



December 6, 2019

Texas Commission on Environmental Quality  
Stormwater & Pretreatment Team Leader (MC -148)  
P. O. Box 13087  
Austin, Texas 78711- 3087

Texas Commission on Environmental Quality  
Water Section Manager  
2309 Gravel Drive  
Fort Worth, Texas 76118-6951

Re: Phase II MS4 Annual Report Transmittal for the City of Grapevine  
TPDES Permit Authorization: TXR040114

Dear Team Leader:

This letter serves to transmit the Fiscal Year 2019 Annual Report for the Texas Pollutant Discharge Elimination System Small Municipal Separate Storm Sewer System General Permit, Authorization Number TXR040114 for the City of Grapevine. This report combines Year 5 (Final) of the 2014 Small MS4 Permit and Year 1 of the 2019 Small MS4 Permit reports.

A separate Notice of Change has not been submitted based on the fact that changes have not been proposed for the next permit year.

As required by the general permit, a copy of this submittal has also been mailed to the TCEQ's regional office in Fort Worth, Texas.

Sincerely,

Gregory Moss, Environmental Specialist II  
City of Grapevine  
501 Shady Brook Dr.  
Grapevine TX 76051  
817-410-3334  
dstoffels@grapevinetexas.gov

cc: Bryan Beck, Director of Public Works, City of Grapevine  
Keith Miertschin, Assistant Director Operations, City of Grapevine  
Dewey Stoffels, Environmental Manager, City of Grapevine

Enclosure: Phase II (Small) MS4 Annual Report for TPDES Permit Number TXR040114



PUBLIC WORKS DEPARTMENT

## Phase II (Small) MS4 Annual Report Form

**TPDES General Permit Number TXR040000**

### A. General Information

Authorization Number: TXR 040114

Annual Reporting Year: Fiscal Year

Last day of fiscal year, if applicable: September 30<sup>th</sup>

MS4 Operator Level: Level 3

Name of MS4/Permittee: City of Grapevine

Contact Name: Dewey Stoffels, Environmental Manager

Telephone Number: 817-410-3389

Mailing Address: 501 Shady Brook Dr. Grapevine TX 76052

E-mail Address: dstoffels@grapevinetexas.gov

### B. Narrative Provisions (Part IV Section B.2.(a))

1. Provide information on the status of complying with permit conditions:(Part V - Standard Permit Conditions):

	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. Provide a general assessment of the appropriateness of the selected BMPs. Use table below or attach a summary, as appropriate:

MCM	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.
1: Public Education, Outreach and Involvement	Stormwater Management Plan and Annual Report Availability	Yes. Posting of the City's Stormwater Management Plan and Annual Reports on the City's website provides residents and other interested parties with access to the City's means and methods of preventing stormwater pollution. It may also open dialogue between parties to improve the program.
1: Public Education, Outreach and Involvement	Stormwater Website/ Newsletters/ Social Media	Yes. Updating the City newsletter, social media, stormwater website is way to provide students and the local community with a basic understanding of environmental rules and initiatives as it relates to stormwater management, as well as providing general information about stormwater.

<b>MCM</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.</b>
1: Public Education, Outreach and Involvement	Participate in Stormwater Public Education Task Force	Yes. Participation in the Public Education Task Force is way for the City of Grapevine to provide its residents with a basic understanding of environmental rules and initiatives as it relates to the stormwater in the community through new and innovative techniques that have been developed in and around the North Texas area. These types of programs are an effective way to keep Grapevine moving forward in its promotion of educating the public on stormwater related issues.
1: Public Education, Outreach and Involvement	Community Volunteers	Yes. Community volunteer involvement provides the community with a sense of ownership in the City's stormwater program.
1: Public Education, Outreach and Involvement	Roadside Watershed Signs	Yes. Roadside signs are a source of information for residents and visitors to know what watershed they are in and where potential pollutants may drain to.
1: Public Education, Outreach and Involvement	Storm Drain Marking	Yes. Storm drain markers are an effective way to educate the public on where stormwater enters and exits the storm drainage system and what areas may be affected by stormwater pollution. They are a visible reminder to both residents and visitors of stormwater conveyances around the City. Storm drain markers are also an effective way to provide the public with information on how to report illicit discharges.
1: Public Education, Outreach and Involvement	Stormwater Education Presentation	Yes. Presentations are an effective way to provide the public with stormwater information. By conducting stormwater presentations, the City is able to provide stormwater information in an effective manner to residents and students alike.
1: Public Education, Outreach and Involvement	Stream and Shoreline Cleanup	Yes. Removal of trash and debris keeps this material from polluting the storm drain system through public involvement.
1: Public Education, Outreach and Involvement	Environmental Audits	Yes. Conducting environmental audits provides audited businesses with educational material that includes stormwater related materials. These industrial audits also focus on reducing issues with FOG and maintenance of grease/ grit traps.
2: Illicit Discharge Detection and Elimination	Maintain Up-to-Date MS4 Map	Yes. Maintaining up-to-date Ms4 maps gives the City a proper inventory of storm drain structures and provides a resource for tracking IDDE events.
2: Illicit Discharge Detection and Elimination	City Field Staff IDDE Training	Yes. Providing annual training to Municipal field staff regarding identifying and responding to illicit discharges reduces response times to these events.
2: Illicit Discharge Detection and Elimination	Participate in the Illicit Discharge Detection and Elimination Task Force	Yes. Allows the City to stay up-to-date and maintain contacts within the stormwater industry, particularly with IDDE.
2: Illicit Discharge Detection and Elimination	Public Reporting of IDDE	Yes. Maintain a record of and track the number of and responses to IDDE events within the MS4.
2: Illicit Discharge Detection and Elimination	Environmental Audits	Yes. Conducting environmental audits provides audited businesses with educational material that includes stormwater related materials.

<b>MCM</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.</b>
2: Illicit Discharge Detection and Elimination	Household Hazardous Waste Program	Yes. Provides residents with an appropriate place to dispose of household hazardous waste. Keeps potential pollutants out of the storm drain system.
3: Construction Site Stormwater Runoff Control	Staff Construction Site Stormwater Training	Yes. Provides necessary stormwater construction training to municipal staff involved in inspecting construction sites in the MS4.
3: Construction Site Stormwater Runoff Control	CSN and NOI Tracking	Yes. The tracking of active construction sites within the MS4 provides potential pollutant source information.
3: Construction Site Stormwater Runoff Control	Construction Site Erosion and Sediment Control Audits	Yes. Ensures construction site compliance with the Construction General Permit and to reduce the amount of sediment received from construction site activities.
3: Construction Site Stormwater Runoff Control	Active Construction Site Inventory	Yes. Maintaining an active construction site inventory allows the City to track sites that may contribute potential pollutants to stormwater.
3: Construction Site Stormwater Runoff Control	Review of Erosion and Sediment Control Plans	Yes. Review of plans allows the City determine if builders have adequate protection to prevent stormwater pollution prior to construction.
3: Construction Site Stormwater Runoff Control	Pre-Construction Meetings	Yes. Holding pre-construction meetings allows the City to present potential stormwater related issues to builders prior to start of work.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Post-Construction BMP Maintenance	Yes. Maintenance of Post-Construction BMPs ensures that the BMPs continue to function as intended, providing pollution prevention measures.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Post-Construction BMP Inventory	Yes. Maintaining a Post-Construction BMP Inventory allows the City to know where pollution prevention measures are located and allows tracking of maintenance.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Smartscape	Yes. Xeriscaping and the planting of native plants provides the City with landscaping that utilizes little to no water and therefore has little to no runoff that may carry pollutants.
4: Post-Construction Stormwater Management in New Development and Redevelopment	Construction Site Plan Review	Yes. Reviewing of Construction Plans for post-construction BMPs allows the City to maintain an accurate BMP inventory, as well as ensuring that plats include maintenance responsibilities.

<b>MCM</b>	<b>BMP</b>	<b>BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.</b>
5: Pollution Prevention and Good Housekeeping for Municipal Operations	City Facility Pollution Prevention Audits	Yes. Auditing City facilities for pollution prevention ensures that these locations do not contribute to storm water pollution.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Pollution Prevention Training	Yes. Training employees in pollution prevention places responsibility on the individual to prevent pollution through their actions and at their facility.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Municipal Operations and Maintenance Assessment	Yes. Ensures municipal operations and activities do not contribute to stormwater pollution within the MS4.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Stormwater Controls for High Priority Facilities	Yes. Determines which, if any, "High Priority" facilities require stormwater controls above and beyond those currently installed in order to prevent stormwater pollution from municipal activities.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Storm Sewer System Operation and Maintenance	Yes. Ensures maintenance of storm sewer structures and infrastructure in optimal functionality.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Pollutant Reduction from Road Maintenance and Operations	Yes. Ensures removal of potential pollutants of concern from roadways and prevent them from entering the MS4.
TMDL	Participation in TCEQ SSOi Program	Yes. Continues participation in the SSOi program to meet the goals of the of the Bacteria Impairment TMDL the Big Bear Creek Watershed, specifically related Sanitary Sewer Systems.
TMDL	On-Site Sewage Facilities	Yes. Addresses the potential contribution of OSSF to the bacterial impairment of the watershed through identifying and addressing failing systems and addressing inadequate maintenance of OSSFs.
TMDL	Liquid Waste Hauling	Yes. Provides information on potential sources of pollution.
TMDL	Pet/ Animal Waste Management	Yes. Informs the public of the issues associated with animal waste and how to properly dispose of it.
pH	Water Quality Impairment	Yes. Will determine whether the City of Grapevine, as an MS4, is contributing to the pH impairment of Grapevine Lake (Segment 0826) and take any required corrective action, as necessary, should it be determined.

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as monitoring data) to evaluate reductions in the discharge of pollutants. Use a table or attach a narrative description, as appropriate.

MCM	BMP	Parameter	Quantity	Units	Does BMP Demonstrate a Direct Reduction in Pollutants? (Yes/No/Explain)
	pH-1	pH	24 samples	su	Yes. All pH monitoring data were within the normal range. Demonstrates that Grapevine has not contributed to the pH impairment of Grapevine Lake during this monitoring period.

**Summary:** The attached list (Attachment 1) of water quality sampling events during the Permit Year 5/1 time period (October 1, 2018 through September 30, 2019) show that the tested creeks within the City of Grapevine showed no impairment for the tested parameters during the sampling period. The City of Grapevine will continue administering the current Stormwater Monitoring Plan as is, due to the positive nature of the water quality within the City limits.

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals:

MCM	Measurable Goal	Success
1: Public Education, Outreach and Involvement	Provide link to SWMP in Annual Report	Met Goal: Developed a website for posting SWMP and Annual Report. <a href="https://www.grapevinetexas.gov/531/Stormwater-Watershed-Quality-Management">https://www.grapevinetexas.gov/531/Stormwater-Watershed-Quality-Management</a>
1: Public Education, Outreach and Involvement	Perform a website, newsletter, and/or social media updates at least six times/year	Exceeded Goal: Website, newsletter, and/or social media updated 52 times.
1: Public Education, Outreach and Involvement	Participate in 25% of PETF meetings/year	Met Goal: Attended 25% (1 of 4) meetings.
1: Public Education, Outreach and Involvement	Track event type and number of volunteers/volunteer hours annually	Met Goal: Events were tracked and number of volunteers/hours were recorded.
1: Public Education, Outreach and Involvement	Inspect 20% of installed signs, repair/ replace (as needed).	Exceeded Goal: Inspected 40% of installed signs.
1: Public Education, Outreach and Involvement	Inspect 20% of all installed storm drain markers.	Exceeded Goal: 20.7% of markers were inspected, replaced or newly installed.
1: Public Education, Outreach and Involvement	Provide at least 2 stormwater education presentations/ year	Met Goal: Made 2 stormwater education presentations.
1: Public Education, Outreach and Involvement	Conduct at least 1 cleanup event/year	Exceeded Goal: Grapevine held 19 cleanup events.
1: Public Education, Outreach and Involvement	Conduct at least 1 cleanup event/year	Exceeded Goal: Grapevine held 29 cleanup events.
1: Public Education, Outreach and Involvement	Conduct at least 25 environmental audits/ year	Exceeded Goal: Conducted 62 environmental audits.
2: Illicit Discharge Detection and Elimination	Update MS4 map with 100% of New Construction during the year	Met Goal.

<b>MCM</b>	<b>Measurable Goal</b>	<b>Success</b>
2: Illicit Discharge Detection and Elimination	Conduct 1 IDDE training event per division with field crew/ year	Met Goal.
2: Illicit Discharge Detection and Elimination	Attend 25% of Task Force meetings	Exceeded Goal: Attended 33.3% (1 of 3) meetings.
2: Illicit Discharge Detection and Elimination	Provide list of IDDEs reported in annual report	Met Goal. See Attachment 2.
2: Illicit Discharge Detection and Elimination	Conduct at least 25 environmental audits/ year	Exceeded Goal: Conducted 62 environmental audits.
2: Illicit Discharge Detection and Elimination	Conduct at least household hazardous waste event/ year	Met Goal.
3: Construction Site Stormwater Runoff Control	Perform 1 stormwater construction training event per year. Record any associated training attended.	Met Goal.
3: Construction Site Stormwater Runoff Control	Provide number of CSN and NOI provided to the City annually	Met Goal. See attachment 3.
3: Construction Site Stormwater Runoff Control	Conduct at least 12 construction site audits per year	Met Goal: 12 sites were audited
3: Construction Site Stormwater Runoff Control	Provide active construction site list with the annual report.	Met Goal. See attachment 4.
3: Construction Site Stormwater Runoff Control	Provide a list of reviewed plans with the annual report.	Met Goal. See Attachment 5.
3: Construction Site Stormwater Runoff Control	Provide a list of pre-construction meetings held with the annual report.	Met Goal. See Attachment 6.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Implement maintenance schedule.	Met Goal.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Maintain an inventory of all newly constructed detention facilities.	Met Goal.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Develop a map of Smartscape locations throughout the City	Met Goal.
4: Post-Construction Stormwater Management In New Development and Redevelopment	List of all plans reviewed and note of type and location of post-construction BMPs.	Met Goal.

<b>MCM</b>	<b>Measurable Goal</b>	<b>Success</b>
4: Post-Construction Stormwater Management In New Development and Redevelopment	Provide map of all known constructed detention facilities with annual report.	Met Goal. See Attachment 7.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Provide an adjusted list of "High Priority" facilities. Audit each of these facilities once during the year.	Met Goal. See Attachment 8.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Conduct 1 P2 training event per division with operations staff/ year	Met Goal.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Audit pollution prevention measures.	Met Goal.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Provide a list of potential controls annually.	Met Goal.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Provide a list of potential/ installed controls	Met Goal. See Attachment 9.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Conduct at least 400 storm sewer maintenance activities per year	Exceeded Goal: 789 Structures maintained.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Provide number of lane miles swept per year	Met Goal: Swept 17,930 lane miles.
TMDL	Provide SSOi annual report to the TCEQ	Met goal. See attachment 10.
TMDL	Provide a list OSSF issues within the City on an annual basis.	Met goal. See attachment 11.
TMDL	Provide number of waste haulers and number of manifests received annually.	Met goal. See attachment 12.
TMDL	Development of outreach material targeting pet and animal waste with annual report.	Met goal. See attachment 13.
pH	Provide resulting pH data to TCEQ	Met goal. See attachment 14.

### C. Stormwater Monitoring Data (Part IV Section B.2.(b))

1. The MS4 has conducted monitoring of stormwater quality and submitted in the annual report (i.e. analytical and visual observations).

Yes     No

- a. Explain below or attach a summary to submit along with any monitoring data used to evaluate the success of the SWMP at reducing pollutants to the maximum extent practicable. Be sure to include a discussion of results:

See Attachment 1 for monitoring data collected during Permit Year 5/1.

**Summary:** The attached list (Attachment 1) of water quality sampling events during the Permit Year 5/1 time period (October 1, 2018 through September 30, 2019) show that the tested creeks within the City of Grapevine showed no impairment for the tested parameters during the sampling period. The City of Grapevine will continue administering the current Stormwater Monitoring Plan as is, due to the positive nature of the water quality within the City limits.

#### **D. Impaired Waterbodies (Part IV Section B.2.(c))**

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

The City of Grapevine has developed the following activities in order to address potential discharges to the following impaired waterbodies:

Bacteria TMDL - 0841\_01 and 0841B - Lower West Fork Trinity River and Bear Creek

BMP 1.7: Provide Stormwater Education Presentations in order to educate the Public on bacteria source reduction.

BMP 1.9: Conduct Environmental Audits in order to educate businesses/ industries/ contractors on bacteria source reduction.

BMP 2.4: Public reporting of IDDEs allows the MS4 to respond to potential illicit bacteria discharges.

BMP 2.6: Provide a HHW Program to provide the public with a venue for proper disposal of FOG (Fats, Oil, and Grease).

BMP TMDL-1: Participate in the SSOi program developed by the TCEQ in order to reduce the potential amount of bacteria contributed to these waterbodies from human activity (SSOs, in this case).

BMP TMDL-2: Review any complaints of OSSFs from information received from TCPH on an annual basis to reduce the potential amount of bacteria contributed to these waterbodies from human activity (OSSFs, in this case).

BMP TMDL-3: Track liquid waste haulers and businesses that require grease trap maintenance in order to reduce the number of SSOs contributed by these devices when left unmaintained.

BMP TMDL-4: Track large concentrations of animals in the City in order to educate owners on the potential bacteria contributions their animals may cause if left unattended.

pH Impairment – 0826 – Grapevine Lake

BMP pH-1: Monitor the pH levels of the 6 feeder streams to Grapevine Lake found within the City of Grapevine borders on a quarterly basis to ensure that the City is not contributing to the impairment.

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water with an approved TMDL (Part II Section D.4.(a)):

The City of Grapevine is NOT a direct discharger to an impaired waterbody with an approved TMDL.

3. Report the benchmark identified by the MS4 and assessment activities (Part II Section D.4.(a)(6)):

Since the City of Grapevine does not directly discharge to the Big Bear Creek/ Lower West Fork Trinity River TMDL, no benchmark for bacteria has been set by the MS4.

The benchmark for pH in the streams discharging to Grapevine Lake is between 5-9 su. See Attachment 8 for collected pH values for Permit Year 5/1.

4. Provide an analysis of how selected BMPs will be effective in contributing to achieving the benchmark (Part II Section D.4.(a)(4)):

The analysis of pH values from collected water quality data will allow the City to determine potential pollutant of concern sources should the benchmark value be exceeded during a given monitoring period.

5. If applicable, report on focused BMPs to address impairment (Part II section D.4.(a)(5)):

Pollutant to Address	Description of Focused BMP	Comments/ Discussion
pH	Collect water quality data, specifically pH, on a quarterly bases from 6 feeder streams within the City.	The analysis of pH values from collected water quality data will allow the City to determine a potential pollutant of concern sources should the benchmark value be exceeded during a given monitoring period.

6. Describe progress in achieving the benchmark (Part II.D.4.(a)(6)):

Benchmark Indicator	Description/ Comments
pH (5-9 su)	All collected values were within this range (See attachment 1)..

## E. Stormwater Activities (Part IV Section B.2.(d))

Describe any stormwater activities the MS4 operator has planned for the next reporting year. Use the table or attach a summary, as appropriate:

MCM	BMP	Stormwater Activity	Description/ Comments
1: Public Education, Outreach and Involvement	Stormwater Management Plan and Annual Report Availability	Post Year 1 Annual Report to City Website	The City of Grapevine current Stormwater Management Plan (SWMP) and associated Annual Reports will be made available for viewing via the City's Website ( <a href="http://www.grapevinetexas.gov">www.grapevinetexas.gov</a> ). The SWMP will be posted upon acceptance by the TCEQ and each annual report shall be posted upon acceptance by the TCEQ.
1: Public Education, Outreach and Involvement	Stormwater Website/ Newsletters/ Social Media	Update City website, newsletters and social media with stormwater material	The City of Grapevine will continue to update its website, newsletters, and social media with information pertaining to the prevention of stormwater pollution. Updates will consist of city specific and general stormwater education, as well as detailing outreach events that can affect stormwater issues.
1: Public Education, Outreach and Involvement	Participate in Stormwater Public Education Task Force	Attend Public Education Task Force Meetings.	The City of Grapevine will continue to participate in Public Education Task Force Meetings conducted by the North Central Texas Council of Governments. These meetings act as a round table for local participating governments to share ideas on stormwater education. Additionally, educational materials are distributed at events promoting environmental awareness messages.
1: Public Education, Outreach and Involvement	Community Volunteers	Utilize community volunteers in various events to reduce stormwater pollution.	The City of Grapevine will utilize community volunteers in various events that target stormwater pollution either directly or indirectly.
1: Public Education, Outreach and Involvement	Roadside Watershed Signs	Inspect installed signs for repair/ replacement.	The City of Grapevine will evaluate the current status of roadside watershed signs installed during previous permit terms. Signs will be inspected for damage and wear and will be repaired and/or replaced as necessary. Additionally, the storm drain system will be reviewed and new watershed signs will be placed in high visibility areas, as need.

MCM	BMP	Stormwater Activity	Description/ Comments
1: Public Education, Outreach and Involvement	Storm Drain Marking	Inspect installed storm drain markers for damage. Replace as necessary.	The City of Grapevine will evaluate the current status of Storm Drain Markers installed during the previous permit term. Markers will be inspected for damage and wear and will be repaired and/or replaced as necessary. Markers will be placed on new inlets, as necessary.
1: Public Education, Outreach and Involvement	Stormwater Education Presentations	Stormwater related public education presentation.	The City of Grapevine will provide a presentation of stormwater related educational material to the public. This will include, at minimum, a display board incorporating stormwater information, handouts/ flyers, and someone familiar with stormwater to answer any questions. Bacteria TMDL Notes: These presentations will also focus on outreach and education for residents and businesses that may contribute animal source bacteria to stormwater, as well as addressing sources of Fats, Oils and Grease (FOG).
1: Public Education, Outreach and Involvement	Stream and Shoreline Cleanup	Stream and shoreline cleanup	The City of Grapevine will conduct stream and shoreline cleanups throughout the year in order to remove trash, litter, debris, etc. from local waterways using volunteers. Shoreline cleanups involve the public in cleaning and maintaining local waterways and removing potential pollutants from the stormwater system.

<b>MCM</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/ Comments</b>
1: Public Education, Outreach and Involvement	Environmental Audits	Stormwater outreach material included with each environmental audit.	The City of Grapevine will conduct environmental audits of industrial locations, hotels, automotive locations, restaurant locations, construction sites and commercial properties. These audits will focus on pretreatment and stormwater aspects of the facility on which they are conducted. Bacteria TMDL Note: These industrial audits provide information on reducing issues with FOG and maintenance of grease/ grit traps for associated IDDEs.
2: Illicit Discharge Detection and Elimination	Maintain Up-to-Date MS4 Map	Update MS4 Map	The City of Grapevine will continue to update the MS4's map in GIS to include new and previously unrecognized storm drain infrastructure.
2: Illicit Discharge Detection and Elimination	City Field Staff IDDE Training	Train field staff in IDDE	The City of Grapevine will train its field staff in illicit discharge detection and elimination. Training will be conducted by qualified staff and will be provided on an annual basis. Sign-in sheets will be maintained as a record of each training event.
2: Illicit Discharge Detection and Elimination	Participate in the Illicit Discharge Detection and Elimination Task Force	Participate in the NCTCOG IDDE Task Force	To stay up-to-date and maintain contacts within the stormwater industry, particularly with IDDE.
2: Illicit Discharge Detection and Elimination	Public Reporting of IDDE	Track public reporting of IDDE	The City of Grapevine will continue to track all IDDE events reported to the municipality via its Cartegraph database system (or any future data management system). Reports from city staff, residents, visitors and businesses will be tracked and responded to accordingly. Bacteria TMDL Note: Reporting of SSOs will be included in the IDDE reporting for improved reporting purposes.

MCM	BMP	Stormwater Activity	Description/ Comments
2: Illicit Discharge Detection and Elimination	Environmental Audits	Stormwater outreach material included with each environmental audit.	The City of Grapevine will conduct environmental audits of industrial locations, hotels, automotive locations, restaurant locations, and commercial properties. These audits will focus on pretreatment and stormwater aspects of the facility on which they are conducted. These audits also review grease/ grit trap condition and maintenance.
2: Illicit Discharge Detection and Elimination	Household Hazardous Waste Program	Provide an event allowing proper disposal of household hazardous waste for residents.	The City of Grapevine will host an annual Household Hazardous Waste collection event to allow the residents of Grapevine to safely and effectively manage the disposal of hazardous waste that may otherwise be improperly disposed of, creating the potential to pollute to stormwater.
3: Construction Site Stormwater Runoff Control	Staff Construction Site Stormwater Training	Train applicable staff in stormwater construction requirements	Conduct training for municipal staff involved in inspecting any type of construction activity within the MS4. Training will be conducted by qualified personnel. Training will focus on the on stormwater issues as they relate to construction sites.
3: Construction Site Stormwater Runoff Control	CSN and NOI Tracking	Maintain all CSN and NOI delivered to the City on file.	The development and maintenance of a construction site inventory through the tracking of CSN and NOI received by the municipality. Inspection records and visual observations will also be used to maintain a current inventory of construction activity in the MS4.

<b>MCM</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/ Comments</b>
3: Construction Site Stormwater Runoff Control	Construction Site Erosion and Sediment Control Audits	Construction site erosion and sediment control audits.	The City's Environmental Services Division will conduct erosion and sediment control audits of random construction sites within the MS4. Audits will verify the site's compliance with the Construction General Permit and focus on the site's compliance with erosion and sediment control standards. These audits will be in addition to standard construction site inspection conducted by the City's Engineering Division.
3: Construction Site Stormwater Runoff Control	Active Construction Site Inventory	Maintain an electronic construction site inventory.	Maintaining an active inventory of all active construction sites in the MS4. This inventory will include all constructions sites in any phase of construction from grading to the issuance of the Certificate of Occupancy.
3: Construction Site Stormwater Runoff Control	Review of Erosion and Sediment Control Plans	Maintain an electronic construction site sediment control plan list.	Review of all erosion and sediment control plans by qualified personnel as part of pre-construction requirements, including determination of potential water quality impacts.
3: Construction Site Stormwater Runoff Control	Pre-Construction Meetings	Develop and maintain an electronic pre-construction meeting list.	Host Pre-Construction meetings with contractors/ property owners and present erosion and sediment control requirements and expectations.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Post-Construction BMP Maintenance	Maintenance of City-owned BMPs.	Maintenance of a comprehensive post-construction BMP inventory and maintenance schedule for those BMPs that are City-owned and/ or operated. Conduct maintenance on and maintain records for City owned BMPs.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Post-Construction BMP Inventory	Add notes to plat requiring private owners to provide annual inspection/ maintenance of privately owned detention facilities..	The maintenance of a comprehensive post-construction BMP inventory and maintenance schedule for those BMPs that are part of new construction and privately owned and/ or operated. Tracking of any violations or enforcement actions electronically.

<b>MCM</b>	<b>BMP</b>	<b>Stormwater Activity</b>	<b>Description/ Comments</b>
4: Post-Construction Stormwater Management In New Development and Redevelopment	Smartscape	Identify existing and new Smartscape locations throughout the City.	To encourage the use of Texas native plants in City development projects.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Construction Site Plan Review	List of all plans reviewed and note of type and location of post-construction BMPs.	Review of construction site plans for locations of new post-construction BMPs, making sure the City is aware of the type and location of post-construction BMPs located within its MS4.
4: Post-Construction Stormwater Management In New Development and Redevelopment	Post-Construction BMP Map	Maintain a map of all known constructed detention facilities.	The development and maintenance of a comprehensive post-construction BMP map of all know publically and privately owned BMPs.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	City Facility Pollution Prevention Audits	Inspect "High Priority" facilities.	Maintain an inventory and map of all City-owned and operated facilities. Determine those facilities are "High Priority" with respect to potential stormwater issues. Audit those "High Priority" facilities for P2 compliance. Assess facilities on a regular basis to determine potential additions to the "High Priority" list. Develop facility specific stormwater Pollution Prevention BMPs for each "High Priority" facility
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Pollution Prevention Training	Train operations staff in P2.	To provide staff involved in daily operations with adequate P2 training to prevent stormwater related issues at the City's various facilities and properties. Training will be specific to the department/ division. Training will be conducted by a member of the Environmental Services Division and records of attendance will be kept on file.

MCM	BMP	Stormwater Activity	Description/ Comments
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Municipal Operations and Maintenance Assessment	Monitor pollution prevention measures enacted.	To audit and assess current municipal operations for potential stormwater pollution issues. Review current Tier II reports and departmental MSDS for potential pollutants of concern. Develop and implement pollution prevention measures for municipal activities. Audit activities for compliance with pollution prevention measures. Dispose of waste properly and safely, as necessary.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Stormwater Controls for High Priority Facilities	Determine if new controls are required. Install stormwater controls, as necessary.	Maintain a list of stormwater controls at each of the listed facilities. Determine whether new controls are required for each facility. If new controls are deemed necessary, install those controls. Refer to BMP 5.1 for the determination of "High Priority" facilities.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Storm Sewer System Operation and Maintenance	Perform storm sewer maintenance activities.	To inspect, document and maintain storm sewer structures and infrastructures to prevent and/or address issues with stormwater transport within the MS4. Identify problem areas or areas with recurring issues. Maintain stormwater BMPs for proper function.
5: Pollution Prevention and Good Housekeeping for Municipal Operations	Pollutant Reduction from Road Maintenance and Operations	Street Sweeping of all City streets.	Provide street sweeping for all accessible streets and parking lots in the MS4 in order to remove potential pollutants, including trash and litter from the swept area. An SOP describing focus and frequency will be developed and kept on file by the City
TMDL	Participation in TCEQ SSOi Program	Continued participation in the SSOi program.	To continue the City's participation in TCEQ's SSOi program, which includes details about the City's improvements to sanitary lines to reduce overflows, addressing of lift station inadequacies and strengthening of sanitary use requirements.

MCM	BMP	Stormwater Activity	Description/ Comments
TMDL	On-Site Sewage Facilities	Contact TCPH for a list of OSSF issues within the City.	Utilize Tarrant County Public Health (the OSSF Authority for this MS4) as a resource for identifying and addressing failing septic systems and addressing inadequate maintenance of OSSFs. Contact TCPH annually for a list of OSSFs and issue status of those OSSFs as applicable.
TMDL	Liquid Waste Hauling	Electronically record all liquid waste hauler manifests received by the City.	The MS4 will maintain electronic records of all liquid waste hauling manifests received by the City.
TMDL	Pet/ Animal Waste Management	Research locations of high densities of pets/ livestock	In order to reduce the contribution of potential bacteria impairment within the MS4, the MS4 will locate and educate locations with high densities of pets or stock animals about ways to reduce animal waste from becoming an issue.
pH	Water Quality Impairment	Continue quarterly pH monitoring of 5 creeks discharging to segment 0826.	To monitor pH levels in the 5 larger creeks within the MS4 (Jones Branch, Dove Branch, Morehead Branch, Farris Branch, and Silver Lake Branch) feeding in to Grapevine Lake (Segment 0826) on a quarterly basis to determine if the MS4 is contributing to this waterbodies impairment. Develop BMPs and measurable goals should this be determined.

**F. SWMP Modifications (Part IV Section B.2.(e))**

1. Changes have been made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ's review.

Yes  No

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

Not applicable.

**G. Additional BMPs (Part IV Section B.2.(f))**

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.

No additional BMPs are deemed necessary at this time.

**H. Additional Information (Part IV Section B.2.(g))**

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

Yes  No

If "Yes," provide the name(s) of other entity/ies and an explanation of their responsibilities (add more spaces or pages if needed):

Name and Explanation: North Central Texas Council of Governments (NCTCOG). According to its SWMP, Grapevine must attend at least 25% of both the Public Education Task Force Meetings (BMP 1.1) and the Illicit Discharge Detection and Elimination Task Force Meetings (BMP 2.3) held by NCTCOG during the fiscal year.

Name and Explanation: Tarrant County Public Health (TCPH). According to its SWMP, Grapevine must utilize TCPH (the OSSF Authority for this MS4) as a resource for identifying and addressing failing septic systems and addressing inadequate maintenance of OSSFs (BMP TMDL-2) by contacting TCPH annually for a list of OSSFs and issue status of those OSSFs as applicable.

- 2.a. Is the named permittee sharing a SWMP with other entities?

Yes  No

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

Yes  No  N/A

**I. Construction Activities (Part IV Section B.2.(h-i))**

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): 14 (8 CSN-Small/ 6 CSN-Large/NOI)

2. Does the permittee utilize the optional seventh MCM related to construction?

Yes  No

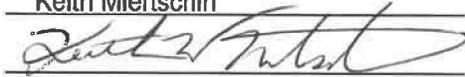
## J. Certification

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): Keith Miertschin

Title: Director of Public Works-Ops

Signature:



Date:

12-4-2019

## Attachment 1

Water Quality Data Collected  
10/01/2018 through 9/30/2019

Creek Name	Major Drainage	Season	Air Temp	Weather Conditions	Dominant Land Use	Stream Flow	Water Color	Water Temp (C)	pH (su)	DO (mg/L)	Specific Cond (us)	Cl2 (mg/L)	Cu (mg/L)	Detergen (mg/L)	Phenol (mg/L)	Ammonia (mg/L)	Salinity (ppm)	TDS (mg/L)
Creek 23	BBC	Fall	14	Partly Cloudy	Residential	Low	Clear	12.5	8.3	9.8	1056	<0.2	ND	ND	ND	<0.1	0.51	0.701
Creek 21	BBC	Fall	14	Partly Cloudy	Residential	Normal	Clear	12.3	8.1	10.1	905	<0.2	ND	ND	ND	<0.1	0.43	0.598
Creek 17	BBC	Fall	14	Partly Cloudy	Residential	Low	Clear	12.7	7.9	9.9	1017	<0.2	ND	ND	ND	<0.1	0.49	0.636
Creek 16	BBC	Fall	14	Partly Cloudy	Residential	Low	Clear	12.5	7.6	9.5	1095	<0.2	ND	ND	ND	<0.1	0.51	0.721
Creek 18	BBC	Fall	10	Partly Cloudy	Residential	Normal	Rust	12.5	8.4	9.6	1138.6	<0.2	ND	ND	ND	0.1	0.56	0.731
Creek 19	BBC	Fall	11	Partly Cloudy	Residential	Low	Rust	12.4	7.38	9.1	1041.6	<0.2	ND	ND	ND	0.1	0.5	0.698
Creek 20	BBC	Fall	14	Partly Cloudy	Residential	Low	Clear	12.5	7.8	9.8	1051	<0.2	ND	ND	ND	<0.1	0.51	0.701
Creek 14	BBC	Fall	14	Partly Cloudy	Commercial	Normal	Brown	12.4	7.7	10.1	1403	<0.2	ND	ND	ND	<0.1	0.71	0.898
Big Bear Creek	BBC	Fall	14	Partly Cloudy	Agriculture	Normal	Green	11.4	8	10.7	980	<0.2	ND	ND	ND	0.1	0.47	0.627
Unnamed Tributary Little Bear Creek	LBC	Fall	11	Partly Cloudy	Commercial	Normal	Clear	12.8	7.9	9.8	1032.8	<0.2	ND	ND	ND	<0.1	0.49	0.682
Cottonwood Branch	DEC	Fall	9	Clear/Sunny	Park	Standing	Grey	14.5	7.5	9.4	1427	<0.2	ND	ND	ND	<0.1	0.7	0.909
Denton Creek	DEC	Fall	10	Clear/Sunny	Residential	Normal	Green	14.8	7.8	7.6	984	<0.2	ND	ND	ND	<0.1	0.45	0.613
Hilton Branch	DEC	Fall	12	Clear/Sunny	Commercial	Normal	Green	15.2	8.3	9	728	<0.2	ND	ND	ND	<0.1	0.31	0.465
Silver Lake Branch	GPVL	Fall			Residential	Dry												
Cable Branch	GPVL	Fall	14	Clear/Sunny	Park	Normal	Clear	14.7	7.6	9.1	1481	<0.2	ND	ND	ND	<0.1	0.76	0.989
Farris Branch	GPVL	Fall	14	Clear/Sunny	Park	Lake	Green	13.9	8.2	7.9	500	<0.2	ND	ND	ND	<0.1	0.23	0.32
Morehead Branch	GPVL	Fall	14	Clear/Sunny	Residential	Lake	Brown	18.6	7.6	7.8	963.3	<0.2	ND	ND	ND	<0.1	0.46	0.617
Dove Branch	GPVL	Fall	14	Clear/Sunny	Residential	Lake	Green	16	7.9	8.8	422.6	<0.2	ND	ND	ND	0.1	0.19	0.271
Jones Branch	GPVL	Fall	14	Clear/Sunny	Residential	Lake	Green	12.5	7.9	10.6	1696.7	<0.2	ND	ND	ND	0.1	0.85	1.089
Creek 23	BBC	Winter	22	Cloudy	Residential	Normal	Clear	18.4	7.7	10.7	1128	<0.2	ND	ND	ND	<0.1	0.53	0.699
Creek 21	BBC	Winter	15	Cloudy	Residential	Normal	Clear	14	7.7	9.8	1136.7	<0.2	ND	ND	ND	<0.1	0.55	0.728
Creek 17	BBC	Winter	22	Cloudy	Residential	Normal	Clear	19.7	7.8	13	1206	<0.2	ND	ND	ND	<0.1	0.59	0.774
Creek 16	BBC	Winter	22	Cloudy	Residential	Normal	Clear	21.4	7.8	10.7	1627.5	<0.2	ND	ND	ND	<0.1	0.8	0.401
Creek 18	BBC	Winter	12	Partly Cloudy	Residential	Low	Clear	13.5	7.8	10.9	792	<0.2	ND	ND	ND	0.1	0.38	0.507
Creek 19	BBC	Winter	13	Cloudy	Residential	Normal	Clear	14.2	8.1	9.8	1127.1	<0.2	ND	ND	ND	<0.1	0.55	0.721
Creek 20	BBC	Winter	15	Cloudy	Residential	Normal	Clear	14.4	7.9	10.2	1130.1	<0.2	ND	ND	ND	<0.1	0.56	0.723
Creek 14	BBC	Winter	15	Cloudy	Commercial	Normal	Clear	13	7.7	9.6	1091.3	<0.2	ND	ND	ND	<0.1	0.53	0.698
Big Bear Creek	BBC	Winter	15	Cloudy	Agriculture	Normal	Clear	13.1	7.9	10.4	942	<0.2	ND	ND	ND	0.1	0.45	0.602
Unnamed Tributary Little Bear Creek	LBC	Winter	11	Partly Cloudy	Commercial	Normal	Clear	12.8	7.8	9.9	477.2	<0.2	ND	ND	ND	<0.1	0.22	0.305
Cottonwood Branch	DEC	Winter	14	Partly Cloudy	Park	Low	Clear	13.6	7.6	8.7	555.3	<0.2	ND	ND	ND	<0.1	0.26	0.36
Denton Creek	DEC	Winter	12	Partly Cloudy	Residential	Normal	Green	13.5	8	11.24	561.4	<0.2	ND	ND	ND	<0.1	0.26	0.356
Hilton Branch	DEC	Winter	12	Partly Cloudy	Commercial	Normal	Clear	15.2	7.6	9.7	563.4	<0.2	ND	ND	ND	<0.1	0.26	0.363
Silver Lake Branch	GPVL	Winter			Residential	Dry												
Cable Branch	GPVL	Winter	21	Partly Cloudy	Park	Normal	Clear	19	7.7	8.5	2299.5	<0.2	ND	ND	ND	<0.1	1.17	1.47
Farris Branch	GPVL	Winter	22	Partly Cloudy	Park	Normal	Green	15.6	7.7	8.4	699.6	<0.2	ND	ND	ND	<0.1	0.31	0.401
Morehead Branch	GPVL	Winter	22	Partly Cloudy	Residential	Normal	Brown	15.7	7.5	10.4	784.1	<0.2	ND	ND	ND	<0.1	0.29	0.384
Dove Branch	GPVL	Winter	22	Partly Cloudy	Residential	Normal	Brown	15.8	8.1	11.8	958.4	<0.2	ND	ND	ND	0.1	0.46	0.613
Jones Branch	GPVL	Winter	22	Partly Cloudy	Residential	Normal	Clear	18.4	8.2	12.5	1326.7	<0.2	ND	ND	ND	0.1	0.65	0.849
Creek 23	BBC	Spring	25	Clear	Residential	Normal	Clear	22.3	8.4	10.9	943.5	<0.2	ND	ND	ND	0.1	0.45	0.604
Creek 21	BBC	Spring	21	Clear	Residential	Normal	Green	19.7	7.5	8	1211	<0.2	ND	ND	ND	0.1	0.59	0.744
Creek 17	BBC	Spring	25	Clear	Residential	Normal	Clear	21.7	7.9	8.4	1186	<0.2	ND	ND	ND	0.1	0.57	0.759
Creek 16	BBC	Spring	26	Clear	Residential	Normal	Clear	21.6	7.7	9.9	930.4	<0.2	ND	ND	ND	0.1	0.44	0.59
Creek 18	BBC	Spring	24	Clear	Residential	Normal	Clear	22.5	7.5	9.3	673	<0.2	ND	ND	ND	0.2	0.31	0.431
Creek 19	BBC	Spring	22	Clear	Residential	Normal	Green	21.8	7.8	8.6	1126.6	<0.2	ND	ND	ND	0.1	0.54	0.721
Creek 20	BBC	Spring	27	Clear	Residential	Normal	Clear	26.5	7.7	9.9	1328.4	<0.2	ND	ND	ND	0.1	0.49	0.658
Creek 14	BBC	Spring	27	Clear	Commercial	Normal	Clear	25.1	7.7	9.6	1104.4	<0.2	ND	ND	ND	0.25	0.52	0.701
Big Bear Creek	BBC	Spring	21	Clear	Agriculture	Normal	Green	20.8	7.7	8	968.9	<0.2	ND	ND	ND	0.25	0.45	0.604
Unnamed Tributary Little Bear Creek	LBC	Spring	22	Clear	Commercial	Normal	Clear	23.4	7.5	7	690.1	<0.2	ND	ND	ND	0.1	0.32	0.442
Cottonwood Branch	DEC	Spring	26	Cloudy	Park	Normal	Clear	25.1	7.6	7.7	502	<0.2	ND	ND	ND	0.1	0.22	0.312
Denton Creek	DEC	Spring	26	Cloudy	Residential	Normal	Green	24.6	7.5	7.3	557.1	<0.2	ND	ND	ND	0.1	0.24	0.329
Hilton Branch	DEC	Spring	26	Cloudy	Commercial	Normal	Green	24.3	7.8	7.3	528.9	<0.2	ND	ND	ND	0.1	0.23	0.324
Silver Lake Branch	GPVL	Spring			Residential	Dry												
Cable Branch	GPVL	Spring	25	Cloudy	Park	Normal	Clear	21.6	7.9	6.1	488.1	<0.2	ND	ND	ND	0.1	0.21	0.296
Farris Branch	GPVL	Spring	21	Cloudy	Park	Lake	Green	24	7.6	6.3	450.8	<0.2	ND	ND	ND	0.25	0.2	0.288
Morehead Branch	GPVL	Spring	22	Cloudy	Residential	Lake	Green	24.1	7.6	6.2	448.7	<0.2	ND	ND	ND	0.25	0.2	0.288
Dove Branch	GPVL	Spring	20	Cloudy	Residential	Lake	Green	23.9	7.6	6.5	450.1	<0.2	ND	ND	ND	0.25	0.2	0.279
Jones Branch	GPVL	Spring	20	Cloudy	Residential	Lake	Green	24	7.6	6.5	506.6	<0.2	ND	ND	ND	0.25	0.22	0.301
Creek 23	BBC	Summer			Residential	Dry												
Creek 21	BBC	Summer	29	Overcast	Residential	Normal	Clear	27.7	7.2	6.6	1048.5	<0.2	ND	ND	ND	<0.1	0.5	0.671
Creek 17	BBC	Summer	34	Clear	Residential	Low	Clear	29	7.1	5	944.8	<0.2	ND	ND	ND	<0.1	0.44	0.605
Creek 16	BBC	Summer			Residential	Dry												
Creek 18	BBC	Summer			Residential	Dry												
Creek 19	BBC	Summer	31	Overcast	Residential	Low	Green	27.9	7.3	5	780.4	<0.2	ND	ND	ND	<0.1	0.36	0.499
Creek 20	BBC	Summer	34	Clear	Residential	Low	Clear	28.3	7.5	9.1	842.3	<0.2	ND	ND	ND	<0.1	0.39	0.539
Creek 14	BBC	Summer	28	Overcast	Commercial	Standing	Clear	26.9	7.2	5.2	768.5	<0.2	ND	ND	ND	<0.1	0.36	0.492
Big Bear Creek	BBC	Summer	30	Overcast	Agriculture	Low	Green	26.5	7.3	5.8	844	<0.2	ND	ND	ND	<0.1	0.39	0.54
Unnamed Tributary Little Bear Creek	LBC	Summer	36	Clear	Commercial	Normal	Brown	30	7.5	6.9	621	<0.2	ND	ND	ND	<0.1	0.28	0.397
Cottonwood Branch	DEC	Summer	36	Partly Cloudy	Park	Low	Clear	29.2	7.5	7.3	1117	<0.2	ND	ND	ND	<0.1	0.53	0.715
Denton Creek	DEC	Summer	34	Clear	Residential	Low	Green	27.5	7.3	7.2	426	<0.2	ND	ND	ND	<0.1	0.19	0.273
Hilton Branch	DEC	Summer	34	Clear	Commercial	Low	Green	27.3	7.3	7	876	<0.2	ND	ND	ND	<0.1	0.41	0.567
Silver Lake Branch	GPVL	Summer			Residential	Dry												
Cable Branch	GPVL	Summer	36	Partly Cloudy	Park	Normal	Clear	28.2	7.4	6.7	1386	<0.2	ND	ND	ND	<0.1	0.67	0.887
Farris Branch	GPVL	Summer	36	Partly Cloudy	Park	Low	Green	30.5	7.5	7.3	912	<0.2	ND	ND	ND	<0.1	0.43	0.584
Morehead Branch	GPVL	Summer	36	Partly Cloudy	Residential	Low	Green	30.7	7.5	6.9	874.5	<0.2	ND	ND	ND	<0.1	0.41	0.56
Dove Branch	GPVL	Summer	36	Partly Cloudy	Residential	Standing	Green	33.1	7.8	12.9	850	<0.2	ND	ND	ND	<0.1	0.4	0.54
Jones Branch	GPVL	Summer	36	Partly Cloudy	Residential	Low	Green	30.1	7.8	7.5	544.9	<0.2	ND	ND	ND	<0.1	0.25	0.349

## Attachment 2

List of Reported IDDEs  
10/01/2018 through 9/30/2019



**MEMORANDUM**

City of Grapevine, TX

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 2.4 Public Reporting of IDDE*

**DATE:** *October 1, 2018*

*(Last update: September 30, 2019)*

**Project Description:** The City of Grapevine will continue to track all IDDE events reported to the municipality via its Cartegraph database system (or any future data management system). Reports from city staff, residents, visitors and businesses will be tracked and responded to accordingly. **Bacteria TMDL Note:** Reporting of SSOs will be included in the IDDE reporting for improved reporting purposes.

**Objective:** To maintain a record of the number of and responses to IDDE events within the MS4.

**Activity to Implement:** Track public reporting of IDDE.

**Measurable Goal:** Provide list of IDDEs reported in annual report.

Number of illicit discharges detected and resolved for PY 2019: 51

IDDE Type	Q1			Q1 Total			Q2			Q2 Total			Q3			Q3 Total			Q4			Q4 Total	Grand Total					
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun			Jul	Aug	Sep		
Illicit Discharge	1	1	1	3	2		2																			6	11	
Pool Discharge	1			1	1		1	1	2	1																		6
Potable Water Release	3	1		4		1	1	1	1																			11
Sanitary Sewer Overflow	6		2	8		2	2	1	1	1																		15
Spills			1	1	1		1	2																				4
T/R Truck Leaks		1	1	2		1	1	1																				4
<b>Grand Total</b>	<b>11</b>	<b>3</b>	<b>5</b>	<b>19</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>51</b>	

Activity	AddressNumber	Street	StartDate	StopDate	Notes
Illicit Discharge	2551	HALL JOHNSON RD	1/16/2019	1/17/2019	<p>Received a call from Utilities that there was a potentially private SSO at the Vine South Apartment complex (N side of Bldg 13). Arrival at site showed a small amount of solids at cleanout and no liquid discharge. Did not enter MS4. Utilities indicated any blockage was on the private side. Contacted property manager (Brittini Smith 817-540-7800, thevinesouthmgr@lincolnapts.com) who had said that a plumber had already been called. Requested updates as to repairs.</p> <p>From Prop. Mgr 1/16/19 16:50.: Thank you for stopping by this afternoon. The plumbers are here now to unclog building 13 for tonight. They will return tomorrow morning to run a camera to look into the issue further to get a permanent solution for what might be happening. If you have any questions please feel free to let me know.</p>
Illicit Discharge	2805	MUSTANG DR	1/8/2019	1/9/2019	<p>From Utilities Cart Request 4231: "Sewer jiz coming out of white pipe east side of building. See Connie when you get there</p> <p>2805 Mustang Dr/Ridge Crest Apts</p> <p>214.549.1020"</p> <p>G. Moss responded to the address and observed sewer liquids and solids coming from a 3" sewer cleanout on the east side of the property. Discharge was mainly spread out in the parking lot/ drive of the property. Spoke with the property manager (Connie Schleback, 817-421-478,</p>

						<p>ridgecrestmgr@devonshire.biz) who had contacted a plumber that was en route. Informed the property manager that they were required to unplug the cleanout and clean up the solids. Reinspected the next day and the area was leaned up satisfactorily.</p> <p>Sunset Concrete employees showed up about 4:30 pm back at the site to clean up the washed out concrete slurry in the bar ditch.</p> <p>Sunset Concrete (sunsetconcrete.com) washing out concrete in the bar ditch of Lonesome Dove Rd. after pouring concrete for a swimming pool at 3300 Alexandria Ct.</p> <p>Illegal Dumping. Took Photos, Republic Services collected, Morris C. with code enforcement pursued citations for responsible party. Was a company doing work for a sheriff associated with an eviction of residents from a home.</p> <p>Approximately 3000 Student Insurance flyers were spilled onto the roadway. Traffic and Environmental Services collected and disposed of the majority of them.</p> <p>2019-08-05-1324 Michael Sessions - Toxic Fireworks</p> <p>2019-08-05-1500 Research Review Other States</p> <p>2019-08-06-1301 Gayle Hall - Fireworks BMPs in use.</p> <p>2019-08-06-1323 Jim Burnett - Western Enterprises, Inc.</p> <p>2019-08-06-1323 APA Standard 87-1 Prohibited</p>
Illicit Discharge	3300	ALEXANDRIA CT	7/24/2019	7/24/2019	7/24/2019	
Illicit Discharge	201	HANOVER DR	7/24/2019	7/24/2019	8/22/2019	
Illicit Discharge	3605	IRA E WOODS AVE	8/22/2019	8/22/2019	8/20/2019	
Illicit Discharge	399	SAND BASS DR	8/5/2019	8/20/2019		

							toxins. 2019-08-06-1323 Perchlorate "truth" & fertilizer. 2019-08-09-0900 Bryan Parker Site Visit w/ Fire Marshall 2019-08-20-0910 Phone Call w/ Michael Sessions. 2019-08-20-0934 GV & Western to continue BMPs & Close Complaint.
Illicit Discharge	2202	W KIMBALL RD	9/20/2019	9/20/2019			ESD received a call from fire reporting that a citizen was requesting the removal of a 5 gallon propane tank along shore of the lake at this address. The tank was located and removed from the area for proper disposal.
Illicit Discharge	5208	HEATHERDAL E DR	8/29/2019	9/13/2019			Concrete slurry washout during sidewalk repair. Contractor for Atmos (Westhill Construction 817-558-2504) was responsible party. Contacted and RP will conduct cleanup. NOV issued to RP. Code Enforcement notified and is aware. Received response letter on 9/13/19. Incident is closed.
Illicit Discharge	4120	WILLIAM D TATE AVE	10/25/2018	10/29/2018			Issued NOV to Speed FabCrete for failure to prevent sediment from entering storm drains. No BMPs installed on site.
Illicit Discharge	300	S MAIN ST	11/8/2018	11/14/2018			CGV employee J Brock observed white liquid discharging from the roof drains of the Palace Theater. He spoke with the contractor on site (Jerry Bustos, Coventry & Gattis) and determined it was paint/primer rinsed off of brushes used for work on the AC units. He had them stop rinsing immediately. G. Moss spoke with Nick Wellborn, CFO of Coventry and Gattis (817-481-4286, nick.wellborn@coventryandgattis.com) who said he would personally watch the cleanup and apologized

						for the discharge. The company was issued a NOV.
Illicit Discharge	1604	LANCASTER DR	12/10/2018	12/11/2018		Accompanied James Tuttle to a complaint of sewer leaving the cleanout located at the front of the business. Utilities had verified that the blockage was on the private side. Sewage was flowing from the cleanout had filled the water meter boxes and was flowing in the curbline. The Clinic Manager (Jan Rautio, 817-481-8661) had a plumber out last Friday and will be calling one out today to fix the issue and clear any outstanding sewage. Will follow up on December 11th. Blockage has been fixed.
Pool Discharge	105	CRYSTAL BROOKE	1/17/2019	1/18/2019		Utilities called stating water discharging from 3" pipe at the curb that contained chlorine. Was not discharging upon ESD arrival. Left note for resident to call. Left phone message for resident. Mailed pool letter.
Pool Discharge	1408	LAGUNA VISTA WAY	4/10/2019	4/10/2019		Pool Discharge at listed address. Spoke with resident and mailed informative letter
Pool Discharge	1400	MOCKINGBIRD DR	5/6/2019	5/10/2019		NOV issued to Hartsell pool Renovations for discharging pool to MS4.

Pool Discharge	1207	LAUREL LN	5/28/2019	5/29/2019	Pool discharge letter sent to homeowner due to neighbors complaint of discharge across neighboring property and out to curb line. Morris Carrejo, Code Compliance was informed.
Pool Discharge	2901	RIVER CREST DR	6/18/2019	6/28/2019	Called Richard Snow the Owner. Advised him that the pool should be drained to sanitary sewer via clean out. He said it was shut off and advised us that "Kaylen" with Mustang Pools was the Pool Guy working on addressing pool after storm.
Pool Discharge	5301	CAMBRIDGE CT	9/27/2018	10/4/2018	Issued an NOV for pool discharge at listed address by A&M Tile & Plastering.
Potable Water Release	1650	W COLLEGE ST	3/2/2019	3/2/2019	Release of 45,000 gallons of potable water due to a blow out. Dechlorination started upon arrival. No environmental effects observed. No need to contact State.
Potable Water Release	200	JENKINS ST	4/8/2019	4/8/2019	Release of 72,000 gallons of potable water from cracked main at Jenkins and Wall. Dechlorination began upon arrival. Discharged to Morehead Branch. No adverse effects observed. TCEQ notified.
Potable Water Release	431	N SCRIBNER ST	5/17/2019	5/17/2019	Loss of approximately 150,000 gallons due to a main break. Dechlorinated upon arrival. No environmental impact. No state notification required.
Potable Water Release	2022	PARK BLVD	7/8/2019	7/8/2019	Potable Water Release 450 gallons lost. No environmental issues.

Potable Release	Water	650	W STATE HWY 114	7/15/2019	7/15/2019	PWR of approximately 72,000 gallons of water. Dechlorination initiated on arrival. No reporting required.
Potable Release	Water	200	JENKINS ST	8/17/2019	8/17/2019	Potable water release of approximately 24,000 gallons to Morehead Branch. Dechlorination started upon arrival. no adverse environmental effects observed. No State report issued.
Potable Release	Water	1500	STATE HWY 121	8/17/2019	8/17/2019	Loss of approximately 52,000 gallons of potable water to Denton Creek. Dechlorination upon arrival. No adverse effects to environment observed. No report to State.
Potable Release	Water	216	E NORTHWEST HWY	10/7/2018	10/7/2018	Release of 1,500 gallons of potable water from a main break. was dechlorinated upon arrival. No environmental impact observed or expected. State was not notified.
Potable Release	Water	5123	FAIRMOUNT DR	10/31/2018	10/31/2018	Loss of 10-15k gallons of potable water from a main break. Dechlorination began on arrival. No environmental issue observed or expected. No State report required.
Potable Release	Water	3300	TIMBERLINE DR	10/16/2018	10/16/2018	Loss of 5,000 to 10,000 gallons of Potable Water from a cement clamp failure. No environmental issue expected or observed due to heavy rains. TCEQ was not notified.
Potable Release	Water	2111	RIDGE LN	11/1/2018	11/1/2018	Loss of 15,000 gallons of potable water due to contractor hitting a main. Dechlorination began on arrival. No environmental impact expected or observed. State was not notified.

Sanitary Overflow	Sewer	3000	PARR LN	3/20/2019	3/20/2019	Loss of 1,260 gallons of sewage from a blockage. Very small amount of sewage entered creek 19 and may have entered BBC. No environmental impact. Blockage cleared and area cleaned. Reported to TCEQ.
Sanitary Overflow	Sewer	1211	W NORTHWEST HWY	3/11/2019	3/12/2019	Loss of 595 gallons of sewage due to blockage. Little if any entered storm drain. Reported to TCEQ via email on 3-11-19 and 5-day report on 3-12-19.
Sanitary Overflow	Sewer	850	S DOOLEY ST	4/29/2019	4/29/2019	SSO of 50 gal due to main blockage. Line was cleared and solids were picked up. Reported to TCEQ.
Sanitary Overflow	Sewer	1500	E STATE HWY 114	5/14/2019	5/14/2019	Loss of ~22,000 gal of sewage due to accidental release of pressure during tie-in work. Did not leave the excavation site.
Sanitary Overflow	Sewer	1250	WILLIAM D TATE AVE	6/7/2019	6/7/2019	Loss of 950 Gallons of sewage due to blockage in line. Small amount entered storm drain that discharges to Creek 14.
Sanitary Overflow	Sewer	2834	W KIMBALL RD	8/6/2019	8/6/2019	SSO caused by Atmos occurred at the listed address. ~1500 gallons of sewage lost to the property. It did not enter any receiving water, TCEQ was notified.
Sanitary Overflow	Sewer	4055	CORPORATE DR	9/13/2019	9/13/2019	Loss of 300 gallons of sewage to drainage leading to Denton Creek. Drainage was dammed and vac'ed out. No environmental issues observed. TCEQ was notified.

Sanitary Overflow	3850	LAKEVIEW DR	10/22/2018	10/23/2018	Loss of 150 gallons of raw sewage from break in a 45 on a force main line from lift station at Lakeview Park. Spill contained did not enter MS4. No environmental issues observed or expected. TCEQ was notified.
Sanitary Overflow	1214	WOODMOOR CT	10/17/2018	10/17/2018	Loss of 1,225 gallons of raw sewage from an overflowing manhole in to Farris Branch. No environmental issues expected or observed. Notification sent to TCEQ.
Sanitary Overflow	602	SHADYBROO K DR	10/13/2018	10/16/2018	SSO from WWTP clarifiers with unknown amount entering Morehead Branch. No environmental issues expected or observed.  This information was provided by Jeff Hatch, Wastewater Treatment Plant Manager: Due to the rain event, we experienced a high level of flow coming into the treatment plant. We saw upwards of 10 MGD leaving he plant at its peak. The high flows caused the level in our secondary clarifiers to rise. The rise in the secondary clarifier caused the level in the connected scum pits to reach a level that could not be contained. This caused an overflow of the train #2 scum pit at about 200gpm. The overflow began at 12:00pm and lasted until 2:00pm. We are estimating an overflow of about 24,000 gallons. The water that overflowed the scum pit was treated water that was leaving the secondary clarifiers for the cloth filters. The overflowed water was secondary treated water that had not been filter or gone through the UV disinfection system. There was some scum and grease that overflowed as well, but was contained to the wash rock inside the treatment plant and did not make it to the receiving waters. During the overflow period, we opened raw flow to the offline Train #1 to help alleviate flow to Train #2. We also set up a trash


Sanitary Overflow	Sewer	3000	W RD	KIMBALL RD	10/21/2018	10/22/2018	Loss of 4800 gallons of raw sewage from a cracked force main pipe at Kimball lift station. Ran from station to lake approximately 0.2 miles slowly. Estimated 1000-1500 gallons may have entered lake. No environmental issues observed or expected. TCEQ notified.
Sanitary Overflow	Sewer	1401	MINTERS CHAPEL RD		10/8/2018	10/10/2018	Loss of ~100 gallons of sewage from broken hose at lift station. Trace amount entered Cottonwood branch. DO readings in the creek at the station and Texan Trail were normal. Notified TCEQ
Sanitary Overflow	Sewer	733	BEAR RUN DR		12/25/2018	12/25/2018	Loss of 500-1000 gallons of liquid sewage to Bear Creek Park. Soaked into field. Reported to TCEQ (See File).
Sanitary Overflow	Sewer	601	W WALL ST		12/10/2018	12/11/2018	SSO reported at Wright Construction. Manhole overflowing due to line blockage. Line was cleared. Loss of 2,250 gallons. Small amount entered Morehead Branch which had low flow conditions. Ammonia and DO were normal. No aquatic life present. No environmental impact observed. TCEQ notified via email on 12/11/18.
Spills		1700	WILLIAM TATE AVE	D	1/29/2019	1/30/2019	2019-01-30-0745: I (D. Stoffels) investigated the site. There was staining on the concrete that appeared to be from auto fluids and possibly batteries. There were no batteries at the site. I sent a copy of the email below to Francis Bishop in case he could help out with the camera. I called and spoke with Mariann Thorsell. Explained to her the situation and wished her well with tracking down the people who dropped the battery. She had damage to her vehicle and had to be towed.
From: LisaMerzImerz@grapevintexas.gov							

Spills	4120	WILLIAM D TATE AVE	4/20/2019	4/20/2019	<p>Sent: Tuesday, January 29, 2019 8:40 PM</p> <p>To: ENVIRONMENTAL_SERVICES &lt;ENVIRONMENTAL_SERVICES@grapevintexas.gov&gt;</p> <p>Subject: Batteries at 7-11 William D Tate</p> <p>Caller Mariann Thorsell 817-705-5057 advised 2 car batteries fell off a truck approx 4pm and her daughter ran over one of them – they were leaking and moved them to the north side of the 7-11 parking lot at 1700 WDT –</p> <p>The caller was trying to determine if cameras captured the truck or if they fell off. Wanted to let you know, not sure since batteries were moved to private parking lot if it is something you would deal with.</p> <p>Police were never notified about the accident.</p> <p>Thank you.</p> <p>Received a call from FD regarding a potential vehicle fluid spill at the listed address (Grapevine Powersports). Upon arrival, FD had taken defensive position around a lift that had caught fire. As a result of the fire, the vehicle had lost various hydrocarbons. FD had bermed and caught all of the fluids prior to it entering the City's MS4. The contractor (Speed Fab-Crete, John Nelson, jnelson@speefab-crete.com, 817-455-0145) was onsite and informed that they were responsible for the cleanup and removal of any lost fluids and to not allow any of the fluids to enter the storm drain system. The creek was re-inspected on 4-23-19 and new evidence of hydrocarbon</p>
--------	------	--------------------	-----------	-----------	--

						discharge was observed.
Spills	1500	E STATE HWY 114	4/26/2019	4/26/2019		TCEQ forwarded a complaint about Northgate releasing approximately 5 cubic feet each of sand and gravel due to heavy rains. Checked Grapevine reach of Cottonwood branch and no environmental effects were observed. Check file for more info.
Spills	1500	E STATE HWY 114	12/1/2018	12/3/2018		Hydraulic Spill due to street sweeper accident on westbound E SH114 at Texan Trail. G. Moss responded. TxDOT was notified. Approximately 30 gallons of fluid lost. Most on side of the road with some entering drop inlet (storm drainage). Fluid was trapped in storm drain box and did not travel. Cleanup was left to TxDOT. Follow-up on Monday showed spill was satisfactorily cleared.
T/R Truck Leaks	500	SHADYBROO K DR	2/13/2019	2/13/2019		Roll off truck leaked oil all over employee parking lot on Monday, 02/11/2019. Route Supervisor was informed of issue. Street crew put sand over spill and swept it up on Tuesday.
T/R Truck Leaks	117	SYCAMORE CT	4/3/2019	4/4/2019		Trash truck or recycling truck left oil spot in front of his driveway and down the street. Route Supervisor was notified about complaint. Supervisor scheduled clean up crew to clean spill from location.
T/R Truck Leaks	132	SYCAMORE CT	11/8/2018	11/8/2018		Trash truck parking in cul-de-sac leaving Oil and grease, needs to be power washed. Route Supervisor was notified about complaint. Cleaning crew was dispatched to location to clean up oil from street.

T/R Truck Leaks	2823	SOUTHSHOR E DR	12/17/2018	12/17/2018	Trash truck broken down front of her house leaking juices all over the street, needs truck gone and mess cleaned up. Route Supervisor was notified about complaint. A crew was sent to location on Tuesday, 12/18/2018 to clean up spill made by truck.
-----------------	------	-------------------	------------	------------	---

## Attachment 3

Number of CSN and NOI Provided to the City Annually  
10/01/2018 through 9/30/2019



**MEMORANDUM**

**City of Grapevine, TX**

---

**TO:** *File*  
**FROM:** *Gregg Moss, Environmental Specialist*  
**SUBJECT:** *BMP 3.2 CSN and NOI Tracking*  
**DATE:** *October 1, 2018*

*(Last update: September 30, 2019)*

---

**Project Description:** The development and maintenance of a construction site inventory through the tracking of CSN and NOI received by the municipality. Inspection records and visual observations will also be used to maintain a current inventory of construction activity in the MS4.

**Objective:** Tracking of CSN and NOI received by the MS4.

**Activity to Implement:** Maintain all CSN and NOI delivered to the City on file.

**Measurable Goal:** Provide number of CSN and NOI provided to the City annually.

# of CSN – Small Site received during permit year: 8  
# of CSN – Large Site received during permit year: 6

CSN (Small Site)

2018-10-26	Grapevine Lake Dam Repair
2018-12-20	Grapevine Green Ribbon Phase IV
2019-01-11	Wall Street Township
2019-01-14	Glass Cactus Renovations
2019-03-21	ONCOR Vineyard Switching Substation
2019-05-02	Cedar Park Addition
2019-05-02	Grapevine Station North (1001)
2019-08-13	Silverlake Crossings Office Building

CSN (Large Site)

2018-11-20	Grapevine Station North
2018-12-17	Reserve at Bear Creek
2019-02-18	PayCom
2019-03-05	The Wallis and The Baker Apartments
2019-04-12	The Shops at Grapevine Mills Crossing
2019-04-19	Cottonbelt Regional Rail

**Attachment 4**

**Inventory of Active Construction Sites  
as of 9/30/2018**



**MEMORANDUM**

**City of Grapevine, TX**

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 3.4 Active Construction Site Inventory*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

**Project Description:** Maintaining an active inventory of all active construction sites in the MS4. This inventory will include all constructions sites in any phase of construction from grading to the issuance of the Certificate of Occupancy.

**Objective:** To ensure the MS4 maintains and recognizes the active construction sites in its jurisdiction. This list will provide the MS4 with a list of potential pollutant contributors to its stormwater system.

**Activity to Implement:** Develop and maintain an electronic construction site inventory.

**Measurable Goal:** Provide active construction site list with the annual report.

**Current (as of 9/30/18) Number of Active Construction Sites: 29**

<b>Project Name</b>	<b>Location</b>	<b>Inspector</b>
Abba's Acres	Intersection of Meadowmere and Kimball Road	Scott Cannon (Engineering)
The Baker and The Wallis Apartments	3155 Stars and Stripes Way	Daniel Steinshouer (Engineering)
Big Bear Creek Dog Park (City Project)	3234 SH360	Gregg Moss (Environmental)
Cannon Elementary School	1300 W College St	Daniel Steinshouer (Engineering)
Cedar Park Residential	500 Bushong Dr	Scott Cannon (Engineering)
DCT Fellowship West Ph II	3175 Bass Pro Drive	Daniel Steinshouer (Engineering)
DFW Metro Building 1, 2 & 3	Metroplace Drive at Metro Circle	Scott Cannon (Engineering)
Gateway 48	5351 William D Tate	Daniel Steinshouer (Engineering)
Gaylord Texan Staging Lot Expansion	1501 Gaylord Trail	Scott Cannon (Engineering)
GRACE	837 E Walnut	Daniel Steinshouer (Engineering)
Grapevine Chamber of Commerce	200 Vine Street	Daniel Steinshouer (Engineering)
Grapevine Hill Addition	Jones Street (off N Dooley)	Daniel Steinshouer (Engineering)
Grapevine Station North (801)	801 N Northwest Hwy	Scott Cannon (Engineering)
Grapevine Station North (1001)	1001 N Northwest Hwy	Scott Cannon (Engineering)
Hilton Garden Inn Expansion	2200 Bass Pro Court	Daniel Steinshouer (Engineering)
Jefferson at Silverlake	Bass Pro Court and Hwy 26	Daniel Steinshouer (Engineering)
Oak Grove Softball Complex	2700 Dove Loop Rd	Daniel Steinshouer (Engineering)
Oak Hills Plaza	3601 William D Tate	Scott Cannon (Engineering)
Oaks at Lonesome Dove Residential Development	3300 Lonesome Dove Rd	Scott Cannon (Engineering)
ONCOR Vineyards Switching Station	1057 Texas Trail	
Park Hills Estates	901 N Park Blvd	Scott Cannon (Engineering)
Paycom	3489 State Highway 121	Daniel Steinshouer (Engineering)
The Preserve	101 East Glade Rd	Daniel Steinshouer (Engineering)
Reserve at Bear Creek	4201 State Highway 360	Scott Cannon (Engineering)
The Shops at Grapevine Mills Crossing	3540 Grapevine Mills Boulevard North	Daniel Steinshouer (Engineering)
Tex Rail	Main St. & Hudgins	Daniel Steinshouer (Engineering)
TexRail 12" Waterline	Main St. & Hudgins	Scott Cannon (Engineering)
The Trade Group	2900 Genesis Way	Scott Cannon (Engineering)
7-11	3594 Grapevine Mills Boulevard North	Daniel Steinshouer (Engineering)

Updated: 09/30/2019

## **Attachment 5**

### **List of Erosion and Sediment Control Plans Reviewed 10/01/2018 through 9/30/2019**



**MEMORANDUM**

City of Grapevine, TX

---

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 3.5 Review of Erosion and Sediment Control Plans*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

---

**Project Description:** Review of all erosion and sediment control plans by qualified personnel as part of pre-construction requirements, including determination of potential water quality impacts.

**Objective:** To ensure that new construction sites meet minimum erosion control requirements prior to the initiation of construction activities.

**Activity to Implement:** Develop and maintain an electronic erosion and site sediment control plan list.

**Measurable Goal:** Provide a list of reviewed plans with the annual report.

Number of ESC plans reviewed during PY 2019: 33

2018-10-19	Grapevine Fire Station 1
2018-10-19	Grapevine Fire Station 2
2018-10-19	Grapevine Station North (801)
2018-11-05	Reserve at Bear Creek
2018-11-05	Silver Lake Crossing Office Building
2018-11-07	Grapevine Station North (1001)
2018-11-08	Glass Cactus Deck Expansion
2018-11-28	Glade and Euless-Grapevine Road Office
2018-12-05	Grapevine Mills Crossing
2019-01-04	D.L. Rogers Annex
2019-01-10	RaceTrac #1065
2019-01-11	PayCom
2019-01-18	Trade Group Warehouse
2019-02-11	Hilton Garden Inn Expansion
2019-02-14	Mustang Improvements
2019-02-23	Oak Hills Plaza
2019-02-26	Mustang Office Building Expansion
2019-03-05	McMillan James Office & Warehouse
2019-03-05	The Wallis and the Baker Apartments

2019-03-08	Banyan Place II
2019-03-08	ONCOR Vineyards Switching Station
2019-03-15	PayCom
2019-04-08	Grapevine Chamber of Commerce
2019-04-17	Cedar Park Addition
2019-04-17	Grapevine Hill Addition
2019-04-19	The Trade group – Water Line Extension
2019-06-03	Carter Addition
2019-07-08	Great Wolf Lodge Entry Gate
2019-07-09	ONCOR Vineyard Switching Substation
2019-08-07	Eules Grapevine Office
2019-08-15	2301 Westgate Plaza
2019-08-20	Kubota Parking Lot Addition
2019-09-05	Waffle House

## Attachment 6

### List of Pre-Construction Meetings Held 10/01/2018 through 9/30/2019



**MEMORANDUM**

City of Grapevine, TX

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 3.6 Pre-Construction Meetings*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

**Project Description:** Host Pre-Construction meetings with contractors/ property owners and present erosion and sediment control requirements and expectations.

**Objective:** To ensure that new construction sites meet minimum erosion control requirements prior to the initiation of construction activities. Use meeting as an educational tool to inform builders of requirements and expectations.

**Activity to Implement:** Develop and maintain an electronic construction site inventory.

**Measurable Goal:** Provide active construction site list with the annual report.

Number of Pre-Construction Meetings held in PY 2019: 19

2019-01-15	RaceTrac #1065
2019-02-13	Grapevine Station (801)
2019-02-13	Oak Hills Plaza
2019-02-14	Grapevine Station North (1001)
2019-03-05	The Baker and the Wallis Apartments
2019-04-02	The Shops at Grapevine Mills Crossing
2019-04-19	Banyan Place II Sewer
2019-04-26	Cedar Park Addition
2019-05-31	Reserve at Bear Creek
2019-06-04	Grapevine Station North (1001)
2019-06-05	ONCOR Vineyard Switching Station
2019-06-19	Grapevine chamber of Commerce
2019-06-21	Gaylord Texan Staging Expansion
2019-06-21	Grapevine Hills Addition
2019-06-25	PayCom
2019-07-01	7-11
2019-07-02	Grapevine Mills Crossing Office Building
2019-07-11	The Trade Group
2019-08-15	Hilton Garden Inn Expansion

**Attachment 7**

**Current Post-Construction BMP Map  
as of 9/30/2019**



**MEMORANDUM**

**City of Grapevine, TX**

---

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 4.5 Post-construction BMP Map*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

---

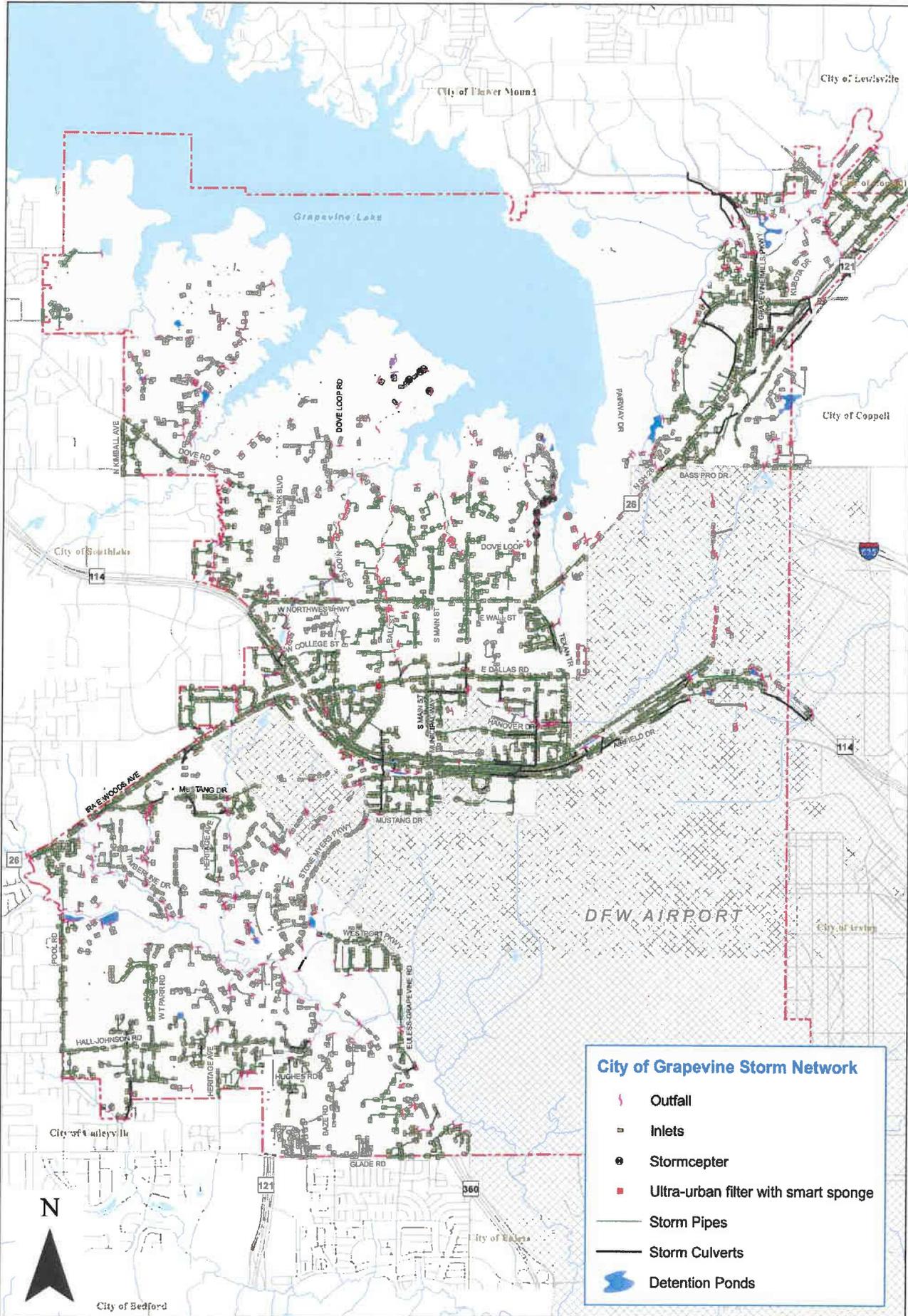
**Project Description:** The development and maintenance of a comprehensive post-construction BMP map of all known publically and privately owned BMPs.

**Objective:** To ensure that all publically and privately owned post-construction control BMPs are mapped and the location and discharge points are known.

**Activity to Implement:** Develop a map of all known constructed detention facilities.

**Measurable Goal:** Provide map of all known constructed detention facilities with annual report.

# City of Grapevine Storm



**City of Grapevine Storm Network**

- Outfall
- Inlets
- Stormceptor
- Ultra-urban filter with smart sponge
- Storm Pipes
- Storm Culverts
- Detention Ponds



## Attachment 8

### List of Pollution Prevention Audits of Municipal Facilities 10/01/2018 through 9/30/2019



**MEMORANDUM**

**City of Grapevine, TX**

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 5.1 City Facility Pollution Prevention Audits*

**DATE:** *October 1, 2018*

*(Last update: August 28, 2019)*

**Project Description:** Develop an inventory and map of all City-owned and operated facilities. Determine those facilities are "High Priority" with respect to potential stormwater issues. Develop P2 SOPs and audit those facilities for P2 compliance.

**Objective:** To determine which City facilities fall into the category of "High Priority" and develop adequate pollution plans for those facilities. Audit those locations for compliance with pollution prevention SOPs.

**Activity to Implement:** Inspect "High Priority" Facilities.

**Measurable Goal:** Conduct one audit of each "High Priority" facility per year.

Attached is a list of the facility audits conducted (all audit forms are on file).

Facility Name	Facility Address	Department	Facility Contact	Date of Inspection(s)	Facility Disposition	Documentation Required	Notes
Municipal Service Center	501 Shady Brook Dr	Public Works - Operations	Keith Mertschin	11/16/18, 2/13/19, 5/29/19, 8/23/19	Full Inspection (See File)	Municipal Facility Audit	
Waste Water Treatment Plant	602 Shady Brook Dr	Public Works - Utilities	Jeff Hatch	7/12/2019	Full Inspection (See File)	Municipal Facility Audit	
Water Treatment Plant	2500 Fairway Dr	Public Works - Utilities	Karl Moellering	7/12/2019	Full Inspection (See File)	Municipal Facility Audit	
Golf Maintenance Facility	3800 Fairway Dr	Finance - Golf	Merlin Tielkemeter	7/12/2019	Full Inspection (See File)	Municipal Facility Audit	
Grapevine Vintage Railroad	203 W Dallas Rd	CVB	Matthew Keefover	7/12/2019	Full Inspection (See File)	Municipal Facility Audit	
Fire Station #1	601 Boyd Dr	DPS	Darrell Brown	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Fire Station #2	2801 Panhandle Dr	DPS	Darrell Brown	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Fire Station #3	2527 Briarwood Dr	DPS	Darrell Brown	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Fire Station #4	4500 Merlot Ave	DPS	Darrell Brown	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Fire Station #5	2801 N Grapevine Mills Blvd	DPS	Darrell Brown	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Grapevine Public Safety Building	1007 Ira E Woods Ave	DPS	Todd Dearing	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Grapevine Animal Shelter	500 Shady Brook Dr	DPS	Kristina Valentine	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Grapevine Botanical Gardens	411 Ball Street	Parks and Recreation	Trace Worthy	7/11/2019	Zero Discharge	Municipal Facility Checklist	
Dove Pool Park	2000 Dove Rd	Parks and Recreation	Kurt Hardin	7/11/2019	Zero Discharge	Municipal Facility Checklist	Location has an outdoor pool
Pleasant Glade Pool	1805 Hall Johnson Rd	Parks and Recreation	Kurt Hardin	7/11/2019	Zero Discharge	Municipal Facility Checklist	Location has an outdoor pool
Bear Creek Park	3230 SH360	Parks and Recreation	Tony Steele	7/11/2019	Zero Discharge	Municipal Facility Checklist	Location will have a dog park with splash pad in FY2020
Meadowmere Park	3000 Meadowmere Ln	Parks and Recreation	Peter Doyle	7/11/2019	Zero Discharge	Municipal Facility Checklist	
Nash Farm	626 Ball St	CVB	Cody Joffr	7/11/2019	Zero Discharge	Municipal Facility Checklist	
Oak Grove Ball Park	2520 Oak Grove Loop S	Parks and Recreation	Rusty Walker	7/12/2019	Zero Discharge	Municipal Facility Checklist	
Parr Park	3010 Parr Ln	Parks and Recreation	Tony Steele	7/11/2019	Zero Discharge	Municipal Facility Checklist	Location has a splash pad
Vineyards Campground	1501 N Dooley	Parks and Recreation	Peter Doyle	7/11/2019	Zero Discharge	Municipal Facility Checklist	

Note: A Disposition of Zero Discharge means that any chemical storage or potential pollutants are stored inside, out of the weather and stormwater runoff. Facilities are still inspected on an annual basis.

## Attachment 9

### List of Stormwater Controls Status as of 9/30/2019



**MEMORANDUM**

**City of Grapevine, TX**

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP 5.4 Stormwater Controls for High Priority Facilities*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

**Project Description:** Identify and assess stormwater controls at each of the listed facilities. Determine whether new controls are required for each facility. If new controls are deemed necessary, install those controls. Refer to BMP 5.1 for the determination of “High Priority” facilities.

**Objective:** To determine which, if any, “High Priority” facilities require stormwater controls above and beyond those currently installed in order to prevent stormwater pollution from municipal activities.

**Activity to Implement:** Determine if new controls are required.

**Measurable Goal:** Provide a list of potential controls.

The following are potential Stormwater controls to be considered at “High Priority” facilities:

City Facilities			
NAME	ADDRESS	Department	Potential New Controls
Fire Station #2	2801 Panhandle Dr	Fire	None
Fire Station #1	601 Boyd Dr	Fire	None
Fire Station #3	2627 Briarwood	Fire	None
Fire Station #4	4500 Merlot Ave	Fire	None
Fire Station #5	2801 Grapevine Mills Bl	Fire	None
Department of Public Safety	1007 Ira E. Woods Ave	Public Safety	None
Animal Control	500 Shady Brook Dr	Public Safety	None
Water Treatment Plant	2600 Fairway Dr	Public Works	None
Wastewater Treatment Plant	602 Shady Brook Dr	Public Works	<ul style="list-style-type: none"> <li>- Stabilize North side slope.</li> <li>- Increase Street Sweeping.</li> </ul>
Municipal Service Center	501 Shady Brook Dr	Public Works	<ul style="list-style-type: none"> <li>- Cover stockpiles.</li> <li>- Protect drains downhill of stockpiles.</li> <li>- Install device to remove sediment from vehicles exiting Auxiliary Yard.</li> </ul>
DOVE CROSSING PARK	1701 Stoneway Dr	Parks	None

NAME	ADDRESS	Department	Potential New Controls
DOVE PARK - POOL	1509 Hood Ln	Parks	None
GRAPEVINE GOLF COURSE	3800 Fairway Dr	Parks	- Cover stockpiles.
HERITAGE PARK/BOTANICAL GARDEN	411 Ball St	Parks	None
MEADOWMERE PARK	3000 Meadowmere Ln	Parks	None
OAK GROVE PARK	Oak Grove Loop N & Soccer Rd	Parks	None
PARR PARK	3010 Parr Ln	Parks	None
PLEASANT GLADE POOL	1805 Hall Johnson Rd	Parks	None
ROCKLEDGE PARK	3851 Fairway Dr	Parks	None
THE VINEYARDS CAMPGROUND	1501 N Dooley St	Parks	None
NASH FARM	626 Ball St	CVB	None
GRAPEVINE VINTAGE RAILROAD	208 W. Dallas Rd.	CVB	None

**Attachment 10**  
**SSOi Reporting Information**  
**As of 9/30/2019**



**MEMORANDUM**

**City of Grapevine, TX**

---

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP TMDL-1 Participation in TCEQ SSOi Program*

**DATE:** *October 1, 2018*

*(Last update: Nov 9, 2019)*

---

**Project Description:** To continue the City's participation in TCEQ's SSOi program, which includes details about the City's improvements to sanitary lines to reduce overflows, addressing of lift station inadequacies and strengthening of sanitary use requirements.

**Objective:** Continue to participate in the SSOi program to meet the goals of the Bacteria Impairment TMDL in the Big Bear Creek Watershed, specifically related to Sanitary Sewer Systems.

**Activity to Implement:** Continued participation in the SSOi program.

**Measurable Goal:** Provide SSOi annual report to the TCEQ.

**See attached report.**

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
SANITARY SEWER OVERFLOW (SSO) AGREEMENT  
ANNUAL PROGRESS REPORT**

**INSTRUCTIONS**

- This form is optional; however, it identifies the required and optional information to be included in the annual progress report for participants in the SSO Initiative. **Participants are highly encouraged to use the form.**
- You may attach to this form any additional information that demonstrates the progress made during the reporting period (such as graphs, photos, work order receipts, etc.)
- The **annual reporting period is located in your Agreement.** Typically, an initial progress report is due 90 days after the effective date of the Agreement, with progress reports due annually thereafter.
- This form may also serve as a template for developing your SSO plan.
- For each section that is completed, please reference the corresponding provision number from the Agreement.
- Participants are required to report the items marked with an asterisk (\*) including all items in Section 1 through Section 4.

**SECTION 1. PARTICIPANT INFORMATION**

1.1 Participant Name*	City of Grapevine
1.2 Case Number (located on the Agreement)*	39590
1.3 Regulated Entity Number*	101614352
1.4 State Water Quality Permit Number (if applicable)*	TX0032018
1.5 Representative Name & Title*	Jeffrey Hatch – Wastewater Plant Manager
1.6 Representative Phone #* (area code and # - no dashes)	2079512865
1.7 Annual Reporting Period (Month and Year – see instructions)*	08-2017 through 07-2018

**SECTION 2. EVALUATING THE EFFECTIVENESS OF THE PLAN**

2.1 Provide the total number of SSOs (As a separate attachment, include a list of SSOs that details the date, volume, and cause for each SSO event) that occurred during the reporting period.\*

<p><b>2.2 Provide a brief summary of how the corrective actions that were completed during this reporting period have already contributed to a reduction of SSOs in the system.*</b></p>	<p><b>The City has established an effective routine cleaning program for our collection system. This includes Bi-weekly, Monthly, 2 Month, 3 Month, 4 Month, and 6 Month cleaning schedules for specific assets that have historically been susceptible to main line stoppages. We have also done a CCTV inspection for each main line stoppage that occurs within the collection system.</b></p>
--	---

<p><b>2.3 What actions are currently being taken or planned to ensure a reduction of SSOs will occur in the future?*</b></p>	<p><b>The City of Grapevine is working to replace existing assets identified in a resent I&amp;I study, along with our capital improvement schedule.</b></p> <p><b>Within Lift Stations, we check stations twice a week to check all operations of these stations to keep us ahead of the curve on failure potential which would lead to SSOs. New pumps have been purchased and installed in historically troubled stations in order to ensure proper station operations.</b></p> <p><b>Improved SCADA system and trained staff how to use trending for predictive and preventive maintenance. Installed flow meters and pressure gauges in several lift station to monitor stations more effectively.</b></p>
--	---

2.4 Provide any additional information that demonstrates the success of your program (e.g. Compare the number of wet weather overflows with dry weather overflows to show inflow/ infiltration (I/I) reduction).\*

We have made improvements to our SCADA system that allows us to have real time data to look for I&I areas and to manage our wastewater plant flow more effectively. We are able to trend more data to provide the information needed to identify trouble areas to make inspections and repairs within the collection system. These improvements have resulted in a 18.5% decline in SSOs within this review period.

### SECTION 3. INTERIM MEASURES TO MITGATE SSOs

3.1 Describe your SSO response plan.\*

**Collection system-** When an SSO is reported during normal business hours, the main line cleaning crew will be dispatched to the reported over flow. If a SSO is confirmed they will clear the stoppage with a jet/vac truck, or call for the proper equipment if a repair is required. After normal business hours, on-call personnel have 30 minutes to respond to verify the reported SSO. There are always at least two individuals on-call; one as primary and the other as secondary. Once an SSO is reported to the on-call staff, the primary on-call will go directly to the site of the reported SSO while the secondary on-call is dispatch to prepare the proper equipment if a SSO is confirmed. This is done to minimize the amount of time between when a SSO is confirmed and when it is corrected. Once the cause of the SSO is corrected, we collect as much of the discharge as possible, and communicate all of the relevant information with our Environmental Division so that they are able assess the impact to the environment.

**Lift Stations –** When an SSO is reported within a lift station, the Lift Station Supervisor as well as a primary on-call will be notified. All stations are monitored via SCADA, which allows for real time alarming showing what exactly is going on within the station. An assessment can be made while in route to the station which provides the personnel to notify the Collection Division for equipment support if needed. Ten of our stations have generators on-site in the event of a power outage and we have access to 2 portable generators as well. We have 4 portable pumps on standby if needed. After hours, the same protocol is observed for day time notification.

Both the Collection Division and the Lift Station Group work together and communicate on all needs both day and night. This allows for no issues to fall between the cracks.

<p><b>3.2 What actions were taken during this reporting period to mitigate SSOs?*</b></p>	<p><b>Routine maintenance is conducted regularly. Installation of new HDPE/PVC main lines is replacing older dilapidated Cast Iron and Clay mains.</b></p>
<p><b>3.3 What improvements were made to your SSO response plan?*</b></p>	<p><b>The only updates that were made was the availability of data to our field staff. All relevant asset data can now be viewed by staff on an app through Arc GIS online. This aids in identifying what line is effected (size, material, location, &amp; access) which then dictates what equipment is best suited for clearing the stoppage. With this app, we are also able to view our Storm Water infrastructure for checking outfalls &amp; creeks if SSO discharge enters our Storm Water drainage system.</b></p>
<p><b>SECTION 4. SOURCES OF FUNDING</b></p>	
<p><b>4.1 Provide a summary of the costs expended for completed projects during this reporting period.*</b></p>	<p><b>Within this review period, we have spent 1.8 million dollars towards infrastructure replacements and new installations within the collection system. We have purchased new pumps for many of the lift stations along with new equipment for our Collection Division. Funds were also invested in upgrades to the SCADA systems along with employee training.</b></p>

<p>4.2 Describe the anticipated and confirmed sources of funding for the next two years.*</p>	<p>The anticipated funds for the next two years will be 5 million dollars which will be sourced through utility rates collected by the City.</p> <p>These funds will be allocated to replace pumps and install flow meters for the lift station. We will also be carrying out projects that would replace 70,000 ft. of pipe and several manholes within the collection system.</p>
---	---

**SECTION 5. OPERATIONS AND MAINTENANCE (O&M) PROGRAM**

<p>5.1 Briefly describe your O&amp;M Program for the reporting period.*</p>	<p>We have two crews dedicated to preventative maintenance in our Collection System.</p> <p>The Lift Station Group has implemented a maintenance program that requires pumps to be pulled on a set time frame regardless of issues with the pump. We have scheduled on site visits that include wet well inspection, pump operation, and by-pass operation. The stations are cleaned as needed. Electrical motor controls and SCADA are de-energized to inspect and torque all connections to pump specs. Stations are monitor 24/7 via SCADA as well as a dedicated on call person.</p>
---	--

**5.2 O&M Activities**  
 Quantify the following components of your O&M activities for the reporting period. If you did not conduct an activity, please indicate with N/A.

<p>5.2.1 Inspection frequency of the system (sewer pipes, lift stations, manholes, etc.)*</p>	<p>A MH inspection is done every time one is opened either for High Pressure Cleaning, or for CCTV inspection.</p> <p>Lift stations are inspected twice a week.</p>
---	---

5.2.2 Cleaning frequency of the system (sewer pipes, lift stations, manholes, etc.)*	Lift Stations are checked twice week and are cleaned as needed.  Sewer main assets & MH are on schedule to be cleaned every two years. Unless conditions exist such as grease from restaurants, the lines are cleaned on a more frequent schedule.
5.2.3 Total number of linear feet of sewer pipe in the system*	1,195,180
5.2.4 Total number of linear feet of sewer pipe inspected*	10,998
5.2.5 Total number of manholes in the system*	3842
5.2.6 Total number of manholes inspected*	MH were inspected, however we have just begun recording these inspections in our Work Order system. This has been corrected. Estimated 923 MH inspections last year.
5.2.7 Total number of lift stations in the system*	31
5.2.8 Total number of lift stations inspected*	31
5.2.9 Total number of linear feet of sewer pipe cleaned*	Approximately 317,477
5.2.10 Describe the types of SSO-related employee training that was completed (e.g., Capacity, Management, Operations, & Maintenance; Fats, Oils, & Grease; etc.)*	Cross training with all equipment for new staff members. By-pass set up training for sewer failures. Also attend annual training with our Environmental Services Division.  Various members of our staff have also been sent to TCEQ approved training courses to obtain or maintain Wastewater Collection Operator licenses.

5.2.11 Other	N/A
--------------	-----

**SECTION 6. SYTEM EVALUATION & REHABILITATION**

6.1 System Evaluation	Quantify or describe the following measures used to evaluate your system's capacity; inflow/ infiltration (I/I) rate; etc. that were completed during the reporting period. If you did not conduct an activity, please indicate with N/A.
6.1.1 Flow Monitoring (e.g., wastewater treatment facility; lift stations; rainfall records, etc.)	<p>Wastewater Treatment influent and effluent flows are monitored real time 24/7, 365 days. Flows are reported to TCEQ via our monthly DMR. The annual average flow did not vary much which would indicate I/I issues are not present.</p> <p>Currently we are using a draw down calculation with SCADA for discharge flow. We are in the process of adding flow meters to our larger stations. So far two have been added and 3 more purchased are waiting to be installed.</p>

<p><b>6.1.2 Dye Testing (e.g., to identify leaks, illegal connections, etc.)</b></p>	<p><b>We do this test when verifying the location of sewer taps that are in question.</b></p>
--	---

<p><b>6.1.3 Smoke Testing (e.g., to identify illegal connections, exposed cleanouts, etc.)</b></p>	<p><b>N/A</b></p>
--	-------------------

<p><b>6.1.4 Evaluation to identify the location and condition of sewer pipes.</b></p>	<p><b>We use ITpipes inspection software for our CCTV inspections, which uses the PACP evaluation standards. This data is then synced to our work order system and ESRI to be used as metrics for the prioritization of sewer line replacements.</b></p>
---	--

**6.1.5 Evaluation to identify the location and condition of manholes.**

**Manholes are visually inspected each time it is opened. When our CCTV crew accesses a manhole to do an inspection on a sewer main they also do an inspection on the manhole using a PACP evaluation software purchased by the City.**

**6.1.6 Evaluation to identify the location and condition of lift stations.**

**Station location is identified by GPS in work trucks as well as GIS mapping. Condition of the stations are checked twice a week.**

**6.1.7 Closed Circuit Television**

**We are on schedule to CCTV our entire collection system every four years. The amount of completed CCTV inspections did decline during this review period due to the catastrophic failure of equipment, and the time it took to purchase a replacement.**

**6.1.8 System Mapping Updates**

**We actively update our GIS data when we find unmarked or mismarked assets within our collection system.**

6.1.9 Other	N/A
<b>6.2 Rehabilitation Projects</b>	<b>Quantify or describe the following rehabilitation projects that were completed during the reporting period. Please provide specific details, such as the number of linear feet, sizes of sewer pipes, number of manholes, etc. If you did not conduct an activity, please indicate with N/A.</b>
6.2.1 Number of Sewer Pipes Repaired/Rehabilitated*	21 linear feet of pipe repaired various consisting of 4, 6, & 8-inch point repairs on sewer mains, 160 feet of 30 inch sewer main
6.2.2 Number of Sewer Pipes Replaced*	5230
6.2.3 Number of Sewer Pipes Removed	0
6.2.4 Number of Sewer Pipes Added	1531.86 linear feet comprised of 6 & 8 inch sewer main
6.2.5 General Sewer Pipe Improvements	All lines being replaced or upgraded via pipe bursting will be replace with HDPE pipe. Either DR 21 of DR 17 depending on the location, and proximity to other utilities.
6.2.6 Number of Manholes Repaired/Rehabilitated*	20
6.2.7 Number of Manholes Replaced*	1

<b>6.2.8 Number of Manholes Removed</b>	<b>0</b>
<b>6.2.9 Number of Manholes Added</b>	<b>10</b>

<b>6.2.10 General Manhole Improvements (e.g., installing locks, replacing covers, etc.)</b>	<b>No changes have been made within this time frame.</b>
<b>6.2.11 Number of Lift Stations Repaired/Rehabilitated*</b>	<b>6</b>
<b>6.2.12 Number of Lift Stations Replaced*</b>	<b>1</b>
<b>6.2.13 Number of Lift Stations Removed</b>	<b>1</b>
<b>6.2.14 Number of Lift Stations Added</b>	<b>0</b>
<b>6.2.15 General Lift Station Improvements (e.g., electrical upgrades, installation of monitoring systems, etc.)</b>	<b>Six stations have had new pumps installed. One station has had new wires pulled, soft starts with power monitoring installed, digital pressure gauge, and flow meter installed.</b>

6.2.16 Other	N/A
--------------	-----

<b>7.1 General SSO Education &amp; Outreach</b>	<b>Quantify or describe the following measures completed under your SSO Education Program (if applicable) during the reporting period. Please provide specific details, such as number/frequency of brochures distributed, etc.</b>
7.1.1 Educational Brochures (e.g., bill inserts, door knockers, etc.)	Outreach and education materials were issued to the public at all City events, along with commercial sites that were inspected during this evaluation period.
7.1.2 Media Advertisements (e.g., television, radio, newspaper, etc.)	Printed materials created by City Environmental services as well as material obtained from NCTCOG.
7.1.3 Website Updates	No updates to the City website
7.1.4 Educational/Training Opportunities (e.g., community events, school programs, etc.)	Two dedicated Environmental events, as well as all other City festivals and functions.

7.1.5 City Ordinances	N/A
7.1.6 Other	N/A

<b>7.2 Fats, Roots, Oil, &amp; Grease (FROG) Program</b>	<b>Quantify or describe the following measures completed under your FROG Program (if applicable) during the reporting period. Please provide specific details, such as number/frequency of brochures distributed, etc.</b>
7.2.1 Number of Grease Trap/Interceptor Inspections*	20
7.2.2 Grease Ordinance Updates	City Ordinance has not been modified during this evaluation period.

<b>7.2.3 Grease Ordinance Enforcement</b>	There were no enforcements on Grease Ordinances
<b>7.2.4 Grease Control Methods</b>	Pumping frequency requirements are determined by the type of facility: Every 30 days for facilities that serve fried foods, every 90 days for facilities that serve non-fried foods, and every 6 months for daycare centers.
<b>7.2.5 Food Service Establishment Training</b>	An Education/Outreach packet is giving to food service facilities on every audit conducted by Environmental Services.

<p><b>7.2.6 Root Control Methods</b></p>	<p>High pressure cleaning is our method of root control. We do not use any kind of chemical additives in our collections system. We have also begun specifying HDPE as our pipe material for areas that can be rehabbed via pipe bursting which virtually eliminates the possibility of root infiltration.</p>
--	--

**SECTION 8. ADHERENCE TO MILESTONES**

<p><b>8.1 Discuss/describe all of the milestones that were completed in accordance with the requirements of the Agreement during the reporting period.*</b></p>	<p>The City of Grapevine as an organization has continued to strive towards our goals of eliminating SSO's in our collection &amp; treatment systems. Field Operations had continued to train staff members for more productive preventative maintenance programs, and more effective when responding to emergencies. During this review period, Grapevine has started a multi-phase replacement program based on data received from an I&amp;I study. Grapevine has also committed to building a more effective and robust asset management program through the purchase of new equipment, software, and personnel training.</p> <p>Our Lift Station Group have continued to upgrade and install additional instruments integrated into our SCADA system. Providing a greater number of data points is providing better data resulting in O&amp;M of our lift station infrastructure.</p> <p>The Environmental Division capitalize on every opportunity to educate citizens and businesses on their impact on the collection system. They also enforce the City's ordinances when necessary.</p>
---	---

<p>8.2 Discuss/describe all of the milestones that were NOT completed in accordance with the requirements of the Agreement during this reporting period. Include any changes you plan to make to ensure that milestones are completed for the next two years.*</p>	<p>The area that needs the most improvement is the amount of CCTV inspection completed on our collection system. At the beginning of this evaluation period we had a catastrophic failure with our inspection equipment. In response to this failure, the City of Grapevine purchased all brand new equipment and software. The new equipment was not delivered until July 2018.</p>
<p>8.3 Provide a list of scheduled projects that are planned for the next two years.*</p>	<p>Replacement of approximately 70,000 linear feet of pipe identified as contributing to our I&amp;I. This will be done in three separate projects: Northeast Outfall, Ticknor Terrace, and Bellaire subdivision.</p>

**SECTION 9. MISCELLANEOUS**

<p>Provide any additional information you feel necessary to demonstrate compliance under the terms of the SSO Initiative.</p>	<p>N/A</p>
---	------------

**SECTION 10. SIGNATURE**

<p>Signature:</p>	<p>Date: November 9, 2018</p>
<p>Name (printed or typed): Jeffrey Hatch</p>	<p>Title: Wastewater Plant Manager</p>



January 2  
December

Jon Niemann, *Chairman*  
Emily Lindley, *Commissioner*  
Toby Baker, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*  
April 26, 2019

The Honorable William D. Tate  
Mayor of Grapevine  
P.O. Box 95104  
Grapevine, Texas 76099

Re: Notice of Termination of Sanitary Sewer Overflow (SSO) Agreement  
City of Grapevine; RN101614352  
Case No. 35950; Effective Date: July 17, 2008

Dear Mayor Tate:

The purpose of this letter is to inform you that the above-referenced SSO Agreement has been terminated because the final requirement has been reached. Specifically, the requirement to submit the Final Progress Report, which signifies the expiration of an SSO Agreement, occurred on December 31, 2018. Our records indicate that we received this report on November 13, 2018.

We understand that the City of Grapevine has elected to re-enter the SSO Initiative and is currently working with the DFW Regional Office to develop a new SSO Plan. No further action is necessary with regard to the above-referenced SSO Agreement. We appreciate your continued participation in the SSO Initiative and if we can be of any further assistance, please contact Ms. Andrea Linson by phone at (512)239-1482; fax at (512)239-4562; or email at [andrea.linson@tceq.texas.gov](mailto:andrea.linson@tceq.texas.gov).

Sincerely,

Handwritten signature of Lynley Doyen in cursive.

Lynley Doyen, Section Manager  
Enforcement Division

cc: Bryan Beck, P.E., Director of Public Works, City of Grapevine, P.O. 95104, Grapevine, Texas 76099

## Attachment 11

List OSSF Issues Provided by Tarrant County  
10/01/2018 through 9/30/2019



**MEMORANDUM**

**City of Grapevine, TX**

---

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP TMDL-2 On-Site Sewage Facilities*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

---

**Project Description:** Utilize Tarrant County Public Health (the OSSF Authority for this MS4) as a resource for identifying and addressing failing septic systems and addressing inadequate maintenance of OSSFs. Contact TCPH annually for list of OSSFs and issue status of those OSSFs as applicable.

**Objective:** To address the potential contribution of OSSF to bacterial impairment of the watershed through identifying and addressing failing systems and addressing inadequate maintenance of OSSFs.

**Activity to Implement:** Contact TCPH for a list of OSSF issues within the City.

**Measurable Goal:** Provide a list of OSSF issues within the City on an annual basis.

Grapevine had no OSSF issues reported and no new OSSF installed during Permit Year 2019.

See attached documents.

## Gregg Moss

---

**From:** Rebecca L. Grassl-Petersen <RLGrassl-Petersen@TarrantCounty.com>  
**Sent:** Wednesday, October 16, 2019 12:42 PM  
**To:** Gregg Moss  
**Cc:** Yvonne Brinkley; David G. Jefferson  
**Subject:** RE: OSSF Issues in Grapevine

\*\*\* EXTERNAL EMAIL COMMUNICATION - PLEASE USE CAUTION BEFORE CLICKING LINKS AND/OR OPENING ATTACHMENTS \*\*\*

Hi Gregg,

Our support staff has emailed me and Grapevine had no activity this past year.

Please let us know if you have further questions.

Thank you, Becca

**From:** Gregg Moss [mailto:gmooss@grapevintexas.gov]  
**Sent:** Wednesday, October 16, 2019 9:31 AM  
**To:** Yvonne Brinkley <YBrinkley@TarrantCounty.com>  
**Cc:** Rebecca L. Grassl-Petersen <RLGrassl-Petersen@TarrantCounty.com>; David G. Jefferson <DGJefferson@TarrantCounty.com>  
**Subject:** Fwd: OSSF Issues in Grapevine

**EXTERNAL EMAIL ALERT! Think Before You Click!**

Just following up on the email request below.

Thank you!

Gregg Moss  
City of Grapevine  
Environmental Services

Get [Outlook for iOS](#)

---

**From:** Gregg Moss <gmooss@grapevintexas.gov>  
**Sent:** Tuesday, October 8, 2019 3:42 PM  
**To:** Yvonne Brinkley

**Cc:** Rebecca L. Grassl-Petersen; David G. Jefferson

**Subject:** OSSF Issues in Grapevine

[gmoss@grapevintexas.gov](mailto:gmoss@grapevintexas.gov)

Yvonne

Can you tell me how many OSSF issues were reported to Tarrant County from 10-1-18 to 9-30-19 from Grapevine (76051)? We need the information for our annual stormwater report.

Thank you!

Gregg Moss MS, CPMSM, CSI

Environmental Specialist II

City of Grapevine

[gmoss@grapevintexas.gov](mailto:gmoss@grapevintexas.gov)

O: 817-410-3330

F: 817-410-3051



Please consider the environment before printing this email.

**Attachment 12**

**List of Liquid Waste Haulers and Number of Manifests Received  
10/01/2018 through 9/30/2019**



**MEMORANDUM**

**City of Grapevine, TX**

---

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP TMDL-3 Liquid Waste Hauling*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

---

**Project Description:** The MS4 will maintain electronic records of all liquid waste hauling manifests received by the City.

**Objective:** To track liquid waste hauler use within the City/ MS4. Provides an additional resource when tracking potential sources of bacteria.

**Activity to Implement:** Electronically record all liquid waste hauler manifests received by the City.

**Measurable Goal:** Provide number of waste haulers and number of manifests received annually.

A total of 11 waste haulers submitted manifests during PY 2019.

A total of 812 manifests were received during PY 2019.

## Attachment 13

Animal Waste Outreach & Education  
10/01/2018 through 9/30/2019



**MEMORANDUM**

**City of Grapevine, TX**

---

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP TMDL-4 Pet/ Animal Waste Management*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

---

**Project Description:** In order to reduce the contribution of potential bacteria impairment within the MS4, the MS4 will locate and educate locations with high densities of pets or stock animals about ways to reduce animal waste from becoming an issue.

**Objective:** To list and map locations that have high concentrations of animals that may be bacteria sources within the MS4. These include dog parks, horse ranches, farms, pastures and the like.

**Activity to Implement:** Develop outreach material targeting pet and animal waste.

**Measurable Goal:** Development of outreach material targeting pet and animal waste with annual report.

Attached are outreach materials developed for this program. This is an on-going BMP.



Do you have livestock on your property?

Do you dispose of their waste properly?



Livestock generate large amounts of waste on a daily basis. Livestock waste is major source of noxious gases, harmful pathogens and odor; hence, it has public health and environmental concern. Improper collection and disposal of untreated animal waste can harm groundwater and human health. Nutrients and bacteria from animal waste can cause fish kills and harm shellfish in contaminated streams, creeks, and estuaries.

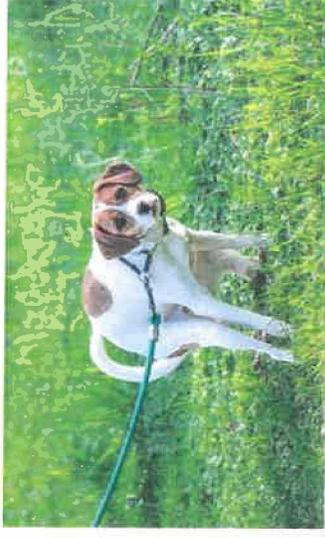
You are required to collect livestock waste and dispose or recycle it properly. Leaving waste out in a pasture makes it available to runoff, where it can adversely affect our streams and lake. Proper management of livestock waste is required by all livestock owners.



For further information please contact the City of Grapevine Environmental Services Division  
817.410.3330.

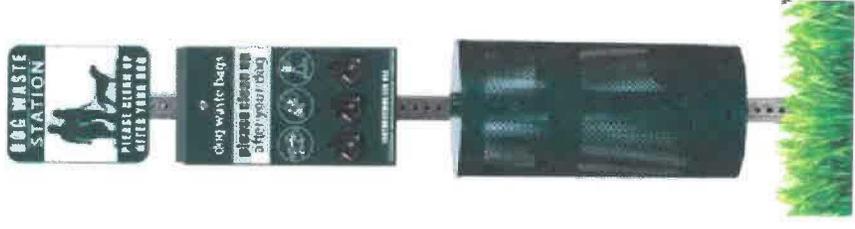


**Do you have pets?  
Do you dispose of their waste properly?**



Pets generate large amounts of waste on a daily basis. Pet waste is so of viruses, bacteria and parasites — including harmful pathogens like *e coli*, giardia and salmonella; hence, it has public health and environmental concern. Improper collection and disposal of untreated animal waste can harm groundwater and human health. Nutrients and bacteria from animal waste can cause fish kills and harm shellfish in contaminated streams, creeks, and our lake.

You are required to collect pet waste and dispose or it properly. Leaving waste out on a lawn or in a park makes it available to runoff, where it can adversely affect our streams and lake. Every pet owner is required to pick up and dispose of their pet's waste properly.



For further information please contact the City of Grapevine Environmental Services Division 817.410.3330.

## Attachment 14

### Surface Water Sampling Results Conducted from 10/01/2018 through 9/30/2019



**MEMORANDUM**

**City of Grapevine, TX**

**TO:** *File*

**FROM:** *Gregg Moss, Environmental Specialist*

**SUBJECT:** *BMP PH-1 Water Quality Impairment*

**DATE:** *October 1, 2018*

*(Last update: Sept 30, 2019)*

**Project Description:** To monitor pH levels in the 6 larger creeks within the MS4 (Jones Branch, Dove Branch, Farris Branch, Morehead Branch, Cable Branch and Silver Lake Branch) feeding in to Grapevine Lake (Segment 0826) on a quarterly basis to determine if the MS4 is contributing to this waterbody's impairment. Develop BMPs and measurable goals should this be determined.

**Objective:** To determine whether the City of Grapevine, as an MS4, is contributing to the pH impairment of Grapevine Lake (Segment 0826) and take any requires corrective action, as necessary, should it be determined.

**Activity to Implement:** Quarterly pH monitoring of 6 creeks discharging to segment 0826.

**Measurable Goal:** Provide resulting pH data to TCEQ.

Creek Name	Major Drainage	Season	Sample Date	Sample Time	Air Temp (C)	Flow	Water Color	Water Temp (C)	pH
Silver Lake Branch	GPVL	Fall	11/20/2018	11:20		Dry			
Cable Branch	GPVL	Fall	11/20/2018	14:55	14	Normal	Clear	14.7	7.6
Farris Branch	GPVL	Fall	11/20/2018	14:15	14	Lake	Green	13.9	8.2
Morehead Branch	GPVL	Fall	11/20/2018	14:40	14	Lake	Brown	18.6	7.6
Dove Branch	GPVL	Fall	11/20/2018	13:10	14	Lake	Green	16.0	7.9
Jones Branch	GPVL	Fall	11/20/2018	13:45	14	Lake	Green	12.5	7.9
Silver Lake Branch	GPVL	Winter	2/14/2019	10:50		Dry			
Cable Branch	GPVL	Winter	2/14/2019	13:45	21	Normal	Clear	19.0	7.7
Farris Branch	GPVL	Winter	2/14/2019	14:45	22	Normal	Green	15.6	7.7
Morehead Branch	GPVL	Winter	2/14/2019	14:15	22	Normal	Brown	15.7	7.5
Dove Branch	GPVL	Winter	2/14/2019	14:35	22	Normal	Brown	15.8	8.1
Jones Branch	GPVL	Winter	2/14/2019	14:55	22	Normal	Clear	18.4	8.2
Silver Lake Branch	GPVL	Spring	5/14/2019	14:15		Dry			
Cable Branch	GPVL	Spring	5/14/2019	13:50	25	Normal	Clear	21.6	7.9
Farris Branch	GPVL	Spring	5/14/2019	10:55	21	Lake	Green	24.0	7.6
Morehead Branch	GPVL	Spring	5/14/2019	11:25	22	Lake	Green	24.1	7.6
Dove Branch	GPVL	Spring	5/14/2019	10:00	20	Lake	Green	23.9	7.6
Jones Branch	GPVL	Spring	5/14/2019	10:25	20	Lake	Green	24.0	7.6
Silver Lake Branch	GPVL	Summer	8/20/2019	14:55		Dry			
Cable Branch	GPVL	Summer	8/20/2019	14:30	36	Normal	Clear	28.2	7.4
Farris Branch	GPVL	Summer	8/20/2019	13:50	36	Low	Green	30.5	7.5
Morehead Branch	GPVL	Summer	8/20/2019	14:15	36	Low	Green	30.7	7.5
Dove Branch	GPVL	Summer	8/20/2019	13:00	36	Standing	Green	33.1	7.8
Jones Branch	GPVL	Summer	8/20/2019	13:25	36	Low	Green	30.1	7.8