

Grand Prairie

T E X A S



City of Grand Prairie &

Dallas County Flood Control District #1

TPDES Phase II Small MS4 General Permit Annual Report

Year 5: August 13, 2011 - August 12, 2012

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List of Acronyms

BMP	Best Management Practice
CRP	Clean Rivers Program
DCFCD	Dallas County Flood Control District #1
EPA	Environmental Protection Agency
ESD	City of Grand Prairie Environmental Services Department
GIS	Geographic Information Systems
GPISD	Grand Prairie Independent School District
HHW	Household Hazardous Waste
KGPB	Keep Grand Prairie Beautiful
MEP	Maximum Extent Practicable
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
NCTCOG	North Central Texas Council of Governments
NPDES	National Pollutant Discharge Elimination System
P2	Pollution Prevention
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
SWMP	Storm Water Management Program
SWPP	Storm Water Pollution Prevention
SWP3	Storm Water Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System

Part I. General Information

Municipality/Permit #: City of Grand Prairie/ TXR040065

District/Permit #: Dallas County Flood Control District #1/ TXR040255

TPDES Permit #: TXR040000

TCEQ NOI Form #: 20368

Year 5 Reporting Period: August 13, 2011 – August 12, 2012

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This report was prepared for and sent to:

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Part II. Interlocal Agreement

The City of Grand Prairie and Dallas County Flood Control District #1 (DCFCD) jointly submitted the Storm Water Management Program as described in an interlocal agreement approved by the aforementioned entities on February 5, 2008 (Appendix A). According to Part III of the General Permit, a permittee may enter into interlocal agreements with municipalities where the small MS4 is located in order to meet the goals of the permit if the permittee does not have enforcement authority and is unable to meet the goals of the general permit through its own powers. Approximately 20% of the DCFCD is located within the City of Grand Prairie boundaries; however, the DCFCD does not have enforcement capabilities. As a result, the City of Grand Prairie and DCFCD agreed to the joint submission of the SWMP where the DCFCD is solely responsible for only two (2) BMPs (BMP 6.10 and 6.11). The City of Grand Prairie is entirely responsible for all other BMPs described in the SWMP.

For the aforementioned reason, the City of Grand Prairie and DCFCD have jointly submitted this annual report.

Part III. Additional Information

1. No changes were made to or proposed for the SWMP in Year 5.

Future BMP activities are dependent upon amendments to the reissued Phase II MS4 Permit.

Correspondence with the TCEQ regarding revisions made to the SWMP **following** NOI submittal and **before** submittal of the Year 1 annual report and TCEQ approval of the NOI and SWMP may be found in Appendix B. **These revisions were documented in the Year 1 annual report.**

2. The City of Grand Prairie and DCFCD have *not* annexed lands since obtaining permit coverage.
3. Receiving waterbodies for the MS4 newly listed on the 2010 Texas 303(d) list are: 1) Lower West Fork of Trinity (Segment 0841/5a) for dioxin in edible tissue; 2) Johnson Creek (Segment 0841L/unclassified/5b) for bacteria, and Crockett Branch (Segment 0841V/unclassified/5b) for bacteria.

On December 20, 2000, TMDLs were approved by the TCEQ for legacy pollutants in segments 0841 (Lower West Fork of Trinity River) and 0841A (Mountain Creek Lake). Other than these TMDLs for legacy pollutants, no other TMDLs have been established for the MS4.

4. The MS4 *has* conducted analytical monitoring of stormwater quality. See BMP 3.6, BMP 3.16, and BMP 3.17 for the discussion and summary of stream, Joe Pool Lake inlet, and Joe Pool Lake beach monitoring results, respectively.

Part IV. Narrative Provisions

Status of the Compliance with Permit Conditions

The City of Grand Prairie and DCFCD have completed the required self-assessment and have determined that the City and DCFCD are in compliance with all permit conditions. The City and DCFCD 1) are currently in compliance with the SWMP as submitted to and approved by the TCEQ, 2) are in compliance with recordkeeping and reporting requirements, and 3) meet the eligibility requirements of the permit.

Appropriateness and Effectiveness of Year 5 BMPs for Reducing Pollutants

Each of the Year 5 BMPs was assessed as appropriate. Table 1 describes the estimated level of effectiveness of all Year 5 BMPs as they relate to the reduction of the discharge of pollutants to the maximum extent practicable (MEP).

Table 1: BMP Effectiveness and Progress Towards Reducing the Discharge of Pollutants to the MEP

<i>BMP</i>	<i>Description</i>	<i>Effectiveness</i>	<i>Comment</i>
1.2	Clean Rivers on Website	Low	Reaches only those perusing the City's stream monitoring website; however, once on the Clean Rivers site, citizens are able to better understand water quality issues
1.3	Lawn and Garden	Low	Reaches only those picking up brochure, perusing website, or seeking to understand SmartScape demonstration gardens, but increases awareness of alternative chemicals and benefits to planting native species
1.4	HHW Program	High	Encourages the proper disposal of hazardous waste and informs citizens of when and where they can dispose of waste
1.5	Don't Bag It	Moderate	Encourages a reduction in potential storm water contaminants such as fertilizers, insecticides and herbicides, while preserving valuable landfill space
1.6	Pet Waste	Moderate	Give-a-ways and brochures target the appropriate audience and encourage proper disposal of pet waste
1.7	H2O Line	Moderate	Reminds industrial facilities of reporting deadlines and gives them BMP information to increase compliance with industrial stormwater permit
1.8	Environmental Workshop	High	Surveys indicate that information helps facilities comply
1.9	Commercial/Industrial Floatables Education	Moderate	Educational materials discuss methods for reducing floatables. Reaches the appropriate audience as brochures are distributed during inspections, classes, workshops, and at the Development Center
1.10	Information for ARB	High	Compliance has increased significantly
1.11	School Curriculum	High	The City purchased and distributed Major Rivers Educational Packets for GPISD. This program emphasizes the importance of stormwater pollution controls to young students who in turn may relay this information to their older parents/guardians.
1.12	Interactive watershed model	Low	Effective method of teaching the concept of a watershed; however, the model has limited outreach capabilities
1.13	Utility Bill Insert	High	This is the most widely read city publication
1.14	Stream/Watershed Road Signs	Low	Signs are installed at 8 different locations throughout the City; the signs have limited outreach capabilities

1.15	Multimedia Education	Moderate	Promotes watershed awareness to Grand Prairie citizens through creative video productions and through the City's website
1.16	Non-English	High	High population of only Spanish speaking citizens in Grand Prairie
1.17	Auto Watch	Moderate	Targeted information for automotive sector
1.18	KGPB Programs	High	Tons of trash and debris are removed from neighborhoods, streams, and creeks
1.19	Construction BMPs	Low	Reaches developers seeking out educational information
1.20	Visitor Education	Moderate	Website visited by anyone with access to the internet. Brochures are available at the City's Visitor Center
1.21	Take Care of Texas	Low	Dependent upon those receiving information
2.1	Public Notice	Low	Not applicable
2.2	Texas Stream Team	High	Stream monitors sample at different locations and/or times than the City's stream monitoring. Data collected has the potential to reveal areas needing further monitoring, remediation, and/or enforcement
2.3	Master Composter	Moderate	Provides students with practical alternatives to over-applying fertilizer, potentially reducing the amount of excessive nutrients to local waterways
2.4	Drain Markers	Moderate	Increases awareness of the storm drain system to citizens and to those installing markers
2.5	Educational Event	High	Event focuses on stormwater issues and reaches hundreds of residents in one day
2.7	Illegal Dumping Hotline	High	City staff are made aware of polluted areas that they may have otherwise missed
2.8	Stakeholder Meetings	High	Citizens and City staff come together to make most appropriate decisions for SWMP
2.9	KGPB Programs	High	Includes residents, students, companies, civic groups, neighborhoods, and churches in an effort to prevent litter and other pollutants from entering the stormwater system. Actively removes floatables from waterways.
2.10	Neighborhood Outreach	Moderate	Neighborhood associations are encouraged to form cleanup committees
2.11	School Outreach	High	Gets students and faculty involved in stewardship oriented activities, including Adopt-A-Stream cleanup efforts, storm drain marking projects, water quality monitoring programs and wetland education programs, resulting in the reduction of storm water pollutants
2.12	Corporate Involvement	High	This recognition based program has helped to remove pollutants from creeks and prevents polluting activities
2.14	Request for Drainage/Design Comments	High	Contractors and other professionals make revision recommendations for the manual. Necessary revisions are made based on the comments received.
2.15	HHW Events	High	Actively allows citizens to participate and dispose of HHW properly. 1,148 residents participated in the events and ~29,300 pounds of hazardous waste products were recycled in Year 5.
2.16	Annual Awards	High	Mandates storm water compliance to achieve recognition
2.17	ARB Mailing	Moderate	Increases ability to reach targeted audiences consistently
3.1	GIS MS4 Database	High	Map used to trace illicit discharges to waterbodies. Field verification detects illicit discharges
3.2	Complaint database	Moderate	Tracks spills and creates historical information for assessment
3.3	Complaint response	High	Creates response mechanism. Incidents such as spills or sanitary sewer overflows are mitigated
3.4	Spill response	High	Abates pollutants and prevents them from entering streams
3.5	BPR Process	High	Mandates compliance prior to operation

3.6	Clean Rivers Program	High	Atypical results are investigated and mitigated
3.7	SSO Response	High	Ensures the protection of our waterways following an SSO
3.8	IDDE Education	Moderate	Stormwater BMP posters, brochures, and videos were used to target the appropriate audience
3.9	Stormwater Ordinance	High	Regulations and enforcement increases compliance
3.10	Industrial Inspection Program	High	Ensure TPDES compliance
3.11	Commercial/Industrial Floatables	Moderate	Enforcement helps to ensure compliance
3.12	Litter Collection	High	Approximately 56.78 TN of litter were collected in Year 5 and sent to the Grand Prairie Landfill. By preventing litter from remaining in the environment, both surface and groundwater are protected from potential contamination associated with it
3.13	Illegal Dumping Clean-up	High	Clean-up reduces potential pollutants
3.14	Floatables Assessment	Low	This BMP is in the initial stages. Letters and educational materials were sent out to 28 facilities in Year 5.
3.15	IDDE	High	Detects illicit discharges which are then mitigated
3.16	Joe Pool Lake Sampling	High	Atypical results are investigated and mitigated
3.17	Beach Sampling Program	Moderate	Reduces health risks to citizens
3.18	Rapid Bioassessment Program	Low	This BMP is in the initial stages. Year 5 marked the first round of sampling for this program.
3.19	On Site Sewage System Permitting	Low	Only three (2) permits were given and one (1) citation was issued in Year 5
3.21	Auto Inspection Program	High	Enforcement and education encourages businesses to prevent pollutants from coming into contact with stormwater
4.1	Review Infrastructure Plans and Designs	High	Determines the effectiveness of the drainage and erosion control measures in plans and provides comments for revisions by the designer to reduce to the maximum extent practicable potential site specific erosion control concerns
4.2	Inspect Erosion Control Measures	High	Erosion control inspections are performed by City inspectors on a routine basis. Inspectors enforce permit provisions
4.3	Earthwork Permit	High	Prior to any land disturbing activity, all erosion controls must be in place according to the plan. By tracking the number of earthwork permits issued, the City monitors sites and maintains compliance before activities begin
4.4	Stormwater Pollution Prevention Plan During Construction	High	The City requires a Stormwater Pollution Plan in accordance with the regulatory authorities' permit process. A copy of the NOI is required before a permit is issued.
4.5	Complaint Response	High	City investigator ensures problem areas are brought back into compliance, thus reducing pollution runoff
4.9	Redefine Construction Site Inspection Program	High	Current BMP conditions were addressed at each location

5.1	Development Review Process	High	Review of plans is used for the mitigation of impact. The number of plans that have been approved reflect the impact on post construction runoff will be minimal to the detention areas as well as to floodplains associated with the site, if applicable. The review process may require several modifications of a drainage plan by the engineer to allow the BMPs to operate at the maximum extent practicable
5.2	Stream Buffer Preservation	High	The City strives to create structural controls that are multi-purpose, while realizing that each site, project, and watershed presents different challenges and opportunities. The City encourages the preservation of natural hydrology and drainage ways and the reduction of impervious cover. The goal is to make efficient use of the natural features of the sites to prevent stormwater impact at the maximum extent practicable
6.2	Existing SWP3s	High	Inspections result in necessary updates to City SWPPPs. BMP improvements and/or additions are researched and implemented. Training City staff increases effectiveness of BMPs and helps to prevent pollutants from coming into contact with stormwater
6.3	Storm Sewer and Drainage Maintenance	High	Maintenance includes cleaning, clearing, seeding, and overall maintenance of the storm sewer systems
6.5	SWPP for City	Moderate	Educational materials were created and used to increase water quality awareness
6.6	Native/Adaptive Vegetation	Low	Possible locations for future vegetation promotion along floodplain easements selected. No other actions taken
6.7	Mosquito Management	High	Controls products used and establishes processes so that applicators remain at a distance from fresh waterbodies
6.8	Street Sweeping	High	Removing contaminants from the roadways reduces the associated risk to the environment. 257.53 TN of materials were collected and delivered to the Grand Prairie Landfill for proper disposal in Year 5
6.9	Inspect City Facilities	Moderate	City facilities not covered by a specific TPDES permit were inspected for stormwater issues
6.10	DCFCD#1 Storm Sewer and Drainage Maintenance	Moderate	As situations arise in the DCFCD#1 that require maintenance or waste removal, this BMP helps to reduce the discharge of pollutants

Part V. Summary of Minimum Control Measures

The following summary of minimum control measures includes the BMPs for each MCM, measurable goals, responsible party, target date, and activities completed for each BMP. The listed *Target Date* for each measurable goal is defined as the scheduled start date for that goal where Year 1 starts on August 13, 2007, Year 2 starts on August 13, 2008, Year 3 starts on August 13, 2009, and so forth. Dates listed under *Activities Completed* are the completion dates for said activity.

Included in this summary are also 1) the progress towards reducing the discharge of pollutants as determined through sampling data (this is in addition to the aforementioned Table 1) and a summary of information used to evaluate reductions in the discharge of pollutants, 2) an evaluation of the BMPs progress, and 3) a discussion of obstacles or challenges for a BMP, if applicable.

Future BMP activities are dependent upon amendments to the reissued Phase II MS4 Permit.

See Table 5 for the number of non-municipal construction activities as provided to the City via notices of intent or site notices.

MCM 7 is not utilized for this permit.

MCM 1: Public Education and Outreach

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
1.1 Environmental Education Specialist	Employ an Environmental Education Specialist who supports the education initiative of this SWMP.	<ol style="list-style-type: none"> Employ an Environmental Education Specialist who will actively seek to broaden educational opportunities within the school district and the city Conduct 2 storm water outreach activities annually 	Environmental Services Department	Years 2 – 5

This BMP was completely removed from the SWMP in Year 1 before this permit was authorized by the TCEQ (see Year 1 Annual Report).

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
1.2 Clean Rivers Program	Stream monitoring information is made available for review on the Clean Rivers Program (CRP) website. Access to this site will be provided through the city's website.	<ol style="list-style-type: none"> Provide a link to the Clean Rivers Program's website on the city's website 	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 1.2 Activities Completed

Date: 08/13/2011 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Website link

Approximate Cost = \$0; Labor = 0.5 hours

Provided link to Clean Rivers Program on City website. The Clean Rivers Program allows the public to search for and view sampling results of the waterways in the area: www.gptx.org/EnvironmentalQuality/StreamMonitoring.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.3 Lawn and Garden Education for Homeowners	Efforts will be made to encourage lawn and garden low maintenance concept into existing education programs throughout the city through the purchase and distribution of educational materials and other promotions. Low maintenance garden concepts will be created on city properties.	1. Provide information about native and adaptive plants on the city website and by distributing educational materials at 2 venues located throughout the city	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Maintenance of Texas SmartScape™ Demonstration Garden at the Prairie Paws Adoption Center		Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.3 Activities Completed

Date: 08/13/2011 **Responsible Party:** Public Works Department

Water Utilities SmartScape Garden

Approximate Cost = \$285/month; Labor = 2 hours/week

The Water Utilities SmartScape demonstration garden was maintained in Year 5.

Date: 08/13/2011 **Responsible Party:** Environmental Services Department

Prairie Paws Demonstration Garden

Approximate Cost = \$3,270 for supplies/plants; Labor = 1 hour/month

The Prairie Paws SmartScape demonstration garden was maintained in Year 5.

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

SmartScape Educational Material

Approximate Cost = \$56 (previous purchase); Labor = 0.5 hours/month

Texas SmartScape educational materials were distributed at the Memorial Library and the Development Center.

Date: 08/13/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Native and Adaptive Information on Website

Approximate Cost = \$0; Labor = 0.5 hours

Posted information on Texas SmartScape on the City of Grand Prairie Storm Water website. According to NCTCOG's user statistics, the Texas SmartScape website received 378 visits from Grand Prairie.

"What is Storm Water?" page:

"Select native and adapted plants and grasses that are drought and pest resistant. Native plants require less water, fertilizer, and pesticides. Learn more about native and adaptive plants at www.txsmartscape.com."

"Lawn Chemicals" page:

"Want to learn more about how you can reduce fertilizer and pesticide use? Become a Certified Master Composter or visit the Texas SmartScape™ official website."

Date: 04/13/2012 **Responsible Party: Environmental Quality Division**

Texas SmartScape Bookmark

Approximate Cost = \$32; Labor = 0.5 hours

The Environmental Quality Division purchased 200 Texas SmartScape bookmarks for distribution.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
1.4 Household Hazardous Waste (HHW) Program	Reduction of household hazardous waste dumping will be promoted through the distribution of educational materials and through HHW events that provide city residents the opportunity to dispose of household hazardous waste.	1. Continue pamphlet and/or wheel distribution at 3 venues located throughout the city	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Discuss hazards of household hazardous waste at least 1 time per year in the city newsletter		Years 1 – 5

3. Handout HHW magnets to at least 100 citizens per year

Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.4 Activities Completed

Date: 08/12/2012 Responsible Party: Environmental Quality Division

HHW Magnets

Approximate Cost = \$0.34 per magnet

The City distributed approximately 1,400 Household Hazardous Waste magnets in Year 5. Magnets were distributed during Household Hazardous Waste events, during which we had 1,148 participants, and were made available to visitors at the Development Center, during MayFest, and during complaint inspections.

Date: 08/12/2012 Responsible Party: Environmental Quality Division

Pipeline Articles

Approximate Cost = \$1,575 to print Pipeline and free to mail in utility bill; however, contains multiple articles; Labor = 1.5 hours each

Eleven (11) articles advertising HHW events and/or discussing the hazards of disposing of household hazardous waste improperly were printed in the Pipeline, a City newsletter distributed via water utility bills.

Date: 08/12/2012 Responsible Party: Environmental Quality Division

HHW Wheel Distribution

Approximate Cost = \$2,263 for 2,500 wheels; Labor = 0.5 hours/month

The City distributed "Earth Saver" wheels at the Memorial Library, Betty Warmack Library, Development Center, and at Household Hazardous Waste events.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.5 Don't Bag It! Program	Encourage participants to mulch grass and yard clippings as a compost instead of application of commercial fertilizers.	1. Distribute public education materials about the program at 3 venues located throughout the city	Environmental Services Department, Solid Waste Division	Years 1 – 5
		2. Provide information about the program in the water bill insert to 80% of the city's water customers		Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.5 Activities Completed

Date: 08/13/2011 and 05/01/2012 **Responsible Party: Solid Waste Division**

Don't Bag It!

Approximate Cost = \$1,575 to print the Pipeline and free to mail in utility bill; however, the Pipeline has multiple articles; Labor = 1.5 hours

Two (2) Don't Bag It! articles were printed in the Pipeline.

Date: 08/12/2012 **Responsible Party: Solid Waste Division**

Don't Bag It! Educational Materials

Educational materials about the Don't Bag It! program were distributed at the Development Center, Landfill, City libraries, and during the following events:

Master Composter Training (9/24/11, 4/12/12)

Optimist Club (4/26/12)

Arbor Day Event (4/27/12)

Cinco de Mayo festival (5/5/12)

MayFest (5/19/2012)

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
1.6 Pet Waste Management Education	Promote awareness of the hazards to health and the environment from pet waste through several forms of outreach. (The pet waste dispensers also satisfy minimum control measure for public involvement).	1. Purchase 500 shovels for distribution	Environmental Services Department, Environmental Quality Division and Animal Services Division	Year 1
		2. Create cooperative “Doo the Right Thing” video by the end of Year 1; make video available on the city website and play on cable television annually		Years 1 – 5
		3. Annually distribute a minimum of 200 informative brochures at the Development Center		Years 1 – 5

4. Annually distribute at least 200 informative brochures to customers adopting pets at the Prairie Paws Adoption Center and display poster in the Environmental Services Department office	Years 1 – 5
5. Install 2 pet waste collection dispensers at any future pet park to promote proper owner disposal of pet waste	Year 4

The City exceeded the goals for this Year 5 BMP.

BMP 1.6 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**
Pet Waste Poster

Approximate Cost = \$0; Labor = 0 hours

"If you think picking up poop is unpleasant, try drinking it" poster remains displayed in Environmental Quality Division's office from Year 1.

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**
Doo the Right Thing Video

Approximate Cost = NA (previous purchase); Labor = 0.10 hours/day

The "Doo the Right Thing" video remains posted on the City's website from Year 1 at www.gptx.org/EnvironmentalQuality/PetWaste. In addition, this video was aired on GPTV every day, twice a day from August 2011 to August 2012.

Date: 09/14/2011 **Responsible Party: Environmental Services Department**
Pet Waste Collection Dispensers

Approximate Cost = \$435 (labor and parts)

The City purchased two dog waste system dispensers, signs, sign posts, and dog waste bags. These items were installed in the exercise yards at the Prairie Paws Animal Shelter.

Date: 01/01/2012 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**
Pet Waste Pollution in Pipeline

Approximate Cost = \$1,575 to print the Pipeline and free to mail in utility bill; however, the Pipeline has multiple articles; Labor = 1.5

hours

Pipeline Article:

Pet Waste Pollution

Did you know that pet waste contains bacteria and parasites? When it rains, pet waste and waste-associated pathogens have the potential to wash down the storm drains and into our streams, rivers and lakes—untreated. What you can do to prevent pet waste pollution:

- Pick up the pet waste and put it down the toilet.
- Bury it (up to 6 inches deep).
- Put it in the trash.
- Never leave pet waste when taking your pet for a walk or to the park.

For more information visit our website at www.gptx.org/EnvironmentalServices/WaterQuality/PetWaste.aspx or call 972-237-8055.

Date: 02/24/2012 **Responsible Party: Environmental Quality Division**

Dog Waste Bag Dispensers

Approximate Cost = \$2,225 for 1,000 (labor and supplies)

The City purchased and distributed dog waste bag dispensers. The dispensers were distributed at the Development Center and at educational events such as MayFest and health fairs.

Date: 06/14/2012 **Responsible Party: Environmental Quality Division**

Doo the Right Thing Banner

Approximate Cost = \$161 for 2 banners; Labor = 1 hour

The City purchased "Doo the Right Thing" banners for display at the Prairie Paws Adoption Center and at the Development Center.

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**

Dog Waste Pledges

Approximate Cost = \$0.0; Labor = 6 hours

The City collected ninety-seven (97) Doo the Right Thing pledges at MayFest. Doo the Right Thing slap bands and dog waste dispensers were distributed to individuals who signed a pledge.

Ten (10) additional pledges were signed at the Development Center during a month long stormwater campaign.

Date: 08/12/2012 **Responsible Party: Environmental Services Department**

Pet Waste Brochures

Approximate Cost = \$0.76/brochure and \$0.10/brochure, respectively; Labor = 0.5 hours/month

The City distributed Pet Waste & Water Quality brochures (in English and Spanish) explaining the environmental issues associated with pet waste and how to dispose of the waste properly. Two-hundred (200), or as many as needed, of these brochures were distributed at the Development Center, Memorial Library, and Prairie Paws Adoption Center.

In addition, the City purchased "Too Cute to Pollute?" brochures. These brochures were distributed at the Prairie Paws Adoption Center and during Arbor Day.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.7 H₂O Line	Produce and distribute a newsletter to selected industrial sectors and automotive related businesses featuring storm water topics.	1. Produce and distribute a quarterly newsletter promoting pollution prevention awareness to at least 200 businesses 2. Distribute to at least 50% of businesses during industrial inspections	Environmental Services Department, Environmental Quality Division	Years 1 – 5 Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 1.7 Activities Completed

Date: 07/17/2012 **Responsible Party: Environmental Quality Division**

H2O Line Distribution

Approximate Cost = \$0; Labor = 0.5 hours to email and 0.10 hour/inspection

City inspectors regularly distributed the H2O Line during industrial inspections. In addition, each H2O Line was sent to approximately 330 contacts via email.

Date: 07/17/2012 **Responsible Party: Environmental Quality Division**

H2O Line

Approximate Cost = \$585 to print; Labor = 40 hours (10 hours each)

The Environmental Quality Division created and distributed five (5) H2O Line newsletters in Year 5.

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

The City exceeded the goals for this Year 5 BMP.

BMP 1.8 Activities Completed

Date: 09/29/2011 **Responsible Party: Environmental Quality Division**

3rd Quarter 2011

Approximate Cost = \$2,598 for awards, \$660 for food; Labor = 20 hours

This compliance meeting was the 2011 annual award luncheon recognizing Grand Prairie industries achieving 100% compliance, pollution prevention award winners, and Texas Stream Team participation.

Date: 12/07/2011 **Responsible Party: Environmental Quality Division**

4th Quarter 2011

Approximate Cost = \$75 to \$100 for food; Labor = 15 hours

Craig Pritzlaff, Environmental Attorney with Curran Tomko Tarski LLP, gave a presentation on "Environmental Compliance in the Real World: Strategies for Avoiding Liability".

Date: 03/28/2012 **Responsible Party: Environmental Quality Division and Code Enforcement Division**

ARB Environmental Compliance Meeting

Approximate Cost = \$75 to \$100 for food; Labor = 20 hours

The Environmental Quality and Code Enforcement Divisions hosted a Compliance Meeting for the auto related businesses in Grand Prairie. Presentations were given by City staff on Environmental and Code compliance issues. Eighteen (18) facility operators attended.

Date: 05/05/2012 **Responsible Party: Environmental Quality Division**

2nd Quarter 2012

Approximate Cost = \$75 to \$100 for food; Labor = 15 hours

Chris Proctor, Compliance Manager for GEEP Texas, presented "Managing E-Waste-Economical and Responsible Solutions".

Date: 08/09/2012 **Responsible Party: Environmental Quality Division**

3rd Quarter 2012

Approximate Cost = \$1,670 for awards, \$804 for food; Labor = 20 hours

This compliance meeting was the 2012 annual award luncheon recognizing Grand Prairie industries achieving 100% compliance, pollution prevention award winners, and Texas Stream Team participation.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.9 Commercial and Industrial Activity Education on the Impacts of Floatables	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections. (Refer to BMP 3.11).	1. Find or create informative handouts about litter associated with commercial and industrial activity to distribute	Environmental Services Department, Environmental Quality Division	Year 2

- | | |
|--|-------------|
| 2. Distribute informative brochures to 60% of the food permit holders inspected each calendar year; make both English and Spanish versions available | Years 2 – 5 |
| 3. Make available on the city website | Years 2 – 5 |

All activities for this BMP are complete for Year 5.

BMP 1.9 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Brochure Distribution

Approximate Cost = \$1,964 for 4,000 brochures; Labor < 0.10 hour/inspection

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

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Brochures on Website

Approximate Cost = \$0; Labor = 0.5 hours

The "Clean it Right" and "An Industry's Guide for Protecting Grand Prairie's Watershed" brochures remained posted on the City's website since Year 2. These brochures may be found at www.gptx.org/environmentalquality/FoodService and www.gptx.org/environmentalquality/Industrial, respectively.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.10 Informational Material for Automotive Related Businesses	Awareness of the impact of the automotive sector's pollutants on water quality will be integrated into existing activities by distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.	1. Distribute automotive and storm water quality informative material during Certificate of Occupancy inspections	Environmental Services Department, Environmental Quality Division	Years 1 – 5

2. Make auto related business BMPs available on the city website

Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 1.10 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

ARB Educational Materials

Approximate Cost = NA (previous and current purchases); Labor < 0.10 hour/inspection

Environmental Specialists with the Environmental Quality Division distributed automotive and stormwater quality educational materials during Certificate of Occupancy inspections. Materials included items such as posters, Auto Watch (an Environmental Quality and Code Enforcement publication), "Protect Our Water, Don't Dump" notepads, TCEQ's "The Used Oil Recycling Handbook, Guidance for Used Oil Handlers", Small Business and Local Government Assistance materials, a list of State permitted liquid and solid waste haulers, the City's Automotive Related Business ordinance, Operational Requirements for Mobile Wash Vendors, and An Environmental Guide for Texas Automotive/Autobody Repair Shops.

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

ARB BMPs on Website

Approximate Cost = \$0; Labor = 0 hours

Auto related BMPs remained posted on Environmental Quality's Auto Related Business Education Web page since Year 2. This page may be found at www.gptx.org/EnvironmentalQuality/ARB.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.11 Funding for Elementary School Curriculum on Storm Water Quality	Education on storm water quality and pollution prevention will be provided to elementary schools in Grand Prairie ISD through the purchase of curriculum.	1. Purchase Major Rivers© or similar curriculum as needed for additional fifth grade Grand Prairie ISD classrooms	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 1.11 Activities Completed

Date: 07/07/2012 **Responsible Party: Environmental Quality Division**

Major Rivers Program

Approximate Cost = \$1,844.75; Labor = 1 hour

The City purchased and distributed to GPISD: 5 Educational Packets; 5 Electronic Packets; and 102 English and 10 Spanish Replacement

Packets.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.12 Interactive Watershed Model Display on Storm Water Quality	Demonstrate to multiple age groups the effects of various residential and commercial pollutants on storm water quality.	1. Review the kit's contents after each use and purchase any replacement parts or updates if necessary	Environmental Services Department, Environmental Quality Division	Year 1
		2. Annually display an interactive watershed model or similar display during the child related water quality education events		Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.12 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Replacement Parts

Approximate Cost = \$5; Labor = 1 hour

Environmental Quality staff review the EnviroScape kit's contents after each use and purchase replacement parts if necessary.

Date: 09/24/2011 **Responsible Party: Environmental Quality Division**

Cub Fun Day

Approximate Cost = \$0; Labor = 4 hours

Echo Rexroad, Senior Environmental Specialist, and Brent Redd, Environmental Specialist, presented the EnviroScape during Cub Fun Day at Camp Wisdom. Approximately 300 kids were in attendance.

Date: 10/27/2011 **Responsible Party: Andrew Krentz, Environmental Specialist**

Earth Force Teacher Training

Approximate Cost = \$0; Labor = 3 hours

Andrew Krentz, Environmental Specialist, demonstrated the EnviroScape to 16 teachers participating in GPISD's Earth Force program.

Date: 11/29/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Kennedy Middle School Presentation

Approximate Cost = \$0; Labor = 7 hours

Echo Rexroad, Senior Environmental Specialist, provided a PowerPoint presentation on water quality issues and demonstrated the EnviroScape to approximately 420 Kennedy Middle School students.

Date: 05/19/2012 ***Responsible Party: Environmental Quality Division***

MayFest 2012

Approximate Cost = \$0; Labor = 6 hours

The Environmental Quality Division demonstrated the importance of keeping our watersheds clean of pollution by demonstrating the EnviroScape during MayFest 2012 (Figure 1).

Figure 1: EnviroScape at MayFest 2012



BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.13 Utility Bill Insert	Raise awareness of storm water issues for citizens by placing articles in the water utility bill insert.	1. Annually distribute information about storm water issues in the water utility bill insert to 80% of the city's customers	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.13 Activities Completed

Date: 08/12/2012 **Responsible Party:** Environmental Services Department

Pipeline Articles

Approximate Cost = \$1,575 to print Pipeline and free to mail in utility bill; each Pipeline has multiple articles; Labor = 1.5 hours per article

The City distributed stormwater related articles with the water utility bill in Year 5. Eleven (11) Pipeline articles contained information on household hazardous waste issues and events, two (2) contained information on how to properly handle grass clippings, one (1) article discussed the importance of picking up pet waste, two (2) articles discussed proper electronics handling and disposal, four (4) articles included information on the master composter classes offered by the City, and two (2) included information on City offered rain barrel classes.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.14 Stream and Watershed Name Road Signs	Raise awareness of local watersheds for citizens and visitors. Develop ownership of the watersheds.	1. Develop road sign design and obtain approval	Environmental Services Department, Environmental Quality Division; Public Works Department, Streets Division	Year 2
		2. Select at least 5 sites within city limits the signs will be posted	Environmental Services Department, Environmental Quality Division	Year 3
		3. Install road signs at the 5 streams selected	Public Works Department, Streets Division	Years 4-5

All activities for this BMP are complete for Year 5

BMP 1.14 Activities Completed

Date: 01/13/2012 **Responsible Party:** Environmental Quality Division

Watershed Signs Purchase

Approximate Cost = \$720/six signs

Six (6) signs were purchased for installation in Year 5.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.15 Multimedia Storm Water Public Education	Promote watershed awareness for both citizens and visitors using multiple types of media, including a website and the city's cable channel.	1. Have storm water quality educational program on GPTV at least once per year	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Develop information for city website and post		Year 2
		3. Provide and maintain Storm Water Pollution Prevention information on the city's website		Years 3 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.15 Activities Completed

Date: 08/13/2011 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Website Information

Approximate Cost = \$0; Labor = 0.5 hours/month

Created and posted stormwater educational material for Environmental Quality website in Year 1. This information is updated as needed. Includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team.

The City's website was redesigned in Year 2 and was maintained in Years 3-5. The address to this website is: www.gptx.org/EnvironmentalQuality/Stormwater.

Date: 08/12/2012 **Responsible Party:**

Stormwater PSAs on GPTV

Approximate Cost = NA (previous purchase); Labor = 0.10 hrs/day

On July 11, 2012, the City started airing stormwater pollution prevention PSA videos (i.e. Fats, Oil, and Grease, Leave it on the Lawn, Automotive Fluids, and Fertilizers) on GPTV. The PSAs played every day for 5 weeks.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.16 Tailor Outreach Programs to non-English languages	Evaluate and translate all educational materials created during the permit to Spanish.	1. Evaluate 80% of educational materials that can be translated	Environmental Services Department, Environmental Quality Division	Year 1
		2. Translate 25% of materials that have been evaluated as being available in Spanish		Year 3
		3. Begin purchasing and distributing brochures		Year 4

The City exceeded the goals for this Year 5 BMP.

BMP 1.16 Activities Completed

Date: 08/13/2011 **Responsible Party:** Environmental Quality Division
Spanish Brochure Distribution

Approximate Cost = NA (previous and ongoing purchases); Labor = 0 hours

Well over 25% of the stormwater educational materials distributed by the City are provided in Spanish. This includes, but is not limited to, the following: Lawn Care Maintenance, Fat Free Sewers, A Guide for Auto Service, Repair and Maintenance Businesses, Steps to Obtain Construction Permits for Storm Water Discharges, Pet Waste & Water Quality, Preventing Stormwater Pollution at Construction Sites, Clean It Right, After the Storm: A Citizen's Guide to Understanding Stormwater, the AutoWatch newsletter, Clean Shop posters, and the Auto Related Business Ordinance.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.17 Auto Watch	Create and distribute a water quality and code enforcement publication featuring environmental issues specific to automotive related businesses.	1. Continue to create and distribute publication to at least 300 businesses annually	Environmental Services Department, Environmental Quality Division, Code Enforcement Division	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.17 Activities Completed

Date: 01/24/2012 **Responsible Party: Environmental Quality Division**

Auto Watch - Volume 6, Issue 1

Approximate Cost = \$639 for 600 to print; Labor = 60 hours

Volume 6, Issue 1, Winter 2011-2012, Auto Watch newsletter given to automotive businesses in Grand Prairie explaining new local automotive regulations and other pertinent topics.

Date: 07/05/2012 **Responsible Party: Environmental Quality Division**

Auto Watch - Volume 6, Issue 2

Approximate Cost = \$835 for 1,000 to print, Labor = 60 hours

Volume 6, Issue 2, Summer 2012, Auto Watch newsletter given to automotive businesses in Grand Prairie explaining new local automotive regulations and other pertinent topics.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.18 Keep Grand Prairie Beautiful Education Programs	Conduct KGPB programs that promote environmental education, including storm water and pollution prevention awareness.	1. Conduct or host at least 3 KGPB education programs annually	City Manager's Office, Keep Grand Prairie Beautiful Program	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 1.18 Activities Completed

Date: 09/08/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Ruthe Jackson Cable TV Show

Approximate Cost = \$0; Labor 1.5 hours preparation and taping

Keep Grand Prairie Beautiful's Litter Prevention Efforts were highlighted during taping of the Ruthe Jackson Show featuring Keep Grand Prairie Beautiful Commissioner Kelley Shaw and Special Projects Manager Tammy Chan. Topics discussed included the Litter Free Hotline, Weed & Seed Litter Collection Crew Efforts, Litter Receptacles in the Medians and the Adopt-A-Street and Adopt-A-Stream Programs.

Date: 09/20/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Grand Prairie Community Garden Program Hosts Tarrant County Master Gardeners

Approximate Cost = \$400; Labor = 12 hours

Keep Grand Prairie Beautiful sponsors a Community Garden Program that includes seven Community Gardens and 23 School Gardens in partnership with the Grand Prairie Independent School District. On September 20, 2011, the City hosted 79 Tarrant County Master Gardeners and spoke on EarthKind/organic gardening practices. The City explained how community gardens provide a great opportunity to educate the community about stormwater pollution prevention through the proper use (or no use) of fertilizers, pesticides and herbicides and through natural fertilizing through composting.

Date: 09/22/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Litter Hurts Presentation to Girl Scout Troop 3217

Approximate Cost = NA, (previous purchase); Labor = 2 hours

Keep Grand Prairie Beautiful presented the “Litter Hurts” PowerPoint presentation to members of Girl Scout Troop 3217. The presentation educates about the sources of litter and how to prevent and it and explains the Adopt-A-Street and Adopt-A-Stream programs, as well as how to get involved in these programs.

Date: 12/03/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Keep Grand Prairie Community Garden Program Hosts DFW Community Gardeners

Approximate Cost = \$230; Labor = 12 hours

A team of Keep Grand Prairie Beautiful Community Gardeners hosted 56 local and regional gardeners at the Kirby Creek Nature Center. The City discussed EarthKind/organic gardening practices. The City explained how community gardens provide a great opportunity to educate the community about stormwater pollution prevention through the proper use (or no use) of fertilizers, pesticides and herbicides and through natural fertilizing through composting.

Date: 04/21/2012 **Responsible Party: City Manager's Office, Special Projects Manager**

Community Screening of the “Back to Eden” Film

Approximate Cost = \$120; Labor = 3 hours

Keep Grand Prairie Beautiful sponsored the public screening of the “Back to Eden” film which focuses on organic gardening techniques with a specific emphasis on no till gardening and the use of compost and mulch to layer over existing soils and fertilize the existing soil over time.

Date: 04/26/2012 **Responsible Party: City Manager's Office, Special Projects Manager**

Grand Prairie Community Garden Program Hosts Dallas County Master Gardeners

Approximate Cost = \$320; Labor = 4 hours

Keep Grand Prairie Beautiful sponsors a Community Garden Program that includes seven Community Gardens and 23 School Gardens in partnership with the Grand Prairie Independent School District. On April 26, 2012, the City hosted 68 Dallas County Master Gardeners and discussed the EarthKind/organic gardening practices. The City also explained how community gardens provide a great opportunity to educate the community about stormwater pollution prevention through the proper use (or no use) of fertilizers, pesticides and herbicides and through natural fertilizing through composting.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.19 Educational Material for Construction Site Personnel	Create or find educational materials on BMPs and erosion control for construction site personnel.	1. Create or find brochure and/or link on construction BMPs and erosion control requirements	Environmental Services Department, Environmental Quality Division	Year 2

2. Distribute at least 200 brochures a year at the Development Center and/or provide a link to the educational material on the city's website	Planning and Development Department and Environmental Services Department	Years 2– 5
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All activities for this BMP are complete for Year 5.

BMP 1.19 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division and Planning and Development Department**

Educational Materials for Construction Site Personnel

Approximate Cost = \$0 (printed in house and previous purchase); Labor = 0.5 hours/3 months

"Steps to Obtain Construction Permits for Storm Water Discharges" brochures were distributed at two locations at the Development Center and were posted on the City's Environmental Services (www.gptx.org/EnvironmentalServices) and Engineering (<http://www.gptx.org/index.aspx?page=1296>) websites. "Preventing Stormwater Pollution at Construction Sites" brochures were available at the Development Center, on the Environmental Quality Division's Stormwater website (www.gptx.org/EnvironmentalQuality/Stormwater), and on Engineering's Construction General Permit & BMP FAQ website (<http://www.gptx.org/index.aspx?page=1296>).

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.20 Storm Water Education for Visitors	Provide educational materials featuring water quality issues for Grand Prairie visitors.	1. Provide information about storm water issues on the city website and at Grand Prairie's visitors center	Environmental Services Department, Environmental Quality Division	Year 2

There are no required activities listed for this BMP for Year 5; however, the City continued this activity in Year 5.

BMP 1.20 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Visitor Education

Approximate Cost = \$0 (previous purchase); Labor = 0.5 hours/month

"Nonpoint Source Pollution: You are the Key to the Cleanup" brochures are available for distribution at the City's Visitor's Center.

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Stormwater Website

Approximate Cost = \$0; Labor = 0.5 hours/month

Created and posted stormwater educational material for Environmental Quality website in Year 1.

This information is continuously updated. Includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team.

The City's website was redesigned in Year 2 and was maintained in Years 3-5. The address to this website is: www.gptx.org/EnvironmentalQuality/Stormwater.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
1.21 Take Care of Texas Brochure	Distribute brochures that describe what residents may do to protect the environment.	1. Distribute at least 200 Take Care of Texas brochures	Environmental Services Department, Environmental Quality Division	Year 1

There are no required activities listed for this BMP for Year 5; however, the City continued this activity in Year 5.

BMP 1.21 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Take Care of Texas Brochures

Approximate Cost = \$0; Labor = 0.10 hours/month

"Take Care of Texas-Do Your Part!" brochures were available for distribution at the Development Center.

MCM 2: Public Involvement & Participation

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.1 Public Notice in Development of SWMP	Comply with federal, state, and local public notice requirements when implementing the SWMP.	1. Continue to make the document available for comments on the city website and at the Environmental Services Department office	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.1 Activities Completed

Date: 08/13/2011 Responsible Party: Environmental Quality Division

SWMP at Development Center

A copy of the City's Storm Water Management Program is available for review and comments at the Environmental Quality Division office located at 206 W. Church Street, 2nd Floor, Grand Prairie Texas 75050.

Date: 08/13/2011 Responsible Party: Environmental Quality Division

SWMP and Survey on Website

The City's Storm Water Management Program is available on the City's Storm Water Management Program website (www.gptx.org/EnvironmentalQuality/SWMP). The following survey is also posted on this website:

Storm Water Management Program Questionnaire

The City of Grand Prairie has developed a Storm Water Management Program in order to comply with the Texas Pollutant Discharge Elimination System (TPDES) Phase II Permit. This program is mandated by the Texas Commission on Environmental Quality (TCEQ) in an effort to improve the quality of water discharged through a municipality's separate storm sewer system. Many of the activities described in the Storm Water Management Program have already been enacted by the City. This program documents how the City will continue to make efforts to improve water quality. As required by the TPDES Phase II Permit, the City of Grand Prairie seeks public comment on the Storm Water Management Program. Please take a few minutes to review this program and identify any concerns you may have using this questionnaire.

Please rank the issues that concern you (high, medium or low):

1. Trash in Creeks*

[Select an answer] Low Medium High

2. Water Quality*

[Select an answer] Low Medium High

3. Water Color*

[Select an answer] Low Medium High

4. Not enough education about storm water*

[Select an answer] Low Medium High

5. Other*

[Select an answer] Low Medium High

6. What recommendations would you like to make for the authors of the Grand Prairie Storm Water Management Program?

7. Contact Information (Optional):

8. Would you like to become a volunteer? (Activities include our Texas Stream Team monitoring program and installing storm drain markers.)*

Yes

No

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
2.2 Texas Stream Team Volunteer Stream Monitoring Program	Involve volunteers in the stream monitoring process through Texas Stream Team.	1. Hold at least 1 Texas Stream Team training session for volunteers or corporations annually	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 2.2 Activities Completed

Date: 06/13/2012 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Xochitl Rodriguez: Phase I, II, and III

Xochitl Rodriguez completed Phase I and II of Texas Stream Team training on May 30, 2012. She completed Phase III on June 13, 2012.

Ms. Rodriguez is now a certified Texas Stream Team member.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
2.3 Master Composter Program	Involve the public in lawn and garden compost waste training that will encourage reductions in fertilizer and pesticide use. Participants attend three days of hands-on training and can become a Certified Master Composter.	1. Conduct 2 Master Composter classes per year	Environmental Services Department, Solid Waste Division	Year 1

2. Distribute yard care educational materials to at least 20 Master Composter participants annually

Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.3 Activities Completed

Date: 04/12/2012 **Responsible Party: Solid Waste Division**
Master Composter Classes and Materials

The Solid Waste Division distributed Rodale's Composting Book and the TCEQ Green Guide to Yard Care to master composter participants in Year 5. Master Composter classes were held on 9/24/11 and 4/12/12.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.4 Storm Drain Markers	Install storm drain markers “Protect Our Water, Don’t Dump” to promote awareness of the storm drain system.	1. Purchase and have installed through volunteer help 100 of the city’s unmarked storm drain curb inlets annually	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 2.4 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Storm Drain Markers

In Year 5, the City proposed a "Storm Drain Challenge" to select industrial facilities located in Grand Prairie. Harris Manufacturing, Pepsico, and Pratt & Whitney accepted the Challenge and labeled a total of 143 storm drains with "Don't Dump" markers as a result.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.5 Public Education Event	Hold an interactive educational event that promotes storm water BMPs and awareness of the Trinity River watershed.	1. Annually hold a public education event that focuses on education through involvement and promotional giveaways	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Collect and use at least 20 participant surveys for evaluation of the event		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.5 Activities Completed

Date: 05/19/2012 **Responsible Party: Environmental Quality Division**
MayFest 2012

MayFest, a water quality educational event, was sponsored by the City of Grand Prairie and Grand Prairie ISD. There were approximately 1,000 to 1,500 participants.

Each year the GPISD and City of Grand Prairie co-host this free educational event that focuses on water quality issues. In Year 5, MayFest goers enjoyed a wide variety of water quality exhibits (i.e. EnviroScape, stream simulator, water testing), Country Critters Petting Farm, the Eco Shopping Game, Wildlife on the Move, Purple Martin Landlords, rainwater harvesting, Master Composters, conservation tips, a recycle relay, Prairie Paws pet adoption information, kids arts and crafts, GPISD musical and dramatic performances, and other programs.

Date: 05/19/2012 **Responsible Party: Environmental Quality Division**
MayFest 2012 Survey

During MayFest 2012, 23 surveys were collected in order to evaluate the success of the event.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.6 Storm Water Ordinance	Involve the public in the development of a Storm Water Ordinance (refer to BMP 3.9). Public comment will be incorporated in the finalization of the ordinance.	1. Hold at least 1 public hearing on the storm water ordinance; additional hearings will be held provided there is significant public interest	Environmental Services Department, Environmental Quality Division	Year 2

There are no required activities listed for this BMP for Year 5.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.7 Illegal Dumping Hotline	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline.	1. Continue to make the Illegal Dumping Hotline available on the city's website.	Planning and Development Department, Code Enforcement Division	Years 1 – 5
		2. Add link to Environmental Services storm water Web page promoting Illegal Dumping Hotline	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 2.7 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**
Stormwater Website

Included on the City's Stormwater Web page at www.gptx.org/EnvironmentalQuality/Stormwater:

"You Can Protect Our Waterways:

Report Illegal Dumping. If you have witnessed illegal dumping in the City of Grand Prairie or know of a location where illegal dumping has occurred, please call the Illegal Dumping Hotline at 972-237-8064."

Date: 08/13/2011 **Responsible Party: Code Enforcement Division**
Code Enforcement Website

The number of the City's Illegal Dumping Hotline may be found on the Code Enforcement's website at <http://www.gptx.org/index.aspx?page=219>.

"Illegal Dumping Hotline: 972-237-8064"

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.8 Stakeholder Meetings	Keep citizens and other stakeholders involved in the decision process for managing the Storm Water Management Program.	1. Hold one stakeholder meeting per year	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.8 Activities Completed

Date: 08/31/2011 **Responsible Party: Environmental Quality Division**

TMDL Project Stakeholders Meeting

Cindy Mendez, Environmental Quality Manager, and Echo Rexroad, Senior Environmental Specialist, attended the Upper Trinity TMDL Project stakeholders meeting held by North Central Texas Council of Governments (of which the City is a member).

Date: 10/06/2011 **Responsible Party: Environmental Quality Division**

Planning and Development Department MS4 Permit Responsibilities

This meeting was held to discuss Planning and Development Department's MS4 permit responsibilities for Year 5. Bill Crolley, Romin Khavari, Chris Agnew, and David McKee attended from the Planning and Development Department. Jim Cummings, Cindy Mendez, and Echo Rexroad attended from the Environmental Services Department.

Date: 11/09/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Regional Stormwater Management Coordinating Council

Echo Rexroad attended this meeting held by North Central Texas Council of Governments (of which the City is a member). Echo Rexroad sits on this Council as a representative of the West Fork of the Trinity River. Topics of interest included regulatory updates and work program status reports.

Date: 02/15/2012 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Public Safety, Health and Environmental Committee: Public Meeting

Echo Rexroad presented an update on the MS4 Permit and Year 5 activities to Councilmembers Richard Fregoe, Ruthe Jackson, and Mark Hepworth.

Date: 09/21/2012 **Responsible Party: Environmental Quality Division**

Phase II MS4 Draft Permit

Meeting held to discuss and seek comments on the new Phase II MS4 draft permit. Planning and Development Staff (Romin Khavari, Chris Agnew, and David McKee), Public Works Director, Ron McCuller, and Environmental Services Staff (Jim Cummings, Cindy Mendez, and Echo Rexroad) attended.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
2.9 Keep Grand Prairie Beautiful Programs	Encourage participation in Keep Grand Prairie Beautiful programs, such as Adopt-a-Street, Adopt-a-Stream, Adopt-A-Wetland, Youth Environmental Action (YEA!), and the Great American Cleanup.	1. Host at least 5 events per year to encourage community participation	City Manager's Office, Keep Grand Prairie Beautiful Program	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 2.9 Activities Completed

Date: 10/15/2011 Responsible Party: City Manager's Office, Special Projects Manager

Trinity Trash Bash Adopt-A-Stream Cleanup on Fish Creek

The North Texas River Runners, who have adopted a segment of Fish Creek through Keep Grand Prairie Beautiful's Adopt-A-Stream Program, helped to host a cleanup on October 15, 2011. Other participants in the cleanup included Girl Scout Troops, Boy Scout Troops, Cub Scouts and students from Dubiski Career and Technology High Schools Advanced Placement Environmental Science Class. More than 1,600 lbs of trash were pulled out of the stream on hammocks suspended from the Belt Line bridge (Figure 2).

Figure 2: Trinity Trash Bash



Date: 11/10/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Monthly Adopt-A-Stream Canoe and Kayak Roll Practice at the Kirby Creek Natatorium and Bowles Life Pool

Keep Grand Prairie Beautiful's Adopt-A-Stream Program hosts monthly canoe and kayak roll practices so that volunteers can be safe and comfortable in the water, especially when reaching for trash. The monthly roll practices are led by Certified Canoe and Kayak instructors from the North Texas River Runners (NTRR) who donate their time to train others. Participants include general public, Girl Scouts, Scout Explorers and members of the NTRR.

Date: 12/18/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Youth for Environmental Action (YEA!) Seeding Project

Participants in Keep Grand Prairie Beautiful's YEA! Program helped to spread clover, hairy vetch and elbon rye seeds as cover crops on land that will be used to grow food for the Grand Prairie Family Church food pantry. The cover crops are an organic way to fertilize the soil without using chemicals.

Date: 02/25/2012 **Responsible Party: City Manager's Office, Special Projects Manager**

Beacon Branch Adopt-A-Stream Cleanup

The Beacon Hill Homeowner's Association has adopted a section of the Beacon Branch creek in south Grand Prairie. They've conducted annual cleanups for seven years. This year they collected 480 lbs. of trash and debris.

Date: 04/07/2012 **Responsible Party: City Manager's Office, Special Projects Manager**

2nd Quarter Adopt-A-Street Cleanups

Adopt-A-Street Groups conducted 2nd Quarter Adopt-A-Street cleanups.

Date: 04/21/2012 **Responsible Party: City Manager's Office, Special Projects Manager**

Earth Day Adopt-A-Street Cleanups

Many Adopt-A-Street groups participated in Earth Day Adopt-A-Street cleanup event including members of a Girl Scout Troop who pick up litter four times a year for Control Products.

Date: 04/21/2012 **Responsible Party: City Manager's Office, Special Projects Manager**

Girl Scout 100th Anniversary Forever Green Rain Garden Project

Members of Girl Scout Troop 3217 who garden at the Russ Glenn Community Garden created a rain garden area in a low spot at the Russ Glenn Community Garden. The rain garden collects and filters stormwater runoff (Figure 3).

Figure 3: Girl Scout Rain Garden



Date: 04/21/2012 Responsible Party: City Manager's Office, Special Projects Manager
Great American Cleanup Main Event on Earth Day

Volunteers from all over the city volunteer to conduct litter cleanups and other community improvement projects for Earth Day. Keep Grand Prairie Beautiful fed the volunteers as they arrived in groups. Council Member Ruthe Jackson gave the official greeting and a proclamation from the Mayor.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.10 Neighborhood Outreach Program	Program encourages the involvement of neighborhood associations for the purpose of educating them about various concerns, including storm water related issues, and providing opportunities to participate in various neighborhood-specific projects that can impact water quality (ex. Clean and Beautiful Neighborhoods Program). (Also satisfies MCM 1).	1. Annually coordinate neighborhood projects, such as stream/wetland cleanups, tree planting projects and awareness events	City Manager's Office, Keep Grand Prairie Beautiful Program	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 2.10 Activities Completed

Date: 08/30/2011 **Responsible Party: City Manager's Office, Special Projects Manager**
Bush Neighborhood Association Monthly Meetings

Residents living in the school attendance zone for Barbara Bush Elementary have formed a neighborhood association with a Clean & Beautiful Neighborhood Sub-Committee and a Public Safety Sub-Committee. The Clean & Beautiful Neighborhood Sub-Committee conducts quarterly cleanups. They have also launched a 40-bed organic community garden. They host monthly meetings where they discuss their community improvement efforts.

Date: 09/14/2012 **Responsible Party: City Manager's Office, Special Projects Manager**
First Presbyterian Church Garden Work Day

Members of the First Presbyterian Church partnered with local residents to launch a community garden. They have work days every Saturday where they have perfected the art of making compost.

Date: 01/04/2012 **Responsible Party: City Manager's Office, Special Projects Manager**
Dalworth LINK Clean & Beautiful Neighborhood Cleanup of Drainage Easement

The Dalworth LINK Clean & Beautiful Neighborhood Sub-Committee conducted a cleanup and beautification project in their neighborhood on January 4, 2012 (Figure 4).

Figure 4: Dalworth LINK Cleanup Project



Before



After

Date: 04/29/2012 **Responsible Party:** City Manager's Office, Special Projects Manager
NeighborWoods and ShadeMakers Tree Planting Programs

Residents from various neighborhoods participated in the spring ShadeMakers Citizen Forestry Class where, upon completion of the full training, they can receive a free tree for their front yard or they can receive three trees for planting in a public space with pre-approval. The ShadeMakers training includes information about how trees can help to prevent stream bank erosion and filter stormwater runoff.

Date: 05/30/2012 **Responsible Party:** City Manager's Office, Special Projects Manager
Oaks and Acorns Garden Club Meeting

Residents of the Wildwood Oaks and Nottingham Neighbors area have met for over 50 year in a group called the Oaks and Acorns Garden Club. Keep Grand Prairie Beautiful spoke to this group about litter prevention and beautification programs. Both Wildwood Oaks Neighborhood Association and the Nottingham Neighbors Association adopted street segments and pick up litter on a quarterly basis.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.11 School Outreach Programs	Partnership between the City's Keep Grand Prairie Beautiful Program and a local school district that encourages student and campus participation, fosters the development of campus clubs, and provides opportunities for involvement and education.	1. Annually facilitate at least 10 activities for the campus programs	City Manager's Office, Keep Grand Prairie Beautiful Program	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 2.11 Activities Completed

Date: 09/07/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Green & Clean Campus and Garden Coordinators Meeting at Eisenhower Elementary

Keep Grand Prairie Beautiful partnered with the Grand Prairie Independent School District and Real School Gardens to sponsor a meeting with Teachers and principals from 23 of the GPISD campuses. They learned about the resources and programs the City has to offer for the schools' environmental education efforts. They were educated about correlated curriculums, including *Waste In Place*, Jr. Master Composter, Jr. Master Gardener, the GO GREEN Schools initiative, and other environmental events that will occur throughout the school year. These programs all include information about stormwater and what each of us can do to keep the water clean.

Date: 09/27/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Litter Hurts Presentation to Dubiski AP Environmental Science Class

Tammy Chan, Special Projects/Keep Grand Prairie Beautiful Manager, presented a PowerPoint about floatable litter called "Litter Hurts" to students participating in the Advanced Placement Environmental Science Class at Dubiski Career and Technical High School. The students were encouraged to participate in the October 2011 Fish Creek Cleanup using kayaks and canoes. Keep Grand Prairie Beautiful provides each Green & Clean Campus with a beautiful steel trash can for the entry way to their campus. Dubiski went the extra step to purchase additional trash cans – two for each entry for a total of eight trash cans.

Date: 09/27/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Green & Clean Campus Coordinators Official Kick-Off Meeting for the 2011-2012 School Year

Keep Grand Prairie Beautiful sponsored the annual Green & Clean Campus Coordinators Kick-Off meeting at The Summit. The meeting included planning for upcoming events and determining which schools want to use KGPB's Trash Can and Water Drop mascots for their events. A special presentation of campus litter prevention and environmental stewardship efforts was shown.

Date: 10/28/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

EarthForce Prairie Creek Cleanup

Keep Grand Prairie Beautiful's Green & Clean Campus program sponsored a cleanup of the Prairie Creek watershed with the help of EarthForce environmental stewardship program participants from Grand Prairie's middle schools. Approximately 780 lbs. of trash and illegal dumping was removed from the creek area.

Date: 11/15/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Green & Clean Campus Coordinators Meeting

Green & Clean Campus Coordinators from each campus met to share about environmental happenings at their campuses and to learn about upcoming environmentally friendly volunteer events for their students and school families. The fall E-Waste Collection event which helps to prevent electronic waste from being illegally dumped was also discussed and the district-wide national plastics recycling contest hosted by Rayburn Elementary was coordinated.

Date: 12/03/2011 **Responsible Party: City Manager's Office, Special Projects Manager**

Green & Clean Campus Garden Tour

Barbara Bush Outdoor Habitat hosted a tour of regional gardeners who came to learn more about their Green & Clean Campus Best Management Practices.

Date: 12/13/2011 **Responsible Party:** City Manager's Office, Special Projects Manager
 Green & Clean Campus Coordinator Meeting

Green & Clean Campus Coordinators from various campuses met to share ideas about environmental stewardship education at their campuses and to learn about upcoming volunteer events.

Date: 02/24/2012 **Responsible Party:** City Manager's Office, Special Projects Manager
 Russ Glenn Community Garden Home School Junior Master Gardener Composting Effort

Home Schoolers participating in the Junior Master Gardener Program at the Russ Glenn Community Garden helped turn compost and learned about the benefits of recycling leaves and grass.

Date: 05/19/12 **Responsible Party:** City Manager's Office, Special Projects Manager
 Green & Clean Campus Litter Free Pledge Booth at MayFest

Green & Clean Campus Coordinators help to staff a booth at MayFest. The booth is dedicated to encouraging students from the Grand Prairie Independent School District and their families to pledge not to litter, to pick up litter when they see it (even if it's not theirs) and to tell others not to litter. Participants who took the pledge received a free packet of bluebonnet seeds with a label that says, "Throw Seeds Not Litter!"

Date: 05/24/2012 **Responsible Party:** City Manager's Office, Special Projects Manager
 Barbara Bush Elementary Tree Planting Project

Students from each grade level helped to plant trees on their campus after careful research and planning. The students were led in the planting by a Certified Arborist who educated them about the benefits of trees, including the fact that their roots can help filter stormwater pollution. They also learned about the benefits of compost.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.12 Corporate Involvement Program	Partnership between the City and the Grand Prairie Chamber of Commerce that encourages company involvement in litter prevention and cleanup programs, as well as serve as a vehicle to educate companies about storm water related issues.	1. Annually hold at least 1 meeting to recruit new companies	City Manager's Office, Keep Grand Prairie Beautiful Program	Years 1 – 5
		2. Facilitate annual Cleanup Company meetings or activities for companies involved		Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 2.12 Activities Completed

Date: 10/15/2011 **Responsible Party:** City Manager's Office, Special Projects Manager
 Clean Company Participation in Grand Prairie's Trinity Trash Bash Cleanup on Fish Creek

Clean Company Coordinator Robin Armstrong representing The RoomStore, participated in our Annual Trinity Trash Bash on Fish Creek

(Figure 5).

Figure 5: The RoomStore at the Trinity Trash Bash



Date: 11/12/2011 Responsible Party: City Manager's Office, Special Projects Manager

Fall Adopt-A-Street Cleanup with Clean Company Members

Clean Company members Creative Embroidery, CPC Products and Control Products are faithful to coordinate their quarterly Adopt-A-Street Cleanups. They pay a local Girl Scout Troop \$100 per street section to cleanup up their three street segments.

Date: 11/13/2011 Responsible Party: City Manager's Office, Special Projects Manager

Clean Company Texas America Recycles E-Waste Collection Event

Keep Grand Prairie Beautiful's Clean Company Program partnered with the Chamber of Commerce to collect Electronic Waste from our Clean Company and community members at the Development Center. Our Weed & Seed Job Training program participants collected the E-Waste from the vehicles and distributed it into the appropriate bins.

Date: 04/21/2012 Responsible Party: City Manager's Office, Special Projects Manager

Clean Company Texas America Recycles E-Waste Collection Event

Keep Grand Prairie Beautiful's Clean Company Program partnered with the Chamber of Commerce to collect Electronic Waste from our Clean Company members. Participants in the City's Weed & Seed Job Training Program helped to collect the E-Waste from the company vehicles and distribute it into the appropriate bins. Clean Company participants Chick-Fil-A and Lone Star Park sent their mascots to help

make the event more festive.

Date: 04/24/12 **Responsible Party:** City Manager's Office, Special Projects Manager
Lockheed Martin Adopt-A-Stream Cleanup

Lockheed Martin Missiles and Fire Control employees conducted their annual Adopt-A-Stream Cleanup on April 24, 2012. They cleaned floatable litter out of the south fork of the Cottonwood Creek watershed.

Date: 04/27/2012 **Responsible Party:** City Manager's Office, Special Projects Manager
Grand Prairie Chamber of Commerce Supports Arbor Day

Greg Cashman of the Grand Prairie Chamber of Commerce spent the day helping Keep Grand Prairie Beautiful at its Arbor Day Booth. They also helped to sponsor and present the annual Arbor Day poster winners from the GPISD.

Date: 05/06/2012 **Responsible Party:** City Manager's Office, Special Projects Manager
Food Pantry Partnerships

Keep Grand Prairie Beautiful partnered with several non-profits and churches – Operation Blessing/People that Care, GP United Charities, the Food and Clothing Co-Op, First United Methodist Church and Grand Prairie Family Church. The partners picked up food waste and composted it at various gardens. The partners also conducted several composting experiments including setting up a non-till row garden area based on a hybrid of the “Back to Eden” and the “Lasagna Garden Methods.”

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.13 Poster and Picture Contest	Host a poster and picture contest for GPISD students to encourage environmental stewardship and education.	1. Host a poster and picture contest for GPISD students	Environmental Services Department, Environmental Quality Division	Year 1

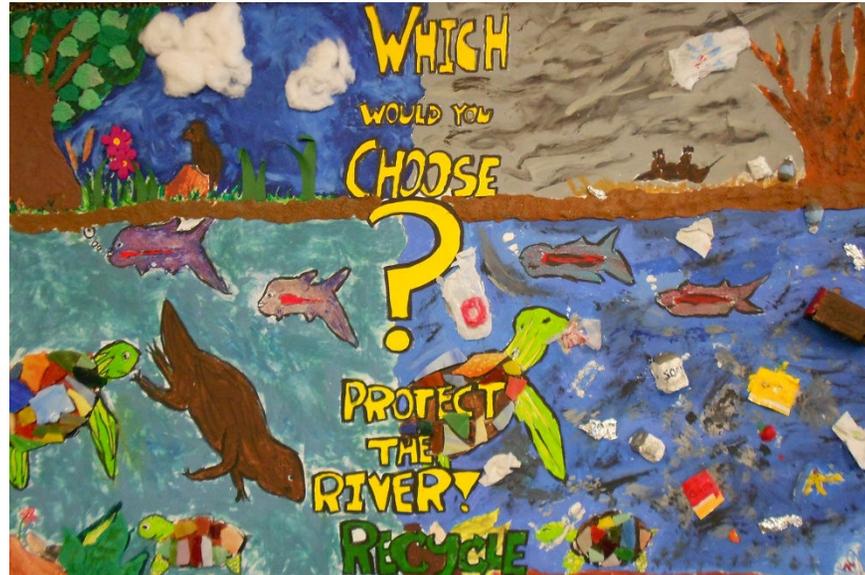
There are no required activities listed for this BMP for Year 5; however, the City continued this activity in Year 5.

BMP 2.13 Activities Completed

Date: 05/19/2012 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist
"Don't Mess With Texas' Trinity River" Art Contest

An art contest was held for all Grand Prairie ISD students. Students were asked to create a piece of art that represented what citizens can do to keep trash from entering the Trinity River (Figure 6). All types of projects were accepted (i.e. photographs, paintings, drawings, sculptures, models, etc.). The winners were announced and their work was displayed during MayFest 2012. Winners also received gift cards.

Figure 6: "Don't Mess With Texas' Trinity River" Art Contest



<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
2.14 Request for Drainage and Design Comments	Request comments from environmental consultant on revisions to drainage and design manual.	1. Request and receive comments on revisions to drainage and design manual	Planning and Development Department	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 2.14 Activities Completed

Date: 08/12/2012 **Responsible Party: Planning and Development Department**
Drainage Design Manual

The 2010 Drainage Design Manual update was released to the development and consultant community on December 16, 2010. No Drainage Manual comments were received in 2011 so a Manual update did not occur in 2011. On February 17, 2012, in a NCTCOG workshop on the new iSWM implementation requirements, feedback was received on needed manual updates for 2012.

The City completed draft revisions of the Drainage Design Manual for distribution to a committee of review consultants for comment and finalization. A request for comments or recommendations to the Drainage Design Manual was placed on October 17, 2012 to the City's consultants. Completion of the revision process is scheduled for December 2012 at which the 2012 Drainage Design Manual will again be released to the development and consultant community.

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

The City exceeded the goals for this Year 5 BMP.

BMP 2.15 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Contract with Forth Worth ECC

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

Date: 06/01/2012 **Responsible Party:**

HHW Events

The Environmental Quality Division held nine (9) Household Hazardous Waste events in Year 5. During this time 1,148 residents participated in the events and ~29,300 pounds of hazardous waste products were recycled.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.16 Annual Environmental Compliance Achievement Awards	Encourage industrial facilities to obtain industrial permit as required by the SIC code.	1. Annually recognize facilities who achieve 100% compliance	Environmental Services Department, Environmental Quality Division	Years 1– 5

All activities for this BMP are complete for Year 5.

BMP 2.16 Activities Completed

Date: 10/12/2012 **Responsible Party: Cheri Hebison, Sr. Environmental Specialist**
2011 and 2012 Annual Compliance Awards

The City annually recognizes Grand Prairie industries achieving 100% compliance.

The following companies were recognized for 100% compliance during the September 29, 2011 Annual Awards Luncheon: ABC Compounding, American Eurocopter, Fruit of the Earth, Harris Manufacturing, International Paper Bag Plant, International Paper Box Plant, Lockheed Martin Missiles and Fire Control - LOSAT, Lockheed Martin Missiles and Fire Control - Marshall St., Pepsico, Pratt & Whitney Inc. - 1174, Pratt & Whitney Inc. - 1177, Smurfit-Stone, Steelcase Inc., Strayer Voigt, Sun Chemical, Triumph Accessory Services, Turbomeca-USA and Microturbo, Inc., Valspar Coatings, and Win-Holt Equipment

The following companies were recognized for 100% compliance during the August 9, 2012 Annual Awards Luncheon: A. Zahner Company, ABC Compounding, Advanced Rubber Molding, AFT Industries, Inc., American Eurocopter, Bell Helicopter - Textron, Control Products Corporation, DeLaval Manufacturing, Glidepath LLC, International Paper - Box Plant, Mid-Cities Manufacturing, Neos Therapeutics, PepsiCo, Pratt & Whitney Services, Inc. - 1174, Pratt & Whitney Services, Inc. - 1177, RockTenn, Strayer-Voigt, Sun Chemical Corporation, Texas Aircraft Milling, Triumph Accessory Services, Inc., Turbomeca, Engine Corp. & Microturbo, Inc., Valspar Coatings, and Wikoff Color Corp.

Pollution Prevention award winners and industries participating in Texas Stream Team were also announced.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
2.17 Auto Related Business (ARB) and Industrial Facility Mailing List	Maintain mailing list of ARB and industrial facilities and mail out informative material.	1. Annually mail information regarding storm water BMPs	Environmental Services Department, Environmental Quality Division	Years 1– 5

All activities for this BMP are complete for Year 5.

BMP 2.17 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Distribution Lists

The City currently distributes the H2O Line newsletter to approximately 300 contacts via email using a maintained e-mail contact list.

In addition, the Auto Watch newsletter is distributed to approximately 520 contacts using a maintained mailing list. This list is made up of English and Spanish speaking contacts.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
2.18 Rain Barrel Class	Conduct a class that instructs citizens on how to make a rain barrel that will collect and recycle rainwater.	1. Conduct one Rain Barrel class	Environmental Services Department, Solid Waste Division	Year 1

There are no required activities listed for this BMP for Year 5; however, the City continued this activity in Year 5.

BMP 2.18 Activities Completed

Date: 08/13/2011 **Responsible Party: Public Works Department**

Make It and Take It Rain Barrel Class

Article in Pipeline: Utility Bill Insert

Make It and Take It Rain Barrel Class

Collect and recycle rain water at home by making a rain barrel from a 55-gallon plastic drum. Water your landscaping naturally and see the blooming difference.

To register for the 6-8 p.m. Tuesday, Sept. 13, Make it and Take it Rain Water Barrel Class (Grand Prairie residents \$35 and non-residents \$50 per rain barrel), send check or money order payable to the City of Grand Prairie to: Selena Jackson, P.O. Box 534045, Grand Prairie, Texas 75053

Please reference Rain Barrel Class and include your phone number, email (optional), and any other relevant contact information to receive additional information. Class will be conducted in the Public Works Training Center, 317 N. Belt Line Road. Contact Selena Jackson 972-237-8377 with questions. Space is limited.

Date: 07/12/2012 **Responsible Party: Public Works Department**

Rain Barrel Classes

The City held three (3) Rainwater Harvesting classes in Year 5: 1) September 13, 2011- 19 barrels made; 21 residents attended, 2) April 14, 2012- 50 barrels made; 55 residents attended, and 3) July 12, 2012- 11 barrels made; 8 residents attended.

MCM 3: Illicit Discharge Detection & Elimination

A list of allowable non-stormwater discharges was *not* developed. Future BMP activities are dependent upon amendments to the reissued Phase II MS4 Permit.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
3.1 Create a GIS Database of the MS4	Create an updated map of the locations of all outfalls and the names of all receiving US Waters, and provide the source(s) of information used to develop and update the map.	1. Review of the current drainage system map and addition of new growth once per year 2. Field verify 20% per year of all city stream miles for storm drain outfall locations	Environmental Services Department, Environmental Quality Division and Information Technology Department, GIS Division	Year 1 – 5 Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 3.1 Activities Completed

Date: 08/12/2012 ***Responsible Party: GIS Division***
Year 5 MS4 Database

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

Outfalls are also field verified by Engineering and GIS staff using Global Positioning System. At the end of Year 3, 99.6% of the outfalls in Grand Prairie were field verified. At the end of Year 4, 100% of the outfalls were mapped and field verified. During Year 5, new outfalls were mapped as they were constructed.

In addition, the City hired Alan Plummer Associates, Inc. to determine the condition of the outfalls located north of Interstate 30 (~300 outfalls). This project was still in progress at the end of Year 5.

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

All activities for this BMP are complete for Year 5.

BMP 3.2 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**
Garrison

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

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.3 Complaint Response	All citizen complaints are to be investigated.	1. Maintain a response of 80% within 5 days	Environmental Services Department	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 3.3 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Investigate Complaints

The Environmental Quality Division investigated well over 80% of residential complaints within five (5) working days in Year 5. The average response time for complaints in Year 5 was 1.2 days. Forty (40) spills and twenty-seven (27) SSOs were investigated and resolved during this permit year.

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

All activities for this BMP are complete for Year 5.

BMP 3.4 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**
Eagle SWS

The Environmental Quality Division has a contract that took effect on April 18, 2008, with Eagle Construction and Environmental Services L.P (now Eagle SWS) for hazardous materials emergency response. This contract was extended through April 17, 2013.

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Specialist Response and Training

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

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.5 Building Project Review Process	Environmental Specialist reviews and inspects for any illicit connections or water quality hazards during the building project review process.	1. Continue to review at least 80% of new construction plans for water quality hazards 2. Continue to inspect at least 80% of Certificates of Occupancy that have a potential to impact storm water	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 3.5 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Certificate of Occupancy Inspections

The Environmental Quality Division received 617 Certificate of Occupancy applications in Year 5. 100% of the COs with the potential to impact stormwater were inspected for water quality hazards.

Date: 08/12/2012 **Responsible Party: Terri Blocker, Senior Environmental Specialist**
Plans Reviewed

The Environmental Quality Division received 566 Building Projects in Year 5. 100% of the Projects with the potential to impact stormwater were reviewed for water quality hazards.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.6 Clean Rivers Program	Participate in CRP by conducting monthly stream monitoring of 10 sites within or near the city limits. Atypical results have been investigated for illicit discharge.	1. Participate in CRP and monitor and investigate for atypical results monthly	Environmental Services Department, Environmental Quality Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 3.6 Activities Completed

Date: 08/12/2012 **Responsible Party:** Environmental Quality Division

Stream Monitoring

The Environmental Quality Division has voluntarily conducted stream sampling since 1986.

Currently, 22 stream sites are sampled on a monthly, quarterly, and annual basis. The data collected during these monitoring events is used to detect and eliminate illicit discharges or other threats to human and environmental health. Atypical results are identified, researched, and resolved. In addition, this stream monitoring data is provided to the Clean Rivers Program for quality monitoring, assessment, and public outreach.

A monthly summary of the stream sampling data collected in Year 5 is attached in Appendix C. One area of concern was identified after the sampling results were obtained. Table 2 is a summary of the actions taken to mitigate the atypical stream sampling result.

Table 2: Atypical Stream Sampling Results

DATE	LOCATION	PARAMETER	VALUE	RESOLUTION
4/24/12	Site 25 – Cottonwood Creek @ Timberlake	Turbidity	55 NTU	The stream color was milky during monthly sampling. This anomaly was traced to Anderson Elementary school of AISD. The district was laying a walking trail without proper erosion control. The sprinkler was also malfunctioning resulting in a continuous discharge. Corrective actions were taken with the help of the City of Arlington to repair the sprinklers and establish proper erosion control.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.7 Sanitary Sewer Overflow Response Plan	Follow the plan created and implemented for the response of Water Utilities and Environmental Services to SSOs. ESD’s response ensures the protection of the waterways through professional advice and field testing.	1. Maintain the plan for Water Utilities and Environmental Services to respond all to SSOs	Environmental Services Department, Public Works Department, Water Utilities Division	Years 2 – 5

All activities for this BMP are complete for Year 5

BMP 3.7 Activities Completed

Date: 08/13/2011 **Responsible Party:** Environmental Quality Division

Standard Operating Procedure

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

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.8 Illicit Discharge Awareness Campaign for City Employees, Businesses, and General Public	Utilize training developed by NCTCOG for informing public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. (This BMP also addresses the minimum control measure for public education.)	1. Acquire and format NCTCOG Storm Water training materials and determine an effective means of distribution	Environmental Services Department, Environmental Quality Division	Year 2
		2. Distribute materials to city employees and 33% of potential polluting businesses and general public annually		Years 3 – 5

All activities for this BMP are complete for Year 5

BMP 3.8 Activities Completed

Date: 08/15/2011 **Responsible Party:** Environmental Quality Division

Cease the Grease Article

A "Cease the Grease" article was included in the City's Food for Thought newsletter distributed to local restaurants.

Date: 10/25/2011 **Responsible Party:** Environmental Quality Division

Center for Watershed Protection Webcast

Gregg Kidd, Andrew Krentz, and Echo Rexroad, all with the Environmental Quality Staff, attended a webcast titled, "How Gross Can You Get- Controlling Gross Solids and Illicit Discharges as Stormwater Management Practices." The webcast was held by the Center for

Watershed Protection.

Date: 10/25/2011 **Responsible Party: Environmental Quality Division**

Illicit Discharge Detection and Elimination Training

Gregg Kidd, Senior Environmental Technician, and Andrew Krentz, Environmental Specialist, attended the Illicit Discharge Detection and Elimination Training conducted by NCTCOG.

Date: 11/11/2011 **Responsible Party: Environmental Quality Division**

Construction Field Guide

The City purchased Construction Field Guides from NCTCOG and distributed the guides to the appropriate City personnel.

Date: 03/09/2012 **Responsible Party: Environmental Quality Division**

Environmental Quality Staff IDDE Training

Echo Rexroad, Senior Environmental Specialist, presented an IDDE PowerPoint presentation to six (6) Environmental Quality Staff members. The presentation was created by NCTCOG and revised to fit Grand Prairie's needs. In addition, Echo Rexroad reviewed the IDDE inspection form with Staff and provided each Staff member with the IDDE Field Guide created through NCTCOG. Each Staff member read the guide.

Date: 03/15/2012 **Responsible Party: Environmental Quality Division**

New Employee Orientation

Presented "Preventing Storm Water Pollution: What We Can Do" video to new City employees during New Employee Orientation on 11/17/11 and 3/15/12. Fourteen (14) individuals attended the November 2011 orientation and 20 individuals attended the March 2012 orientation.

Date: 04/27/2012 **Responsible Party: Environmental Quality Division**

Arbor Day Festival

Environmental Quality Division Staff displayed and distributed stormwater pollution prevention information at the Arbor Day festival held by the City. Free trees were also distributed. Approximately 1,000 children and adults attended.

Date: 07/13/2012 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

SSO Training

Echo Rexroad led a training session for the Environmental Quality Division on how City Staff responds to SSOs. Items discussed were: 1) what to do when the City receives a call about an SSO, 2) how to read the stormdrain map, 3) how to test for ammonia, 4) how to clean up the SSO, 5) documentation procedures, and 6) reporting. Staff were given a fictitious SSO event to which they responded by going into the field and following the procedures set out in the Standard Operating Procedure (Figure 7).

Figure 7: SSO Training



Date: 07/26/2012 ***Responsible Party: T Sury, Environmental Specialist***

Pollution Prevention Videos for MSGP City Facilities

Applicable sections of "Municipal Employee Training Series. Preventing Storm Water Pollution: What We Can Do" video were presented to thirteen (13) Service Center Staff members on 1/5/12.

On 4/20/12, the Environmental Quality Division purchased a stormwater pollution prevention video for municipalities called "Rain Check" from Excal Visual. This video was presented to fifty-four (54) Service Center Staff members on 7/12/12, fifteen (15) Landfill Staff members on 7/26/12, and five (5) Airport Staff members on 7/10/12.

Date: 08/12/2012 ***Responsible Party: Environmental Quality Division***

Illicit Discharge Brochures

Stormwater educational materials addressing illicit discharges were distributed throughout Year 5. This includes, but is not limited to, the following: An Industry's Guide for Protecting Grand Prairie's Watershed, Lawn Care Maintenance, Fat Free Sewers, A Guide for Auto Service, Repair and Maintenance Businesses, Preventing Stormwater Pollution at Construction Sites, Clean It Right, After the Storm: A Citizen's Guide to Understanding Stormwater, the AutoWatch newsletter, the Auto Related Business Ordinance, and the H2O Line.

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
ARB Posters

Environmental Specialists distributed "7 Ways to Keep a Clean Shop" posters to Auto Related Businesses. The posters illustrated best management practices for these facilities and were available in English and Spanish.

Date: 09/25/2012 **Responsible Party: Environmental Quality Division**
Municipal Industrial Inspectors Workshop

Cheri Hebison, Bharati Maskey, and Echo Rexroad from the Environmental Quality Division, attended the Municipal Industrial Inspectors Workshop held by NCTCOG.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.9 Storm Water Ordinance	Develop a storm water ordinance to effectively prohibit non-storm water discharges into the storm sewer system and implement enforcement procedures and actions. (Refer to BMP 2.6) Include a description of local controls and conditions established for common and incidental non-storm water discharges not considered illicit.	1. Develop a draft ordinance	Environmental Services Department, Environmental Quality Division	Year 1
		2. Finalize ordinance		Year 2
		3. Implement ordinance		Years 3 – 5

All activities for this BMP are complete for Year 5.

BMP 3.9 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Implemented Stormwater Ordinance

The Stormwater Ordinance was implemented in Year 5. Multiple citations, summonses, and Notice of Violations were issued as a result of stormwater violations discovered throughout Year 5.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.10 Storm Water Industrial Inspection Program	Require that facilities comply with any NPDES or TPDES storm water permit applicable under the SIC code.	1. Continue to provide 75% of industries the applications for coverage, when applicable	Environmental Services Department, Environmental Quality Division	Years 1 – 2

2. Enforce failure to apply for or obtain permit coverage	Years 3 – 5
3. Perform inspections once every 3 years	Years 3 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 3.10 Activities Completed

Date: 08/23/2011 **Responsible Party: Cindy Mendez, Environmental Quality Manager**
MSGP Renewal Letter

Cindy Mendez, Environmental Quality Manager, sent letters to 240 industrial facilities in Grand Prairie to remind them of the need to renew their MSGP permit and to offer assistance in obtaining the proper coverage.

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**
Applications, Enforcement and Inspections

100% of industries were provided applications for NPDES or TPDES coverage, when applicable. Notice of Violations and/or citations were given to facilities that failed to apply for or obtain stormwater coverage. Inspections of industrial facilities are performed at least once every 3 years.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.11 Illicit Detection of Commercial and Industrial Floatables	Promote the elimination of floatables from commercial and industrial facilities through inspection activities. (Refer to BMP 1.9).	1. Add floatables and litter control to the health compliance checklist	Environmental Services Department, Environmental Quality Division	Year 2
		2. Enforce efforts to remove floatables through issuance of Notice of Violations and citations for non-compliance		Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 3.11 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**

Floatables Enforcement

Environmental Specialists issued Notice of Violations and citations for floatables during inspections and complaint investigations in Year 5 of the permit.

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

All activities for this BMP are complete for Year 5.

BMP 3.12 Activities Completed

Date: 08/12/2012 ***Responsible Party: Solid Waste Division***
Litter Collection

Throughout Year 5, the City maintained a contract with the City's Special Projects Office for litter collection. The contract requires collection of litter from major through fares on a weekly basis. The Keep Grand Prairie Beautiful Litter Crew collected 56.78 TN of litter in Year 5.

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

All activities for this BMP are complete for Year 5.

BMP 3.13 Activities Completed

Date: 08/12/2012 ***Responsible Party: Code Enforcement Division***
Illegal Dumping Response

The City responded to 118 illegal dumping complaints in Year 5. Complaints included illegally dumped brush, trash, tires, furniture, hazardous waste, etc. Once on site, City staff cleaned up the debris or required the property owner or responsible party to do so. Citations and warnings were issued as necessary. Illegally dumped debris was usually removed within a week of receiving the complaint (it was always removed within 30 days).

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.14 Source Assessment for Floatables	A study of contributing sources of floatables will be used in source abatement. This might include an assessment of materials from clean-ups, an assessment of illegal dumps, or other similar studies.	1. Develop a plan	Environmental Services, Environmental Quality Division	Year 2
		2. Conduct an assessment of floatables		Years 3
		3. Compile assessment results and analyze data		Year 4
		4. Use assessment in re-focus of education efforts and enforcement efforts		Year 5

All activities for this BMP are complete for Year 5.

BMP 3.14 Activities Completed

Date: 08/13/2012 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist
Floatables Letter, Education, and Decal

The City used data from the previous year's floatables assessment to determine the focus of the City's educational efforts. Twenty-eight (28) packages containing a letter describing the City's floatables project, an educational brochure, and a two decals were sent to local businesses. The decals were for the entrances/exits to the facilities and read "This facility is committed to reducing pollutants in our streams. Please place trash in refuse containers. Thank you!"

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.15 Illicit Discharge Detection and Elimination	Develop a program to detect and address non-storm water discharges, including illegal dumping, into the storm sewer system. Standard operating procedures will be developed for the detection of and elimination of illicit discharges.	1. Identify additional program requirements and resource/ training needs	Environmental Services Department, Environmental Quality Division	Year 2
		2. Create a project plan and an assessment, enforcement, and elimination process and acquire needed resources		Year 3

3. Conduct dry weather screening of 20% of city's outfalls per year

Year 1 – 5

All activities for this BMP are complete for Year 5.

BMP 3.15 Activities Completed

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**

Dry Weather Screening

In Year 5, 271 of 715 or 38% of the City's outfalls were inspected for anomalies (Appendix D). The inspector looked for and reported issues such as erosion, siltation, debris, vegetation, structure damage, and illicit discharges. If flow was observed, a sample was taken and tested for pH, temperature, turbidity, chlorine, copper, detergents, and dissolved oxygen. Illicit discharges were investigated and resolved. Of the 271 outfalls inspected, 155 were inspected by City Staff and 116 were inspected by the City's contractor, Alan Plummer Associates, Inc.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.16 Joe Pool Lake Reservoir Surface Water Sampling	Sample the inlets of the reservoir that are influenced by the city's MS4 to determine the water quality of the MS4 at this sensitive water supply system.	1. Determine at least 3 sampling points	Environmental Services Department, Environmental Quality Division	Year 2
		2. Acquire needed supplies for sampling		Year 3
		3. Monitor selected inlets annually		Years 4 – 5

All activities for this BMP are complete for Year 5.

BMP 3.16 Activities Completed

Date: 07/25/2012 **Responsible Party: Environmental Quality Division**

Joe Pool Lake Sampling

Three inlet locations at Joe Pool Lake were sampled during Year 5. Bowman Creek at Mirabella, Loyd Creek at Loyd Park, and Walnut Creek at Highway 360 were sampled for E. Coli (Table 3). Temperature, turbidity, dissolved oxygen, pH, and conductivity were also sampled at these sites; these field results were normal.

Table 3: Joe Pool Lake Inlet Sampling Results

Joe Pool Lake Inlet Sampling Results for July 25, 2012	
Location	E. Coli MPN/100ML
Bowman Creek at Mirabella	30
Loyd Creek at Loyd Park	24
Walnut Creek at Hwy 360	22

1. This is the second year of sampling at these sites.
2. The recommended limits for contact recreation are 399 MPN/100mL for single samples.

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

All activities for this BMP are complete for Year 5.

BMP 3.17 Activities Completed

Date: 08/13/2011 ***Responsible Party: Environmental Quality Division***
Beach Sampling SOP

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

Date: 08/12/2012 ***Responsible Party: T Sury, Environmental Specialist***
Joe Pool Lake Beach Sampling Results

See Table 4.

Table 4: Results for Loyd Park and Lynn Creek Beach Sampling

BEACH SAMPLING 2012 – E COLI MPN/100ML						
Month	Loyd Park West	Loyd Park Middle	Loyd Park East	Lynn Creek West	Lynn Creek Middle	Lynn Creek East
May	8	17	34	2	4	27
June	24	4	12	12	75	58
July	8	16	16	18	6	8
Aug	46	29	6	10	35	4

1. Results that are less than reportable limits are conservatively treated as at detection limits (i.e. <4 is 4).
2. The recommended limits for contact recreation are 399 MPN/100mL for single samples and 126 MPN/100mL Geom. Mean.
3. August results reflective of the summer vacation for schools are lower than comparable period last year.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.18 Rapid Bioassessment Program	Better understand water quality impacts by comparing habitat and biological conditions with existing physical water quality data.	1. Develop a rapid bioassessment plan	Environmental Services Department, Environmental Quality Division	Year 3
		2. Acquire necessary training and supplies		Year 4
		3. Begin rapid bioassessment program; monitor 3 sites annually		Year 5

All activities for this BMP are complete for Year 5.

BMP 3.18 Activities Completed

Date: 05/09/2012 **Responsible Party:** Environmental Quality Division
Training

Gregg Kidd, Senior Environmental Technician, and Echo Rexroad, Senior Environmental Specialist, collected benthic macroinvertebrates with the City of Dallas on 4/12/12 and with the City of Fort Worth on 5/9/12. This experience was a training exercise for the City of Grand Prairie and contributed to the development of Grand Prairie's bioassessment methods.

Date: 06/21/2012 **Responsible Party:** Environmental Quality Division
Sampling Events

Gregg Kidd, Senior Environmental Technician, and Echo Rexroad, Senior Environmental Specialist, sampled for benthic macroinvertebrates

at Cottonwood Creek, Fish Creek, and Johnson Creek on 6/21/12 and 9/6/12.

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

All activities for this BMP are complete for Year 5.

BMP 3.19 Activities Completed

Date: 08/12/2012 **Responsible Party: Terri Blocker, Senior Environmental Specialist**
Complaints and Enforcement

No complaints were received in Year 5. One citation was written as a result of an inspection.

Date: 08/12/2012 **Responsible Party: Terri Blocker, Senior Environmental Specialist**
Permitted OSSF

Only two (2) OSSFs were permitted in Year 5.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
3.20 Mobile Vehicle Wash Business Policy	The City’s policy on mobile vehicle wash business will be revised to better discourage illicit discharges.	1. Revise and approve the policy	Environmental Services Department, Environmental Quality Division	Year 2

There were no required activities for Year 5 for this BMP.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
3.21 Auto Inspection Program	Develop inspection program for auto-related businesses.	<ol style="list-style-type: none"> 1. Develop program and ordinance 2. Inspect at least 75% of auto-related businesses annually 	Environmental Services Department, Environmental Quality Division	Years 1 – 5

The City exceeded the goals for this Year 5 BMP.

BMP 3.21 Activities Completed

Date: 08/12/2012 ***Responsible Party: Environmental Quality Division***

ARB Inspections

The Environmental Quality Division and Code Enforcement Division inspected 100% of the auto-related businesses in Grand Prairie in 2011, during which inspectors ensured ARBs were in compliance with local, state, and federal stormwater regulations. From January 2012 to October 2012, 488 of 523 or 93% of the ARB inspections were completed.

Date: 08/12/2012 ***Responsible Party: Environmental Quality Division***

ARB Ordinance

The City has an Automotive Related Business Regulations ordinance (Article XX, Sections 13-530 through 13-552) used to regulate the automotive related businesses in Grand Prairie.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
3.22 Sampling Manual	A manual will be created that will define and standardize all storm water sampling and monitoring procedures.	1. Create sampling manual and provide a copy to at least 80% of Environmental Quality Division Staff and technicians	Environmental Services Department, Environmental Quality Division	Year 1

There are no required activities for this BMP for Year 5.

MCM 4: Construction Site Storm Water Runoff Control

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.1 Review Infrastructure Plans and Designs	Require designers to include design of erosion control measures and approved BMPs in plans and specifications in all projects in compliance with and requiring compliance with the TPDES Construction General Permit and all local and State regulations.	1. Continue to require erosion control plans and BMP details in engineering plan submittals	Planning and Development Department	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 4.1 Activities Completed

Date: 08/12/2012 ***Responsible Party: Planning and Development Department***
Review Infrastructure Plans and Designs

A total of 53 drainage and erosion control plans were approved from August 13, 2011 through August 12, 2012.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.2 Inspect Erosion Control Measures	Inspection of the infrastructure and effectiveness of the required erosion control measures used on applicable construction projects.	1. Continue to inspect general erosion control measures during baseline or annual inspections	Planning and Development Department	Years 2 – 3
		2. Document any violations and provide follow-up inspections within 10 days of the notice of violation, ensuring enforcement of permit provisions	Planning and Development Department	Years 3 – 5

All activities for this BMP are complete for Year 5.

BMP 4.2 Activities Completed

Date: 08/12/2012 ***Responsible Party: Engineering Division***

Inspect Erosion Control Measures

A total of 881 erosion control measure inspections were performed in Year 5. A total of 38 violations and erosion control measure follow-up inspections were performed in Year 5.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
4.3 Earthwork Permit	Issue permits for site grading, when necessary, to reduce the impact to neighboring properties, downstream flooding, or channel erosion.	1. Continue to issue permits as needed	Planning and Development Department, Engineering Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 4.3 Activities Completed

Date: 08/12/2012 **Responsible Party: Engineering Division**

Review Earthwork Permits

A total of 47 clearing, grubbing, and earthwork permits were approved from August 13, 2011 through August 12, 2012.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
4.4 Storm Water Pollution Prevention Plan during Construction	A Storm Water Pollution Prevention Plan (SWP3) is required on all applicable construction projects in accordance with the regulatory authorities' permit process. A copy of the NOI or Construction Site Notice on all applicable construction projects shall be required.	1. A copy of the NOI from the contracting authority must be provided before a construction permit can be issued	Planning and Development Department	Years 3 – 5

All activities for this BMP are complete for Year 5.

BMP 4.4 Activities Completed

Date: 08/12/2012 **Responsible Party: Engineering Division**

Storm Water Pollution Prevention Plan During Construction

A total of 21 permits were copied to the City from August 13, 2011 through August 12, 2012. Of these 21 NOI's, 19 were for non-municipal construction activities (Table 5).

Table 5: Non-Municipal Construction Activities

<i>Number of Non-Municipal Construction Activities Within Jurisdiction of Permittee</i>
19

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.5 Complaint response	Citizen complaints regarding sediment and other development pollutants are investigated.	1. Continue to investigate at least 80% of complaints within 15 working days with priority complaints investigated sooner	Planning and Development Department	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 4.5 Activities Completed

Date: 08/12/2012 **Responsible Party: Planning and Development Department**
Complaint Response

A total of 6 complaints were received from August 13, 2011 through August 12, 2012 of which all 6 or 100% were investigated within 15 working days from the time the complaint was received.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.6 Construction Ordinance	Work with the Environmental Services Department to include in the City of Grand Prairie Storm Water Ordinance (Refer to BMP 3.9) provisions to meet the legal authorities necessary to comply with permit requirements for Construction Site Storm Water Runoff Control. Ordinance will require contractors to implement erosion and sediment control BMPs and to control construction site waste.	1. Assign Staff and obtain information for draft ordinance	Planning and Development Department, Engineering Division	Year 1
		2. Develop a draft ordinance		Year 2
		3. Finalize ordinance		Year 3

4. Implement ordinance

Year 3

There are no required activities for this BMP for Year 5.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.7 Site Development Plan Reviews	Enhance review of site development plans to include water quality considerations, including a review of erosion control plans and proposed approved BMPs. Any amendments to the site plan review procedures will conform to the Storm Water Ordinance and post construction requirements.	1. Assign Staff and obtain information for site plan review procedures	Planning and Development Department	Year 1
		2. Revise and adopt the site plan review procedures		Year 2
		3. Amend site plan review procedures as necessary and implement compliance requirements		Year 3

There are no required activities for this BMP for Year 5.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.8 Recording and Public Complaint Response	Refine the system for recording and responding to calls from the public. This approach will include clarifying responsibilities, procedures, recordkeeping, and follow-up.	1. Assign and train Staff	Planning and Development Department	Year 1
		2. Prepare a memorandum of understanding clarifying responsibilities, procedures, recordkeeping, and follow-up on calls from the public		Year 2
		3. Implement		Year 3

There are no required activities for this BMP for Year 5.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.9 Redefine the Construction Site Inspection Program	Redefine the construction site inspection program by developing a system to assign inspectors, track training requirements, establish schedules of inspections, establish recordkeeping procedures, and define enforcement procedures. The existing inspection program will be upgraded to reflect the redefined construction site inspection program. Compliance with the Storm Water Ordinance will be insured by the use of non-monetary penalties, fines, bonding requirements, permit denial, stop work orders, and holding of Certificate of Occupancy until full compliance.	1. Redefine the inspection program and complete a memorandum of understanding concerning inspector assignments and enforcement procedures, training requirements, and record keeping processes	Planning and Development Department	Year 3
		2. Complete training of all departmental construction site inspectors. Initiate a program to formally train new inspectors by the end of their first year of their inspection assignment		Year 4
		3. Include in the inspection activities the additional sanctions provided by adoption of the Storm Water Ordinance		Year 5

All activities for this BMP are complete for Year 5.

BMP 4.9 Activities Completed

Date: 07/23/2012 ***Responsible Party: Chris Agnew, Assistant Storm Water Utility Manager***
Workshops

Chris Agnew attended the following NCTCOG workshops: 1) Bioretention Design on 7/23/12 , 2) Downstream Assessment Analysis on 8/21/12, and 3) Maintenance and Inspection of Stormwater Controls on 9/17/12.

Date: 08/12/2012 ***Responsible Party: Planning and Development Department***
Construction Inspection Program

In Year 5, training was performed in the field. Current BMP conditions and the need for maintenance of BMPs and/or additional BMPs to minimize erosion and sedimentation loss at the construction site were addressed at each location.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
4.10 Construction Site Storm Water Public Education Program	Coordinate a public education program with Environmental Services Division to provide information to construction site operators regarding the requirements of the Construction General Permit and the MS4 General Permit.	1. Add internet links concerning Construction Site BMPs and Storm Water to the Grand Prairie website	Planning and Development Department	Year 2
		2. Create fact sheets and distribute to developers and homebuilders regarding requirements for permitting and pollution prevention		Year 3

There are no required activities for this BMP for Year 5.

MCM 5: Post Construction Storm Water Management in New Development & Redevelopment

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
5.1 Development Review Process	All development plans are reviewed for compliance with floodplain requirements, for adequacy of infrastructure design for drainage, and for use of detention ponds.	1. Continue to review at least 80% of development plans for mitigation of impact	Planning and Development Department, Engineering Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.1 Activities Completed

Date: 08/12/2012 **Responsible Party: Engineering Division**
Development Review Process

A total of 111 drainage and erosion control plans were reviewed from August 13, 2010 through August 12, 2011.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
5.2 Stream Buffer Preservation	Encourage the preservation of natural channels and the 100 year floodplain.	1. Continue to encourage the preservation of stream buffers during plan reviews by requiring dedication of drainage or floodplain management easements for the 100-year floodplain	Planning and Development Department	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 5.2 Activities Completed

Date: 08/12/2012 Responsible Party: Planning and Development Department

Stream Buffer Preservation

Using an integrated approach to deal with storm water quality protection, stream bank protection, and flood control requirements, the City is striving to use the natural drainage system which will mean as little maintenance as possible. By implementing controls after all site design and nonstructural options have been exhausted, the City's purpose is to create structural controls that are multi-purpose and aesthetically integrated into a site's design, while realizing that each site, project, and watershed presents different challenges and opportunities. The City encourages the preservation of natural hydrology and drainage ways and the reduction of impervious cover with associated runoff and pollutants. The goal is to make efficient use of the natural features of the sites to prevent storm water impact at the maximum extent practicable.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
5.3 Storm Water Design Criteria and Methods	Adopt storm water design criteria and methods that integrate considerations for drainage and water quality for post construction BMPs. An internal committee will evaluate the implementation of the manuals by Grand Prairie and propose their adoption with any amendments thereto.	1. Appoint Staff to evaluate and make recommendations	Planning and Development Department	Years 2
		2. Research information through benchmarking and attending NCTCOG meetings and training seminars		Years 2
		3. Adopt the policies and design criteria as needed		Year 3

	4. Affected city departments and divisions will implement the policy and design criteria manuals as adopted	Year 4
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There are no required activities for this BMP for Year 5.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
5.4 Revise Policies and Design Criteria in the Unified Development Code	Revise the Unified Development Code as needed to include requirements and revised standards. An internal committee will evaluate the Unified Development Code and design criteria, propose amendments thereto to support water quality objectives, and update as necessary.	1. Appoint Staff to evaluate and make recommendations	Planning and Development Department	Year 2
		2. Research information through benchmarking and attending NCTCOG meetings and training seminars; head an internal committee		Year 2
		3. Adopt the amendments to the Unified Development Code		Year 3
		4. The affected city departments and divisions will implement the revisions to the Unified Development Code		Year 4

There are no required activities for this BMP for Year 5.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
5.5 Long term operation and maintenance of BMPs	Perform periodic inspections on existing post construction BMPs and work with the owners to provide needed maintenance and repairs. Failure to perform	1. Document all inspections and violations	Planning and Development Department	Year 3

<p>maintenance and repairs directed by the city may result in penalties.</p>	<p>2. Develop guidance documents for developers and other responsible parties addressing maintenance and operation responsibilities, stressing the importance of proper maintenance for water quality and quantity control and ensuring proper maintenance activities are conducted</p>	<p>Year 3</p>
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All activities for this BMP are complete for Year 5.

BMP 5.5 Activities Completed

Date: 08/12/2012 **Responsible Party:** Engineering Division

Long term operation and Maintenance of BMPs

A total of 38 inspections for Post Construction BMPs associated with detention facilities were performed from August 13, 2011 through August 12, 2012.

MCM 6: Pollution Prevention & Good Housekeeping for Municipal Operations

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
<p>6.1 Storm Water Management Program Data Tracking</p>	<p>Track all city activities related to the Storm Water Management Program through a data tracking program. Software will be utilized to assist with the tracking.</p>	<p>1. Purchase and utilize software 2. Create annual report</p>	<p>Environmental Services Department, Environmental Quality Division</p>	<p>Year 1 Year 2</p>

There are no required activities listed for this BMP for Year 5; however, the City continued this activity in Year 5.

BMP 6.1 Activities Completed

Date: 8/13/2011 **Responsible Party:** Environmental Quality Division

Data Tracking with Asist

The Asist software is used to manage the SWMP BMPs.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.2 Existing SWP3s	Three existing SWP3s are maintained for the Airport, the Landfill, and the Service Center, as required by the general permit TXR05000.	1. Maintain and update SWP3s for the permits at the three existing regulated facilities	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Review the SWP3s annually for any changes required		Years 1 – 5
		3. Inspect all three sites annually		Years 1 – 5
		4. Ensure that required annual SWP3 training is conducted		Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 6.2 Activities Completed

Date: 12/12/2011 **Responsible Party: T Sury, Environmental Specialist**

Annual Inspections

Annual comprehensive compliance inspections were conducted for each MSGP City facility. The Airport was inspected on 12/2/2011, the Landfill was inspected on 12/12/2011, and the Service Center was inspected on 12/1/2011.

Date: 03/14/2012 **Responsible Party: Public Works Department**

Certified Stormwater Inspector Training

Ronnie Bates, Public Works Manager, and Barry Fulfer, Drainage Operations Supervisor, attended the National Stormwater Center's "Certified Stormwater Inspector" training.

Date: 07/26/2012 **Responsible Party: Environmental Quality Division**

Stormwater Pollution Prevention Video

Applicable sections of "Municipal Employee Training Series. Preventing Storm Water Pollution: What We Can Do" video were presented to thirteen (13) Service Center Staff members on 1/5/12.

On 4/20/12, the Environmental Quality Division purchased a stormwater pollution prevention video for municipalities called "Rain Check"

from Excal Visual. This video was presented to fifty-four (54) Service Center Staff members on 7/12/12, fifteen (15) Landfill Staff members on 7/26/12, and five (5) Airport Staff members on 7/10/12.

Date: 08/12/2012 **Responsible Party: T Sury, Environmental Specialist**

SWPPP Updates

Airport updates:

All changes related to the general provisions in the permit amendments effective August 14, 2011 were made.

Service Center updates:

All changes related to the general provisions in the permit amendments effective August 14, 2011 were made. In addition, the site map was modified to show the additional streets storage area.

Landfill updates:

All changes related to the general provisions in the permit amendments effective August 14, 2011 were made. The SWPPP was also updated to reflect the raising of the electric panel for leachate pump 2 and the removal of the sump and the associated stormwater discharge pipe; this reestablished sheet flow in the area. The site map was modified to show these changes and the new cell construction area.

Date: 08/12/2012 **Responsible Party: T Sury, Environmental Specialist**

Quarterly Visual Inspections

The three City facilities regulated by the general permit TXR05000 are the Municipal Airport, Landfill, and Service Center. In addition to the inspections performed at these facilities for the purpose of maintaining and updating their corresponding SWPPPs, outfalls at each facility are monitored during qualifying rainfall events on a quarterly basis. The Service Center was monitored on 9/19/11, 10/10/11, 1/9/12, and 4/4/12. The Airport was monitored on 9/20/11, 10/10/11, 1/9/12, and 6/15/12. The Landfill was monitored on 10/12/11, 12/19/11, 1/10/12, 4/4/12, and 8/16/12. Due to dry weather in the 3rd quarter, sampling was conducted at the first opportunity in the 4th quarter. It was monitored a second time at the end of the fourth quarter.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.3 Storm Sewer and Drainage Maintenance Program	Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations. Use permanent vegetation to stabilize disturbed soil.	1. Hire a crew of 3 to maintain storm sewer and drainage	Public Works Department, Streets Division	Years 1 – 5
		2. Respond to 100% of citizen complaints		Years 1 – 5
		3. Track storm sewer and drainage maintenance		

All activities for this BMP are complete for Year 5.

BMP 6.3 Activities Completed

Date: 08/12/2012 **Responsible Party: Public Works Department**
Tracking Maintenance

Storm sewer and drainage maintenance was tracked for Year 5. Maintenance included 22 different type of activities conducted as a result of citizen complaints, field observations, and regular City storm sewer maintenance.

Date: 08/12/2012 **Responsible Party: Public Works Department**
Complaint Response

The Public Works Department responded to 100% of citizens' complaints in Year 5. Response included cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. 54 issues were resolved in Year 5 in response to complaints and field observations.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.4 Disposal of Waste Removed from the MS4	Develop a standard operating procedure for the disposal of waste removed from the MS4, including any dredged soil, accumulated sediments, and floatables.	1. Develop an SOP for waste disposal	Environmental Services, Environmental Quality Division	Year 2

There are no activities listed for this BMP for Year 5.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.5 Storm Water Pollution Prevention Guidelines for all City Activities	Develop pollution prevention guidelines for selected city activities not covered by a specific TPDES permit. Training materials will be developed from NCTCOG Storm Water training materials, as indicated by BMP 3.8.	1. Identify target audience and activities for the pollution prevention plan	Environmental Services Department, Environmental Quality Division	Year 2
		2. Review Phase 1 city SWP3s as well as suggested EPA and TCEQ BMPs		Year 2
		3. Design the SWPP materials for selected city employees		Years 3 – 4
		4. Begin developing, purchasing and disseminating SWPP materials to selected city employees annually		Years 5

All activities for this BMP are complete for Year 5.

BMP 6.5 Activities Completed

Date: 09/08/2011 **Responsible Party: T Sury, Environmental Specialist**
TCEQ Water Quality/Stormwater Seminar

T Sury attended the TCEQ Water Quality/Stormwater Seminar in Austin, Texas.

Date: 09/27/2011 **Responsible Party: Andrew Krentz, Environmental Specialist**
iSWM Implementation Workshop

Andrew Krentz attended the iSWM Implementation Workshop hosted by NCTCOG.

Date: 10/25/2011 **Responsible Party:**
Illicit Discharge Detection and Elimination Training

Gregg Kidd, Senior Environmental Technician, and Andrew Krentz, Environmental Specialist, attended the Illicit Discharge Detection and Elimination Training conducted by NCTCOG.

Date: 11/11/2011 **Responsible Party: Environmental Quality Division**
Construction Field Guide

The City purchased Construction Field Guides from NCTCOG and distributed the guides to the appropriate City personnel.

Date: 03/09/2012 **Responsible Party: Environmental Quality Division**
IDDE Training

Echo Rexroad, Senior Environmental Specialist, presented an IDDE PowerPoint presentation to six (6) Environmental Quality Staff members. The presentation was created by NCTCOG and revised to fit Grand Prairie's needs. In addition, Echo Rexroad reviewed the IDDE inspection form with Staff and provided each Staff member with the IDDE Field Guide created through NCTCOG. Each Staff member read the guide.

Date: 03/14/2012 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**
Certified Stormwater Inspector Training

Ronnie Bates (Public Works Manager, Barry Fulfer (Drainage Operations Supervisor), Brent Redd (Environmental Specialist) and Echo Rexroad (Senior Environmental Specialist) attended the National Stormwater Center's "Certified Stormwater Inspector" training.

Date: 03/15/2012 **Responsible Party: Environmental Quality Division**
New Employee Orientation

Presented "Preventing Storm Water Pollution: What We Can Do" video to new City employees during New Employee Orientation on 11/17/11 and 3/15/12. Fourteen (14) individuals attended the November 2011 orientation and 20 individuals attended the March 2012 orientation. (See also BMP 3.8).

Date: 05/17/2012 **Responsible Party: Environmental Quality Division**

EPA Region 6 Inspection/Enforcement Workshop

Five (5) Environmental Quality Staff attended the EPA Region 6 National Multimedia Inspection/Enforcement Workshop held in Dallas, Texas.

Date: 06/29/2012 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

EPA Region 6 Stormwater Conference

Echo Rexroad attended the 14th Annual EPA Region 6 Stormwater Conference.

Date: 07/26/2012 **Responsible Party: Environmental Quality Division**

Coordinated Local Environmental Enforcement Training

Brent Redd (Environmental Specialist) and Echo Rexroad (Senior Environmental Specialist) attended the Coordinated Local Environmental Enforcement training held by NCTCOG and Texas Illegal Dumping Resource Center.

Date: 07/26/2012 **Responsible Party: Environmental Quality Division**

Stormwater Pollution Prevention Videos

Applicable sections of "Municipal Employee Training Series. Preventing Storm Water Pollution: What We Can Do" video were presented to thirteen (13) Service Center Staff members on 1/5/12.

On 4/20/12, the Environmental Quality Division purchased a stormwater pollution prevention video for municipalities called "Rain Check" from Excal Visual. This video was presented to fifty-four (54) Service Center Staff members on 7/12/12, fifteen (15) Landfill Staff members on 7/26/12, and five (5) Airport Staff members on 7/10/12.

Date: 08/12/2012 **Responsible Party: Environmental Quality Division**

Environmental Quality Division Staff Meeting Presentations

The Environmental Quality Division holds monthly Staff meetings to discuss environmental issues and/or events. Several presentations were given in Year 5 by Staff members. Presentations included topics such as: water and air sampling, how to handle spills, TMDLs in the Trinity, and total petroleum hydrocarbons.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.6 Promotion of Native or Adaptive Vegetation Along Floodplain Easements	Promote good storm water filtration and natural uptake of possible nutrient pollutants by native and/or adaptive vegetation.	1. Identify at least 2 areas to promote native vegetation	Environmental Services Department, Environmental Quality Division and Public Works Department,	Year 2
		2. Choose location and design for signage and formalize sign budget	Streets Division	Year 3

	3. Install at least 1 sign for each area and define management area	Year 4 – 5
	4. Identify future areas suitable for promotion of vegetation as the city continues to develop	Year 5

All activities for this BMP are complete for Year 5.

BMP 6.6 Activities Completed

Date: 10/26/2011 **Responsible Party: Environmental Quality Division**

Sign Installation

Two signs were installed on 10/26/11. One is located along the Good Link Trail near 161 and the Trinity River. The second sign is located along the Lone Star Trail and the Trinity River.

Date: 08/12/2012 **Responsible Party: Planning and Development Department**

Future Vegetation Promotion Along Floodplain Easements

The City has two potential roadway projects that are proposed: 1) Wildlife extension to SH 161 and 2) Palace Parkway extension. These locations may be suitable for the promotion of native or adaptive vegetation as they will likely require wetland mitigation.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.7 Mosquito Management Program	Maintain mosquito management methods that will not result in illicit discharges to the MS4.	1. Maintain integrated mosquito management methods when handling and applying pesticides	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Use low toxicity bio-controls for larvae control		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 6.7 Activities Completed

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**

Low Toxicity Bio-Controls

Gambusia affinis fish are used in bodies of water with mosquito breeding problems. This biological control provides an abatement program directed primarily toward the prevention, elimination, or control of aquatic sources leading to the production of mosquitoes capable of disease transmission.

Bactimos Briquettes and Agnique MMF (MonoMolecular Film) are also used. Bactimos Briquettes is a biological larvicide containing Bacillus thuringiensis israelensis, which kills only mosquito larvae (EPA registration No. 6218-47) and has a toxicity category of “Caution”. Agnique MMF (MonoMolecular Film) is a biodegradable, alcohol ethoxylated surfactant (EPA registration No. 2302-14, 53263-28) made from renewable plant oils. This film interrupts the critical air/water interface in the mosquito’s larval and pupal development cycle causing them to drown and has a toxicity category of “Caution”.

Date: 08/13/2011 **Responsible Party: Environmental Quality Division**
Integrated Mosquito Management

The Environmental Quality Division's mosquito control plan is based on comprehensive Integrated Pest Management (IPM) which includes, but is not limited to, mosquito and disease surveillance, source reduction, complaint investigations, public education, biological control (mosquito fish production) and larval and adult mosquito control, and insecticide resistance management.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.8 Street Sweeping	Remove solid pollutants from the streets to avoid contamination of the storm sewer system.	1. Sweep major thoroughfares on an annual basis and more often on high traffic roads	Environmental Services Department, Solid Waste Division	Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 6.8 Activities Completed

Date: 08/12/2012 **Responsible Party: Solid Waste Division**
Street Sweeping

The City has a contract with Flagship Sweeping Services, Inc. for all street sweeping activities. Flagship Sweeping Services, Inc. cleans curbs, gutters, median curbs, road shoulders, gore points and turning lanes located throughout the City. Cleaning operations include sweeping, panning, dumping and trash pickup operations. Depending on area, streets are cleaned on a weekly, semiannual, and annual basis. In Year 5, 257.53 TN were collected.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
6.9 Inspect City Facilities	Inspect city facilities for Best Management Practices.	1. Inspect 25% of city facilities annually	Environmental Services Department, Environmental Quality Division	Years 2 – 5

All activities for this BMP are complete for Year 5.

BMP 6.9 Activities Completed

Date: 07/27/2012 ***Responsible Party: T Sury, Environmental Specialist***
City Facility Inspections

The City inspected 29% of the 28 City facilities selected for this program. The facilities inspected in Year 5 were the CVE Training Center, Ruthe Jackson Center, Tangle Ridge Golf Club, Park Maintenance Facility, Prairie Lakes Golf Course, Lake Parks, Parks Memorial Garden, and Kirby Creek Park.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
6.10 Storm Sewer and Drainage Maintenance Program for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see MCM 6.3)	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.	1. Respond to written complaints within the District	Dallas County Flood Control District #1	Years 1 – 5
		2. Perform annual maintenance reviews and prepare report		Years 1 – 5
		3. Make necessary repairs to District facilities		Years 1 – 5

All activities for this BMP are complete for Year 5.

BMP 6.10 Activities Completed

Date: 07/31/2012 ***Responsible Party: Dallas County Flood Control District #1***
Complaints, Reviews, and Repairs

No written complaints were filed in Year 5. The annual maintenance review was conducted in February 2012, and the report was prepared in July 2012.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
6.11 Disposal of Waste Removed from the MS4 for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see MCM 6.4)	Develop a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1's storm water system.	1. Develop a SOP for waste disposal	Dallas County Flood Control District #1	Year 2

No activities are listed for this BMP for Year 5.

Part VI. 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.

I further certify that I am authorized under 30 Texas Administrative Code 305.128 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

City of Grand Prairie

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Dallas County Flood Control District #1

Signature: _____

Printed Name: _____

Title: _____

Date: _____

APPENDIX A: Interlocal Agreement

STATE OF TEXAS)
COUNTY OF DALLAS)

INTERLOCAL AGREEMENT BETWEEN CITY OF GRAND PRAIRIE
AND THE DALLAS COUNTY FLOOD CONTROL DISTRICT #1
CONCERNING JOINT SUBMISSION OF THE STORM WATER MANAGEMENT
PROGRAM

This agreement is between the City of Grand Prairie, by and through its duly authorized City Manager, and the Dallas County Flood Control District #1, by and through its President. It is an Interlocal Agreement between two political subdivisions within the State of Texas, authorized in Chapter 791 of the Texas Government Code, and concerning an item of mutual interest and importance. This Interlocal Agreement for the joint submission of a Storm Water Management Program to satisfy the requirements of the permit application to the Texas Commission on Environmental Quality (TCEQ) for compliance with Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR040000 relating to storm water discharges associated with small municipal separate storm sewer systems is made and entered into by and between the City of Grand Prairie, Texas (hereafter referred to as the “**CITY**”), and the Dallas County Flood Control District #1 (hereafter referred to as the “**DISTRICT**”).

WHEREAS, the **CITY** and the **DISTRICT** mutually desire to enter into an **AGREEMENT** to partner with each other in the joint submission of a Storm Water Management Program to the TCEQ for compliance with Phase II requirements; and

WHEREAS, the parties recognize the joint benefits in the joint submission of a Storm Water Management Program; and

NOW, THEREFORE, FOR AND IN CONSIDERATION OF THE MUTUAL COVENANTS SET OUT HEREIN, the City of Grand Prairie and the Dallas County Flood Control District #1 agree as follows:

1. The **CITY** and the **DISTRICT** agree to a joint submission of a Storm Water Management Program to the TCEQ in compliance with Phase II requirements.
2. The **CITY** and the **DISTRICT** agree that services related to the inspection and maintenance of **DISTRICT** owned storm water systems within the **DISTRICT** boundaries, as noted in Attachment 1, will continue to be the financial responsibility of the **DISTRICT**.
3. The **CITY** and the **DISTRICT** agree that the **CITY** will perform all of the required portions of the Storm Water Management Program in regards to: the minimum control measures within the City of Grand Prairie including within the limits of the **DISTRICT**, with the exception of MCM 6.3 and MCM 6.4, as denoted in the Storm Water

Management Program. The **DISTRICT's** specific responsibilities are defined in MCM 6.10 and MCM 6.11, as shown in Attachment 2, relating to the maintenance of drainage components and disposal of waste removed from the MS4, as denoted in the Storm Water Management Program.

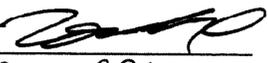
4. The **CITY** and the **DISTRICT** agree that the **DISTRICT** will provide detailed information on **DISTRICT** activities within the **DISTRICT** boundaries in the City of Grand Prairie to the **CITY** by October 1 of each year for the next five (5) years, in an electronic format so that the **CITY** may complete its annual report to the TCEQ.

5. The parties represent by the execution of this document that they have authority to act, and that the appropriate body has taken action to approve this contract.

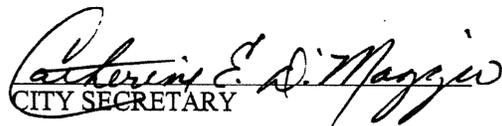
6. Neither party intends by entry into this agreement to waive any immunity that it might have in the performance of its governmental duties.

Executed on this 5th day of February, 2008.

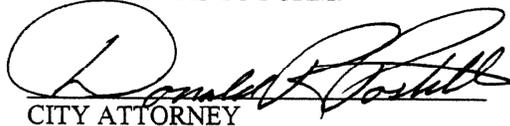
CITY OF GRAND PRAIRIE

by: 
Printed Name: TOM COX
Title: Deputy City Manager

ATTEST:


CITY SECRETARY

APPROVED AS TO FORM:


CITY ATTORNEY

DALLAS COUNTY FLOOD CONTROL DISTRICT #1

by: 
Printed Name: ROBERT M. NELSON
Title: PRESIDENT

ATTEST:

by: Cassie Huchingson

APPROVED AS TO FORM:

Joe Petran
ATTORNEY FOR THE DALLAS COUNTY FLOOD CONTROL DISTRICT #1

ATTACHMENT 2

MCM 6. Pollution Prevention/Good Housekeeping for Municipal Operations

40 CFR 122.34 (b) (6) –Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

Selected BMPs for Pollution Prevention/Good Housekeeping for Municipal Operations

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
6.1 Storm Water Management Program Data Tracking	Track all city activities related to the Storm Water Management Program through a data tracking program. Software will be utilized to assist with the tracking.	1. Purchase and utilize software	Environmental Services Department, Environmental Quality Division	Year 1
		2. Create annual report		Year 2
6.2 Existing SWP3s	Three existing SWP3s are maintained for the Airport, the Landfill, and the Service Center, as required by the general permit TXR05000.	1. Maintain and update SWP3s for the permits at the three existing regulated facilities	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Review the SWP3s annually for any changes required		Years 1 – 5
		3. Inspect all three sites annually		Years 1 – 5
		4. Ensure that required annual SWP3 training is conducted		Years 2 – 5

6.3 Storm Sewer and Drainage Maintenance Program	Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations. Use permanent vegetation to stabilize disturbed soil.	1. Hire a crew of 3 to maintain storm sewer and drainage 2. Respond to 100% of citizen complaints 3. Track storm sewer and drainage maintenance	Public Works Department, Streets Division	Years 1 – 5
				Years 1 – 5
6.4 Disposal of Waste Removed from the MS4	Develop a standard operating procedure for the disposal of waste removed from the MS4, including any dredged soil, accumulated sediments, and floatables.	1. Develop an SOP for waste disposal	Environmental Services, Environmental Quality Division	Year 2
6.5 Storm Water Pollution Prevention Guidelines for all City Activities	Develop pollution prevention guidelines for selected city activities not covered by a specific TPDES permit. Training materials will be developed from NCTCOG Storm Water training materials, as indicated by BMP 3.8.	1. Identify target audience and activities for the pollution prevention plan	Environmental Services Department, Environmental Quality Division	Year 2
		2. Review Phase 1 city SWP3s as well as suggested EPA and TCEQ BMPs		Year 2
		3. Design the SWPP materials for selected city employees	Environmental Services Department, Environmental Quality Division	Years 3 – 4
		4. Begin developing, purchasing and disseminating SWPP materials to selected city employees annually		Years 5
6.6 Promotion of Native or Adaptive Vegetation Along Floodplain Easements	Promote good storm water filtration and natural uptake of possible nutrient pollutants by native and/or adaptive vegetation.	1. Identify at least 2 areas to promote native vegetation	Environmental Services Department, Environmental Quality Division and Public Works Department, Streets Division	Year 2
		2. Choose location and design for signage and formalize sign budget		Year 3

			3. Install at least 1 sign for each area and define management area		Year 4 – 5
			4. Identify future areas suitable for promotion of vegetation as the city continues to develop		Year 5
6.7 Mosquito Management Program	Maintain mosquito management methods that will not result in illicit discharges to the MS4.		1. Maintain integrated mosquito management methods when handling and applying pesticides 2. Use low toxicity bio-controls for larvae control	Environmental Services Department, Environmental Quality Division	Years 1 – 5
6.8 Street Sweeping	Remove solid pollutants from the streets to avoid contamination of the storm sewer system.		1. Sweep major thorough fares on an annual basis and more often on high traffic roads	Environmental Services Department, Solid Waste Division	Years 1 – 5
6.9 Inspect City Facilities	Inspect city facilities for Best Management Practices.		1. Inspect 25% of city facilities annually	Environmental Services Department, Environmental Quality Division	Years 2 – 5
6.10 Storm Sewer and Drainage Maintenance Program for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see MCM 6.3)	Conduct maintenance and improvements for the drainage components owned by the Dallas County Flood Control District #1 when noted through written complaints and through field observations.		1. Respond to written complaints within the District 2. Perform annual maintenance reviews and prepare report 3. Make necessary repairs to District facilities	Dallas County Flood Control District #1	Years 1 – 5
6.11 Disposal of Waste Removed from the MS4 for the Dallas County Flood Control District #1 (excluding the City of Grand Prairie – see MCM 6.4)	Develop a standard operating procedure for the disposal of waste removed from the Dallas County Flood Control District #1's storm water system.		1. Develop a SOP for waste disposal	Dallas County Flood Control District #1	Years 1 – 5
					Year 2

APPENDIX B: TCEQ Correspondence



Addendum

August 13, 2008

This addendum modifies and supplements the City of Grand Prairie's Storm Water Management Program developed in response to the TPDES Phase II MS4 General Permit (TXR040000).

- BMP 1.1, Environmental Education Specialist

Current: Years 2-5, Employ an Environmental Education Specialist who will actively seek to broaden educational opportunities within the school district and the city. Conduct 2 storm water outreach activities annually.

Revision: Remove entire BMP

Justification: BMP is not a required element for the SWMP. With current economic conditions, it is unlikely the City will be able to fill this position within the next few years.

- BMP 1.11, Funding for Elementary School Curriculum on Storm Water Quality

Current: Purchase Major Rivers© or similar curriculum for additional fifth grade Grand Prairie ISD classrooms

Revision: Purchase Major Rivers© or similar curriculum **as needed** for additional fifth grade Grand Prairie ISD classrooms

Justification: Adel Quintana, the Science Program Coordinator for Grand Prairie Independent School District, informed the City that GPISD did not need additional copies of Major Rivers this year. By adding "as needed" to the measurable goal, the City will not be required to purchase additional curriculum unnecessarily.

- BMP 2.1, Public Notice in Development of SWMP

Current: 1) Participate in a 15 minute Grand Prairie cable show that highlights the SWMP and invites the public to make comments and 2) Provide a copy of the document for comment to at least one of the environmental compliance workshops

Revision: Remove these two measurable goals from this BMP. This will leave the following goals: 1) Continue to make the document available for comments on the city website and at the Environmental Services Department office and 2) Make presentations to applicable city council committees

Justification: While we may have accomplished these goals, we have no supporting documentation.

- BMP 2.2, Texas Watch Volunteer Stream Monitoring Program

Current: **Years 1-5**, Hold at least 1 Texas Watch training session for volunteers or corporations annually

Revision: **Years 2-5**, Hold at least 1 **Texas Stream Team** training session for volunteers or corporations annually

Justification: Under the assumption we can use previous years' accomplishments, we have technically accomplished this goal for Year 1. In addition, two City employees were trained in Year 1 and are set to train students at Reagan Middle School in August or September of 2008. However, unforeseen circumstances (i.e. transfer of responsibility to new employee, training of new employee, availability of volunteers during school months, etc.) hindered expected training events.

Texas Watch is now called Texas Stream Team.

- BMP 2.3, Master Composter Program

Current: 1) **Years 1-5**, Conduct 2 Master Composter classes per year and 2) Years 1-5, Distribute yard care educational materials to at least 20 Master Composter participants annually

Revision: 1) **Year 1**, Conduct 2 Master Composter classes per year and 2) Years 1-5, Distribute yard care educational materials to at least 20 Master Composter participants annually

Justification: The City of Grand Prairie has hosted a Master Composter class annually for over 10 years and has trained approximately 700 people during that time. Recent trends have demonstrated less interest in this class, and as a result, it has become increasingly difficult to find individuals willing to participate. Due to the lack of interest, the Solid Waste Division has determined that hosting two classes per year is not financially realistic.

- BMP 2.4, Storm Drain Markers

Current: Years 2-5: Purchase and have installed through volunteer help **200** of the city's unmarked storm drain curb inlets annually

Revision: Years 2-5: Purchase and have installed through volunteer help **100** of the city's unmarked storm drain curb inlets annually

Justification: This Years 2-5 activity may prove to be more difficult than originally thought. While we provided 310 markers for placement, only 71 markers were actually placed this year. The reason for this was said to be the great number of extracurricular activities the volunteers were participating in this year. 100 markers may be a more reasonable goal. If the goal of 100 is not met, remaining markers may be placed by City personnel.

- BMP 4.2, Inspect Erosion Control Measures

Current: **Years 1-2**, Continue to inspect general erosion control measures during baseline or annual inspections

Revision: **Years 2-3**, Continue to inspect general erosion control measures during baseline or annual inspections

Justification: The Planning and Development Department includes the City's Engineering Division and Building

Inspections Division. While both of these Divisions have continued to inspect general erosion control measures during baseline or annual inspections, only the Building Inspections Division has a current method of documenting this activity through a computer system that they use for their Building Inspections work. The Engineering Division has been working with the City's Information Technology staff to develop a computer database specific to taking care of engineering needs and to document BMP activities. This database is in the final stages of modifications and will be implemented for reporting and providing documentation by the end of Year 2.

E-mail sent to TCEQ on August 13, 2008 with above addendum attached

From: Echo Rexroad
Sent: Wednesday, August 13, 2008 3:26 PM
To: 'SWGPA@tceq.state.tx.us'
Cc: Echo Rexroad
Subject: City of Grand Prairie SWMP Addendum

Attachments: SWMPAddendum.doc

To Whom It May Concern:

Please find the attached addendum to the City of Grand Prairie's Storm Water Management Program.

If possible, please send a response to this email confirming receipt of this addendum.

Best regards,

Echo Rexroad
Senior Environmental Specialist
City of Grand Prairie
972.237.8082

E-mail from TCEQ confirming receipt of August 13, 2008 Addendum

From: Kim Wilson [KWILSON@tceq.state.tx.us]
Sent: Thursday, August 14, 2008 10:00 AM
To: Echo Rexroad
Subject: Re: City of Grand Prairie SWMP Addendum
Mr. Rexroad-

I am the reviewer assigned to Grand Prairie and am in receipt of this addendum.

>>> "Echo Rexroad" <erexroad@GPTX.org> 8/13/2008 3:25 PM >>>
To Whom It May Concern:

Please find the attached addendum to the City of Grand Prairie's Storm Water Management Program.

If possible, please send a response to this email confirming receipt of this addendum.

Best regards,

Echo Rexroad
Senior Environmental Specialist
City of Grand Prairie
972.237.8082

E-mail from Gordon Cooper, with the TCEQ, requesting revisions to MCM 4 and 5

From: Gordon Cooper [mailto:GCooper@tceq.state.tx.us]
Sent: Monday, September 08, 2008 9:38 AM
To: Cindy Mendez
Subject: MS4 SWMP Review for the City of Grand Prairie

Ms. Mendez,

My name is Gordon Cooper and I am the permit writer who is reviewing the SWMP for the City of Grand Priarie MS4 permit application.

Upon reviewing the SWMP I have found that there is some additional information that will be required to complete this review process.

MCM 4 –

Required Elements and/or BMPs:

- Please provide additional information of how the program that will be developed to comply with the required elements for this MCM (4) will address storm water runoff from construction activities of one acre and greater including activities at sites that are part of a larger common plan of development.

MCM 5 –

Required Elements and/or BMPs:

- Please provide additional information how the program will address storm water runoff from new development / redevelopment activities of one acre and greater including the larger common plan of development.

Please update your SWMP with this information and send a response to this information request back to me via e-mail within 2 weeks of the date of this e-mail. If there is a specific reason why this information is not needed and not included in the SWMP, please indicate why for each MCM addressed by this request in an e-mail response.

If you need any additional information please feel free to contact me at: Gordon Cooper, TCEQ Water Quality Division, 512-239-1963.

Thank you very much,

Gordon Cooper
Environmental Permit Specialist I
TCEQ Water Quality Division
Storm Water &
Pretreatment Team (MC 148)
P.O Box 13087
Austin, TX 78711-3087
Phone: 512-239-4671
Fax: 512-239-4430

Email sent to Gordon Cooper, with the TCEQ, with revisions to MCM 4 and 5

From: Echo Rexroad
Sent: Tuesday, September 16, 2008 5:09 PM
To: 'Gordon Cooper'
Cc: Cindy Mendez
Subject: RE: MCM 4 and 5 and Fact Sheet

Attachments: SWMP to TCEQ Final.pdf; SWMPAddendum.doc; Re City of Grand Prairie SWMP Addendum.htm

Hello Mr. Cooper,

Please find the attached revised City of Grand Prairie SWMP, addendum, and email from Kim Wilson stating she is in receipt of the addendum.

In addition to the changes described in the attached addendum, we have also revised the SWMP to include the following statements for MCM 4 (page 25) and MCM 5 (page 29):

MCM 4:

The following selected BMPs for Construction Site Storm Water Runoff Control apply to 1) construction activities of one acre and greater and 2) construction activities at sites that are part of a larger common plan of development (where the total disturbed area is equal to one acre or greater).

MCM 5:

The following selected BMPs for Post-Construction Management in New Development and Redevelopment apply to 1) new development / redevelopment activities of one acre and greater and 2) new development / redevelopment activities at sites that are part of a larger common plan of development (where the total disturbed area is equal to one acre or greater).

We have also reviewed the Notice of Application you provided. In the first sentence, where the application states “City of Grand Prairie, 201 **North West** 2nd Street...”, it should say “City of Grand Prairie, 201 **Northwest** 2nd Street...” Other than that one minor change, no other revisions are needed.

Thank you for your time. We look forward to hearing from you again.

Sincerely,

Echo Rexroad
Senior Environmental Specialist
City of Grand Prairie
972.237.8082

APPENDIX C: Monthly Stream Summary

Monthly Results

August 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
20	08/23/2011	11:00	GP11SW-235	34	31.3	8	11	4.79	0.18	800	18600
28	08/23/2011	19:16	GP11SW-242	32	27.9	7.47	9.4	5.68	0.13	45	370
25	08/23/2011	18:35	GP11SW-239	31	28.9	7.27	3.1	3.5	0.19	18	3200
9	08/23/2011	12:36	GP11SW-228	40	33.3	7.7	12	4.29	0.51	45	182
22	08/23/2011	13:06	GP11SW-236	40	30.9	7.81	25	4.76	0.09	930	16900
20	08/23/2011	13:06	GP11SW-236								
11	08/23/2011	13:26	GP11SW-229	40	30.7	7.7	13	4.42	0.18	600	6200
12	08/23/2011	11:40	O11SW-230	38	29.5	7.49	14	4.91	0.26	540	100
15	08/23/2011	11:20	GP11SW-231	37	31.6	7.19	11	2.23	0.32	100	200
17	08/23/2011	11:06	GP11SW-232	36	31.3	7.66	75	4.89	0.06	73	791
6	08/24/2011	19:30	GP11SW-225	32	30.6	7.43	25	4.72	0.39	850	100
19	08/24/2011	11:46	GP11SW-234	38	31.8	7.77	40	4.64	1.47	270	18
5	08/24/2011	19:30	GP11SW-224	33	31.3	7.82	25	4.22	0.14	370	82
23	08/24/2011	11:04	GP11SW-237	36	31.9	7.42	13	4.06	0.06	127	
24	08/24/2011	11:01	GP11SW-238	34	30.5	7.55	8.3	4.3	0.15	118	36
18	08/24/2011	11:25	10	38	31	7.91	140	4.56	0.03	136	18
3	08/24/2011	19:10	GP11SW-223	32	29.6	7.59	27	4.76	0.37	430	450
8	08/24/2011	11:16	GP11SW-227	36	29.4	7.42	4.1	3.61	0.19	600	

Monthly Results

September 2011

Stream Site Number	Date	Time	Sample ID#	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
19	09/21/2011	11:31	GP11SW-269	34	27.1	7.58	60	6.53	1.99	64	2300
22	09/21/2011	11:21	GP11SW-271	32	24.4	7.41	15	4.72	0.24	690	8800
11	09/21/2011	11:26	GP11SW-264	33	24.1	7.4	40	4.07	0.21	1936	500
12	09/21/2011	11:05	GP11SW-265	28	22.5	7.26	15	4.99	0.3	900	19000
28	09/21/2011	11:55	GP11SW-277	25	22	7.19	2.9	4.77	0.25	820	2800
15	09/21/2011	11:03	GP11SW-266	28	24.5	7.27	22	3.34	0.36	880	3200
18	09/21/2011	11:25	GP11SW-268	32	28.3	7.91	95	7.35	0.03	18	64
8	09/21/2011	11:24	GP11SW-262	32	26.1	7.06	8	4.32	0.22	790	4800
20	09/21/2011	11:35	GP11SW-270	24	22.6	7.51	6.9	3.63	0.28	820	420
25	09/21/2011	11:03	GP11SW-274	20	22.1	7.01	4.1	2.57	0.35	280	9400
9	09/21/2011	11:10	GP11SW-263	29	23.3	7.58	27	5.26	0.31	900	16300
26	09/21/2011	11:20	GP11SW-275	22	21.9	7.49	6.6	6.51	0.17	570	200
27	09/21/2011	11:35	GP11SW-276	22	21.9	7.29	21	4.92	0.26	890	17900
17	09/21/2011	11:02	GP11SW-267	27	25.1	7.49	70	4.92	0.07	470	400
23	09/22/2011	11:35	GP11SW-272	22	22.7	6.98	16	5.24	0.08	790	20000
6	09/22/2011	11:00	GP11SW-260	21	25.1	7.03	45	5.68	0.11	950	20000
7	09/22/2011	11:05	GP11SW-261	21	22	6.94	40	5.8	0.12	2900	20000
5	09/22/2011	11:25	GP11SW-259	21	24.1	7.03	21	4.82	0.18	300	20000
3	09/22/2011	11:15	GP11SW-258	21	23.7	7.28	26	6.78	0.29	220	13700
24	09/22/2011	11:45	GP11SW-237	22	23	6.83	8.2	4.34	0.28	340	11400

Monthly Results

October 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
25	10/18/2011	8:33	GP12SW-020	13	18	7.55	38	6.17	0.23	18900	20000
22	10/18/2011	13:16	GP12SW-017	17	18.4	7.33	9	7.66	0.07	4000	20000
20	10/18/2011	10:26	GP12SW-016	14	19.6	7.76	85	7.02	0	7100	18800
18	10/18/2011	14:00	GP12SW-014	18	20.7	7.68	110	6.34	0.06	2000	18900
17	10/18/2011	11:10	GP12SW-013	16	21.1	7.75	40	6.42	0.15	910	1409
15	10/18/2011	11:30	GP12SW-012	15	19.9	7.44	150	6.22	0	17200	20000
12	10/18/2011	11:40	GO12SW-011	16	18.5	7.42	26	6.53	0.03	14300	20000
11	10/18/2011	13:30	GP12SW-010	18	20	7.86	60	7.32	0.02	10000	20000
9	10/18/2011	12:50	GP11SW-009	18	19.3	7.6	110	6.87	0.16	10000	91
8	10/18/2011	13:46	GP12SW-008	17	17	7.24	9.8	5.83	0.15	1091	1273
26	10/18/2011	8:53	GP12SW-021	13	17.1	7.75	80	7.66	0.18	20000	20000
27	10/18/2011	9:13	GP12SW-022	14	17.9	7.51	16	6.54	0.16	16100	20000
30	10/18/2011	10:06	GP12SW-025	14	15.9	7.54	22	8.56	0.02	1454	20000
28	10/18/2011	9:30	GP12SW-023	14	18.6	7.44	80	7.18	0.07	19000	20000
24	10/19/2011	10:56	GP12SW-019	17	18.3	7.55	6.2	6.28	0.08	400	2700
5	10/19/2011	9:33	GP11SW-005	14	15.2	7.83	7.2	6.87	0.1	360	2000
7	10/19/2011	8:25	GP11SW-007	11	15.1	7.86	40	8.92	0	7400	20000
23	10/19/2011	8:45	GP12SW-018	11	16.2	7.52	26	7.61	0.1	600	9900
19	10/19/2011	11:20	GP12SW-015	18	19.7	7.53	150	4.19	0.82	420	20000
3	10/19/2011	9:05	GP11SW-004	12	16.8	7.62	33	7.68	0.09	470	5700

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Monthly Results

November 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
20	11/15/2011	9:53	GP12SW-041	23	20.5	7.72	19	5.15	0.19	370	1082
30	11/15/2011	9:20	GP12SW-050	23	20.3	7.82	26	5.61	0.03	860	3900
29	11/15/2011	10:26	GP12SW-049	23	20.1	7.78	4.4	5.29	0.12	580	127
28	11/15/2011	13:16	GP12SW-048	20.9	20.9	7.84	8.1	6.72	0.13	940	5500
27	11/15/2011	12:56	GP12SW-047	30	22.8	8.1	13	8.13	0.25	4800	12400
25	11/15/2011	8:30	GP12SW-045	22	20.4	7.73	17	5.65	0.48	10000	
17	11/15/2011	10:56	GP12SW-038	24	20.3	8.29	14	8.86	0.02	36	9
15	11/15/2011	11:16	GP12SW-037	24	20.3	7.95	15	6.77	0.1	490	1636
12	11/15/2011	11:26	GP12SW-036	27	20.3	7.62	19	4.5	0.06	3200	13500
9	11/15/2011	13:46	GP12SW-034	28	20.5	7.98	22	7.84	0.18	2400	14200
20	11/15/2011	9:53	GP12SW-041	23	20.5	7.72	19	5.15	0.19	340	1500
26	11/15/2011	8:45	GP12SW-046	22	20.2	7.81	95	7.76	0.33	10000	
8	11/16/2011	11:06	GP12SW-033	17	19.9	7.74	10	7.02	0.24	2900	4700
19	11/16/2011	11:46	GP12SW-040	17	19.1	7.85	45	7	2.51	260	13900
23	11/16/2011	9:06	GP12SW-043	17	19.8	7.76	17	6.83	0.11	1027	7100
22	11/16/2011	8:20	GP12SW-042	17	18.7	7.48	7.9	5.47	7.48	2800	18600
18	11/16/2011	11:26	GP12SW-039	17	19.8	8.17	60	8.45	0.09	73	11700
8	11/16/2011	11:06	GP12SW-033	17	19.9	7.74	10	7.02	0.24	2800	7800
11	11/16/2011	8:33	GP12SW-035	19	19.2	7.73	8.8	6.77	0.09	5400	7800
6	11/16/2011	9:33	GP12SW-031	17	20.9	7.76	19	7.7	0.12	580	5900
3	11/16/2011	9:20	GP12SW-029	19	19.2	7.84	15	8.24	0.08	750	11300
7	11/17/2011	8:40	GP12SW-032	6	12.7	7.71	70	8.26	0.08	720	1336
24	11/17/2011	9:25	GP12SW-044	6	14.3	7.77	3.9	7.14	0.1	2300	500
5	11/17/2011	9:06	GP12SW-030	6	14.2	7.77	26	7.81	0.08	500	300

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Monthly Results

December 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
20	12/13/2011	11:03	GP12SW-064	14	11.4	7.88	22	9.18	0.26	20	40
11	12/13/2011	11:32	GP12SW-058	17	12.7	7.97	8.2	9.27	0.22	460	180
30	12/13/2011	11:01	GP12SW-073	14	11.4	7.86	21	10	0.1	140	20
15	12/13/2011	11:44	GP12SW-060	16	11.7	7.76	14	8.73	0.18	360	1080
17	12/13/2011	11:20	GP12SW-061	15	11	7.85	21	10.81	0.1	80	20
18	12/13/2011	11:35	GP12SW-062	18	12.7	8.68	15	13.4	0.16	20	80
29	12/13/2011	11:05	GP12SW-072	14	11.8	7.83	4.9	9.64	0.07	200	20
22	12/13/2011	11:31	GP12SW-065	16	12.7	7.69	3.8	7.99	0.14	500	760
20	12/13/2011	11:03	GP12SW-064	14	11.4	7.88	22	9.18	0.27	120	40
28	12/13/2011	9:52	GP12SW-071	14	11.7	7.82	2.8	9.82	0.09	900	120
8	12/13/2011	11:34	GP12SW-056	17	12.5	7.83	15	8.86	0.12	280	20
9	12/13/2011	11:25	GP12SW-057	17	12.3	8.02	12	10.21	0.14	300	580
24	12/13/2011	8:57	GP12SW-067	13	10.7	7.81	9.7	9.12	0.23	100	120
25	12/13/2011	8:39	GP12SW-068	12	11.9	7.78	2.6	9.69	0.22	280	60
26	12/13/2011	9:20	GP12SW-069	13	11.7	7.84	6.6	10.18	0.18	120	180
27	12/13/2011	9:37	GP12SW-070	13	12	7.9	1.4	9.59	0.23	220	1360
19	12/13/2011	14:06	GP12SW-063	18	12.4	7.66	11	6.67	2.18	2320	
12	12/13/2011	11:54	GP12SW-059	16	13.6	7.69	2.4	9.01	0.3	140	40
23	12/14/2011	8:50	GP12SW-066	17	13.8	7.65	10.49	9.45	0.66	300	100
5	12/14/2011	9:33	GP12SW-053	18	15.4	7.64	16	8.81	0.15	250	36
6	12/14/2011	9:25	GP12SW-054	17	17	7.46	13.1	8.93	0.3	610	554
7	12/14/2011	8:35	GP12SW-055	18	14.3	7.84	14.3	9.14	0.3	4300	3400
3	12/14/2011	9:09	GP12SW-052	17	14.7	7.71	12.1	9.31	0.21	670	460
23	12/14/2011	8:50	GP12SW-066	17	13.8	7.65	10.49	9.45	0.66	290	36

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Monthly Results

January 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
9	01/17/2012	12:10	GP12SW-084	9	13.4	8.28	16.9	9.79	0.13	2800	400
11	01/17/2012	12:45	TP12SW-085	9	13.1	8.1	8.43	9.79	0.22	91	118
12	01/17/2012	11:10	GP12SW-086	8	13.2	7.78	3.47	9.29	0.23	54	10
27	01/17/2012	8:55	GP12SW-097	7	10.8	7.86	7.22	10.22	0.13	320	191
15	01/17/2012	11:00	GP12SW-087	8	11.9	7.9	21.6	9.23	0.15	250	664
8	01/17/2012	12:56	GP12SW-083	9	13	8.13	14	10.65	0.13	127	10
18	01/17/2012	13:10	GP11SW-089	9	14.6	8.46	55.7	10.54	0.15	700	300
28	01/17/2012	9:36	GP12SW-98	7	12.4	7.89	3	9.37	0.12	390	91
19	01/17/2012	13:20	GP12SW-090	9	13.3	8.07	30.3	9.76	0.65	13000	14000
26	01/17/2012	8:40	TP12SW-096	8	11.2	7.88	19.5	10.49	0.08	109	145
20	01/17/2012	9:55	GP12SW-091	8	13.4	8.1	33.7	8.7	0.09	450	36
22	01/17/2012	12:28	GP1SW-092	9	13.3	7.84	3.18	10.55	0.11	182	36
25	01/17/2012	8:25	GP12SW-095	8	13.5	7.83	2.59	9.61	0.21	230	9
30	01/17/2012	9:36	GP12SW100	8	13.6	7.94	242	9.96	0.17	210	54
29	01/17/2012	10:20	GP12SW-099	7	12.5	7.97	11.7	9.93	0.07	200	10
17	01/17/2012	10:46	GP12SW-088	7	12.5	8.32	38.6	10.99	0.11	280	91
23	01/18/2012	9:42	GP12SW-093	2	8.2	7.83	13.1	11	0.05	100	191
24	01/18/2012	8:50	GP12SW-094	2	10.3	7.62	6.74	8.49	0.2	209	91
3	01/18/2012	9:22	GP12SW-079	2	8.1	7.83	11.2	10.55	0.1	210	73
5	01/18/2012	8:39	GP12SW-080	2	10.1	7.68	6.98	8.47	0.25	470	145
6	01/18/2012	9:10	GP12SW-081	2	13.2	7.56	13.6	9.49	0.3	290	82
7	01/18/2012	8:28	GP12SW-082	1	8	7.69	5.95	10.98	0.1	3200	400

Monthly Results

February 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
28	02/21/2012	10:06	P12SW-123	14	11.6	8	8.34	8.92	0.12	950	500
31	02/21/2012	10:46	P12SW-126	14	11.8	8.12	25.3	8.83	0.1	2100	470
9	02/21/2012	9:00	P12SW-109	8	13.1	8.11	22.5	8.76	0.1	2000	440
11	02/21/2012	13:56	P12SW-110	20	13.2	8.13	17.3	9.54	0.11	990	891
12	02/21/2012	13:36	P12SW-111	18	14.1	7.91	7.78	8.64	0.19	91	10
27	02/21/2012	9:45	P12SW-122	13	11.7	8.07	52.8	9.64	0.28	18	10
15	02/21/2012	13:16	P12SW-112	18	15	7.9	25.7	8.19	0.14	1000	1127
17	02/21/2012	12:56	P12SW-113	18	13.6	8.3	20.9	9.42	0.13	36	27
19	02/21/2012	14:26	P12SW-115	20	15.4	7.98	23	8.42	0.52	6300	
20	02/21/2012	11:56	P12SW-116	16	14.7	8.38	36.9	9.87	0.08	570	410
25	02/21/2012	8:35	P12SW-120	6	13.5	8.05	5.22	8.49	0.12	100	18
26	02/21/2012	9:15	P12SW-121	11	12.4	8.14	21	9.6	0	2200	1073
30	02/21/2012	11:16	P12SW-125	15	12.8	8.23	52.7	9.18	0.16	2600	1100
29	02/21/2012	12:26	P12SW-124	17	15.5	8.15	477	10	0.02	164	27
7	02/22/2012	9:15	P12SW-107	18	14.7	7.85	6.39	9.76	0.18	4700	1236
23	02/22/2012	11:16	P12SW-118	23	15.1	7.73	25.4	9.32	0.1	640	609
22	02/22/2012	8:40	P12SW-117	16	13.7	7.43	4.31	7.83	0.05	430	782
18	02/22/2012	13:16	P12SW-114	24	0.09	8.07	298	9.88	0.09	27	45
5	02/22/2012	9:35	P12SW-105	18	15.2	7.85	20.5	8.5	0.05	460	560
24	02/22/2012	9:56	P12SW-119	19	15	7.72	15.5	8.57	0.25	340	410
8	02/22/2012	12:46	P12SW-108	23	18.6	7.71	1094	9.29	0.1	250	36
6	02/22/2012	10:26	P12SW-106	21	17	7.77	38.5	8.85	0.1	360	440
3	02/22/2012	10:56	P12SW-104	21	14.6	7.81	23.6	9.94	0.06	410	340

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Monthly Results

March 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
20	03/27/2012	12:10	GP12SW-144	24	23.2	7.88	16.8	7.16	0.18		
25	03/27/2012	8:40	GP12SW-148	19	19.9	7.7	3.12	7.86	0.12		
26	03/27/2012	8:55	GP12SW-149	20	18.7	7.85	2.04	8.63	0.2		
27	03/27/2012	10:16	GP12SW-150	21	20.2	7.82	2.21	8.84	0.16		
12	03/27/2012	13:30	GP12SW-139	26	20.5	7.57	5.58	7.38	0.32		
9	03/27/2012	9:45	GP12SW-137	21	20.1	7.8	11.2	7.67	0.13		
28	03/27/2012	10:40	GP12SW-151	22	20.8	7.68	3.82	7.45	0.15		
29	03/27/2012	12:30	GP12SW-152	24	21.4	7.95	13.1	8.64	0.07		
15	03/27/2012	1:18	GP12SW-140	27	23	7.53	26.5	6.99	0.22		
17	03/27/2012	1:05	GP12SW-141	24	20.4	8.1	10.62	9.33	0.11		
30	03/27/2012	11:30	GP12SW-153	23	21.1	7.82	15.5	7.42	0.21		
31	03/27/2012	11:20	GP12SW-154	22	20.2	7.78	11.3	7.64	0.14		
11	03/28/2012	8:40	GP12SW-138	18	20.6	7.91	6.8	8.17	0.25		
18	03/28/2012	11:10	GP12SW-142	23	21.2	8.53	29	8.76	0.21		
19	03/28/2012	11:26	GP12SW-143	23	21.9	8.4	32	8.59	0.14		
23	03/28/2012	10:46	GP12SW-146	21	21.1	7.86	14	8.02	0.18		
24	03/28/2012	9:40	GP12SW-147	20	20.4	7.72	9.5	7.47	0.19		
22	03/28/2012	8:25	GP12SW-145	18	18.9	7.55	7.4	6.36	0.19		
3	03/28/2012	10:20	GP12SW-132	21	20.3	8	8.6	8.51	0.12		
8	03/28/2012	10:56	GP12SW-136	22	20.8	7.77	8.3	7.9	0.23		
5	03/28/2012	9:20	GP12SW-133	19	19.9	8.06	3.9	7.87	0.19		
6	03/28/2012	10:06	GP12SW-134	20	20.1	7.89	55	8.42	0.09		

Monthly Results

April 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
25	04/24/2012	8:45	GP12SW-190	18	19.5	7.63	55	7	0.33		
9	04/24/2012	8:20	GP12SW-179	17	18.2	7.57	4.1	7.45	0.18		
12	04/24/2012	12:06	GP12SW-181	26	20.1	7.52	3.3	8.14	0.11		
31	04/24/2012	10:26	GP12SW-195	22	16.6	7.76	5.3	8.59	0.04		
30	04/24/2012	10:26	GP12SW-195	22	16.6	7.76	5.3	8.59	0.04		
29	04/24/2012	11:00	GP12SW-194	23	19.8	7.82	10	8.65	0.06		
28	04/24/2012	9:34	GP12SW-193	20	17.2	7.69	3.5	8	0.05		
26	04/24/2012	9:02	GP12SW-191	18	16.8	7.7	2.3	8.27	0.11		
22	04/24/2012	13:00	GP12SW-187	28	20.8	7.6	18	7.45	0.13		
17	04/24/2012	11:40	GP12SW-183	23	22.2	7.89	31	7.64	0.15		
15	04/24/2012	11:50	GP12SW-182	27	22.2	7.76	17	8.03	0.09		
20	04/24/2012	10:40	GP12SW-186	22	19.4	7.73	7.9	7.29	0.07		
27	04/24/2012	9:12	GP12SW-192	19	17.2	7.75	14	8.54	0.06		
24	04/25/2012	8:38	GP12SW-189	20	20.7	7.28	5.9	6.25	0.1		
23	04/25/2012	9:32	GP12SW-188	22	22.1	7.62	9.9	7.76	0.1		
18	04/25/2012	10:56	GP12SW-184	25	22.7	7.95	35	8.23	0.05		
11	04/25/2012	9:58	GP12SW-180	23	21.4	7.45	11	7.01	0.19		
8	04/25/2012	10:40	GP12SW-178	23	21.2	7.57	7.9	7.51	0.07		
19	04/25/2012	11:06	GP12SW-185	26	22	7.34	16	6.86	1.32		
7	04/25/2012	8:15	GP12SW-177	21	20.7	7.79	5.1	8.62	0.07		
3	04/25/2012	9:16	GP12SW-174	22	20.4	7.66	13	7.98	0.1		
6	04/25/2012	9:04	GP12SW-176	22	22.2	7.49	17	8.22	0.25		
5	04/25/2012	8:27	GP12SW-175	21	21	7.62		7.56	0.03		

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Monthly Results

May 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
9	05/22/2012	18:20	GP12SW-203	23	23	7.99	15	6.39	0.06		
28	05/22/2012	11:20	GP12SW-217	30	25.4	7.87	3.1	7.6	0.1		
27	05/22/2012	10:56	GP12SW-216	28	25.2	7.88	11	8.42	0.06		
26	05/22/2012	10:30	GP12SW-215	27	23.7	7.92	4.1	7.09	0.12		
25	05/22/2012	10:00	GP12SW-214	26	24.8	7.79	6.1	6.36	0.1		
22	05/22/2012	8:53	GP12SW-211	23	23.1	7.81	14	6.37	0.21		
11	05/22/2012	9:23	GP12SW-204	26	23.9	7.78	6	5.39	0.2		
12	05/23/2012	11:46	GP12SW-205	30	25.6	7.29	11	7.06	0.18		
15	05/23/2012	11:26	GP12SW-206	29	27.6	7.4	17	6.54	0.1		
17	05/23/2012	11:00	GP12SW-207	29	26	7.55	37	6.31	0.21		
18	05/23/2012	13:16	GP12SW-208	31	29.2	7.85	81	7.52	0.1		
20	05/23/2012	9:50	GP12SW-210	27	24.3	7.26	9.2	5.24	0.22		
8	05/23/2012	12:46	GP12SW-202	30	29.7	7.78	7	11.99	0.11		
29	05/23/2012	10:26	GP12SW-218	27	25	7.43	19	7.06	0.08		
19	05/23/2012	13:40	GP12SW-209	32	28.5	7.78	36.3	9.91	0.92		
6	05/24/2012	10:06	GP12SW-200	28	25.8	7.77	65	7.43	0.11		
7	05/24/2012	8:50	GP12SW-201	27	22.8	7.68	11.4	7.1	0.14		
3	05/24/2012	10:26	GP12SW-198	28	25.1	8	11	7.69	0.1		
5	05/24/2012	9:13	GP12SW-199	27	25.1	7.92	7.96	7.09	0.06		
24	05/24/2012	9:40	GP12SW-213	28	24.2	7.65	5.99	7.49	0.1		
23	05/24/2012	11:06	GP12SW-212	28	27.3	7.88	13	7.17	0.05		

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Monthly Results

June 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
22	06/26/2012	9:10	GP12SW-251	32	25.5	7.57	7.2	5.76	0.17		
9	06/26/2012	9:36	GP12SW-243	33	27.7	7.96	10.9	6.2	0.1		
17	06/26/2012	13:16	GP12SW-247	40	32.4	8.04	20.2	7.11	0.09		
20	06/26/2012	12:20	GP12SW-250	38	29	7.69	2.61	5.17	0.19		
25	06/26/2012	10:16	GP12SW-254	35	29.8	7.93	4.38	8.35	0.29		
26	06/26/2012	10:36	GP12SW-255	35	27	7.29	2.07	4.08	0.52		
27	06/26/2012	10:46	GP12SW-256	36	27.6	7.64	1.64	6.67	0.19		
28	06/26/2012	11:06	GP12SW-257	37	28.4	7.76	2.85	8.44	0.23		
29	06/26/2012	12:46	GP12SW-258	40	28.9	7.84	108.1	7.75	0.32		
5	06/27/2012	9:25	GP12SW-239	32	29.1	7.99	12.7	6.79	0.17		
24	06/27/2012	9:45	GP12SW-253	32	28.3	7.54	3.35	5.79	0.21		
19	06/27/2012	11:56	GP12SW-249	36	30.7	8.01	36.7	9.34	0.68		
18	06/27/2012	11:36	GP12SW-248	36	31	8.24	108.4	7.7	0.15		
15	06/27/2012	8:40	GP12SW-246	30	28.6	7.42	20.3	4.28	0.36		
12	06/27/2012	8:25	GP12SW-245	29	26.3	7.33	5.56	4.94	0.19		
11	06/27/2012	9:00	GP12SW-244	30	27.5	7.51	5.19	5.54	0.31		
23	06/27/2012	10:56	GP12SW-252	32	29.8	7.87	10.59	7.03	0.17		
3	06/27/2012	10:26	GP12SW-238	33	29.9	7.85	19.2	6.95	0.17		
8	06/27/2012	11:26	GP12SW-242	34	30.7	7.89	10.76	7.68	0.27		
6	06/27/2012	10:16	GP12SW-240	32	29.4	7.68	33.3	7	0.22		

Monthly Results

July 2012

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
9	07/25/2012	12:06	P12SW-269	34	29.7	7.82	10.79	6.45	0.26		
29	07/25/2012	10:46	P12SW-284	31	28.6	7.76	19.8	7.32	0.26		
28	07/25/2012	8:50	P12SW-283	28	27.8	7.46	2.07	7.8	0.18		
27	07/25/2012	8:35	P12SW-282	27	26.6	7.52	2.89	5.84	0.27		
25	07/25/2012	8:10	P12SW-280	27	27.7	7.33	5.69	5.64	0.24		
23	07/25/2012	13:46	P12SW-278	36	32.7	7.87	8.08	7.71	0.18		
22	07/25/2012	12:36	P12SW-277	35	28.2	7.53	46.2	5.88	0.17		
20	07/25/2012	10:16	P12SW-276	31	27.6	7.24	3.63	3.93	0.33		
17	07/25/2012	11:06	P12SW-273	33	29.8	7.82	30.8	6.78	0.1		
15	07/25/2012	11:26	P12SW-272	33	30.4	7.27	19.3	4.22	0.39		
12	07/25/2012	11:36	P12SW-271	70.3	28.3	7.33	6.95	5.4	0.15		
11	07/25/2012	13:06	P12SW-270	35	30.8	7.38	5.77	5.42	0.39		
19	07/26/2012	9:57	P12SW-275	30	28.8	7.39	49.1	3.81	2.57		
18	07/26/2012	9:45	P12SW-274	30	28.9	7.76	101.7	6.38	0.12		
3	07/26/2012	9:05	P12SW-264	30	28.5	7.72	30	6.89	0.2		
5	07/26/2012	8:05	P12SW-265	28	28.1	7.59	15.6	5.11	0.21		
6	07/26/2012	8:52	P12SW-266	29	28.5	7.46	31.2	6.62	0.32		
8	07/26/2012	9:35	P12SW-268	29	28	7.2	3.78	5.32	0.22		
24	07/26/2012	8:30	P12SW-279	28	28.1	7.31	4.85	5.99	0.28		

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APPENDIX D: Dry Weather Screening

Dry Weather Screening
Year 5
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