampling Results**

## BMP 2.18 Activities Completed

**09/30/2018**

### *Beach Sampling SOP and results*

The beach sampling standard operation procedure is followed during sampling events.

This BMP is effective at reducing pollutants to the MEP. If high levels of E. coli are observed, attempts are made to determine and mitigate the source of the high levels.

Sampling for E. coli was conducted during the summer months from May to September. The designated swimming areas in Lynn Creek and Loyd Parks met the primary contact recreation 1 criteria (where the recommended limits for the geometric mean is 126 MPN /100 mL and the single sample criterion for E. coli is 399 MPN/100 mL) in accordance with the 2014 Texas Surface Water Quality Standards §307.7(b)(1)(A)(i). See the following table for results. Results that are less than the reportable limits are conservatively treated as at detection limits (i.e. <4 is 4).

### **Results for Loyd Park and Lynn Creek Beach Sampling**

<b>BEACH SAMPLING 2018 – E COLI MPN/100ML</b>								
Month	Loyd Park West	Loyd Park Middle	Loyd Park East	<b>Geo Mean</b>	Lynn Creek West	Lynn Creek Middle	Lynn Creek East	<b>Geo Mean</b>
May	44	54	21	<b>37</b>	68	105	64	<b>77</b>
June	8	6	10	<b>8</b>	24	6	49	<b>19</b>
July	8	16	8	<b>10</b>	16	129	34	<b>41</b>
Aug	4	4	4	<b>4</b>	4	4	4	<b>4</b>
Sep	74	64	104	<b>79</b>	21	21	25	<b>22</b>