



City of Grand Prairie &

Dallas County Flood Control District #1

TPDES Phase II Small MS4 General Permit Annual Report

Year 4: August 13, 2010 - August 12, 2011

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List of Acronyms

BMP	Best Management Practice
CRP	Clean Rivers Program
DCFCDD	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 4 Reporting Period: August 13, 2010 – August 12, 2011

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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 4.**

No changes are proposed for the SWMP for Year 5.

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. No receiving waterbodies were newly listed on the 2008 Texas 303(d) list as impaired for the MS4. The Crockett Branch (Segment 0841V/unclassified/5b) is newly listed on the draft 2010 Texas 303(d) list for bacteria.

No 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 4 BMPs for Reducing Pollutants

Each of the Year 4 BMPs was assessed as appropriate. Table 1 describes the estimated level of effectiveness of all Year 4 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 Web site	Low	Reaches only those perusing the City’s stream monitoring Web site; 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 Web site, 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	Low	The City purchased and distributed 26 Major Rivers Educational Packets and 3 Electronic Packets to GPISD in Year 4; however, GPISD does not plan on using the material until Year 5.
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 Web site
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	Web site 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	Half Associates was contracted to review and make recommendations on the drainage and design manual
2.15	HHW Events	High	Actively allows citizens to participate and dispose of HHW properly. 1,074 residents participated in the events and ~26,300 pounds of hazardous waste products were recycled.
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 13.35 TN of litter were collected in Year 4 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. The assessment results were analyzed in Year 4
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. Training and supplies were acquired in Year 4
3.19	On Site Sewage System Permitting	Low	Only three (3) permits were given and one (1) citation was issued in Year 4
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	Moderate	Training of all department inspectors, both building inspectors and engineering construction inspectors, was completed. All construction inspectors will attend an annual training class in construction site erosion control plan inspections

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
5.3	Storm Water Design Criteria and Methods	Moderate	Policies and design criteria that integrate considerations for drainage and water quality were adopted and implemented in Year 3. The policies and design criteria were continued in Year 4
5.4	Revise Policies and Design Criteria in Unified Development Code	High	Revisions to the UDC were adopted and implemented in Year 3; revisions support water quality objectives. Implementation continued throughout Year 4
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	These signs have limited outreach capabilities
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. 315.52 TN of materials were collected and delivered to the Grand Prairie Landfill for proper disposal in Year 4
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, 3) a discussion of obstacles or challenges for a BMP, if applicable, and 4) all activities planned for Year 5 as described by the *Target Date*.

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.	1. Employ an Environmental Education Specialist who will actively seek to broaden educational opportunities within the school district and the city 2. 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.	1. 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 4.

BMP 1.2 Activities Completed

Date: 08/13/2010 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Web site link

Approximate Cost = \$0; Labor = 0.5 hours

Provided link to Clean Rivers Program on City Web site. 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 4 BMP.

BMP 1.3 Activities Completed

Date: 08/13/2010 **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 4.

Date: 08/13/2010 **Responsible Party:** Environmental Services Department

Prairie Paws Demonstration Garden

Approximate Cost = \$222.50/month to maintain; Labor = 1 hour/month

The Prairie Paws SmartsScape demonstration garden was maintained in Year 4 (Figure 1).

Figure 1: Prairie Paws Demonstration Garden



Date: 08/13/2010 **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: 08/13/2010 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Native and Adaptive Information on Web site

Approximate Cost = \$0; Labor = 0.5 hours

Posted information on Texas SmartScape on the City of Grand Prairie Storm Water Web site. According to NCTCOG's user statistics, the Texas SmartScape Web site received 285 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: 02/22/2011 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Train the Speaker SmartScape Class

Approximate Cost = \$0; Labor = 3 hours

Echo Rexroad, Sr. Environmental Specialist, attended the Train-the-Speaker SmartScape class. The class was taught by Dotty Woodson, Extension Program Specialist for the Texas AgriLife Extension Service. The class was held at the Urban Solutions Center in Dallas.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4 BMP.

BMP 1.4 Activities Completed

Date: 8/12/2011 **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

Eight (8) articles advertising HHW events and/or discussing the hazards of disposing of household hazardous waste improperly were printed in the Pipeline.

Date: 08/12/2011 **Responsible Party:** Environmental Quality Division

HHW Magnets

Approximate Cost = \$0.34 per magnet

The City distributed approximately 1,300 Household Hazardous Waste magnets in Year 4. Magnets were distributed during Household Hazardous Waste events, during which we had 1,074 participants, and were made available to visitors at the development center, during MayFest, and during complaint inspections.

Date: 08/12/2011 **Responsible Party: Environmental Services Department**

HHW Wheel Distribution

Approximate Cost = \$1,005 for 1,000 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 4 BMP.

BMP 1.5 Activities Completed

Date: 08/15/2010 and Date: 04/15/2011 **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: 03/30/2011 **Responsible Party: Solid Waste Division**

Homeowners Brochure

Approximate Cost = \$0.25/brochure; Labor = 0.5 hour/month

The City purchased English and Spanish versions of "Homeowners: Leave it a lawn!, How to save time and money and still have a beautiful yard!" brochures from NCTCOG. The brochures were distributed at the Development Center and Landfill.

Date: 07/29/2011 **Responsible Party: Solid Waste Division**

Don't Bag It! Educational Materials

Approximate Cost = \$0.50 to \$1.00/brochure; Labor = 0.5 to 10 hours/month depending on the event(s)

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

Farmers Market (3/19/11)

Spring Master Composter Training (4/14-4/16/11)
 Earth Day Fair / Lockheed Martin -GP (4/28/11)
 Arbor Day Event (4/29/2011)
 Cinco de Mayo festival (4/30/11)
 Moore Elementary Curbside Presentation (5/10/11)
 Lions Club Curbside Presentation (5/19/11)
 MayFest (5/21/2011)
 Westchester HOA Curbside Presentation (5/31/11)
 Tues. Rotary Club Curbside Presentation (6/14/11)
 Farmers Market (6/25/11)
 Friday Rotary Club Curbside Presentation (7/8/11)
 Amesbury Estates HOA Curbside Presentation (7/25/11)
 Bowles Life Center -5th Anniversary (7/29/2011)

<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 4 BMP.

BMP 1.6 Activities Completed

Date: 08/13/2010 **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: 02/15/2011 **Responsible Party: Environmental Quality Division**

Doo the Right Thing Slap Bands

Approximate Cost = \$2.69/band; Labor = 6 hours

Purchased 500 Doo the Right Thing slap bands and distributed them during MayFest 2011 to those who filled out a pledge to pick up after their dog.

Date: 05/22/2011 **Responsible Party: Environmental Quality Division**

Dog Waste Pledges

Approximate Cost = \$0.0; Labor = 6 hours

The City collected ninety-eight (98) 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.

Date: 08/12/2011 **Responsible Party: Environmental Services Department**

Pet Waste Dispensers at Parks

Approximate Cost = NA; Labor = NA

There are no new pet parks in Grand Prairie; therefore, no new dispensers were installed in Year 4.

Date: 08/12/2011 **Responsible Party: Environmental Services Department**

Pet Waste Brochures

Approximate Cost = \$0.76/brochure; 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, Pet Waste brochures were distributed at the Development Center, Memorial Library, and Prairie Paws Adoption Center.

Date: 08/12/2011 **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 Web site from Year 1 at www.gptx.org/EnvironmentalQuality/PetWaste. In addition, this video was aired on GPTV every day, twice a day from January 2011 through August 12, 2011. The video was also aired in 2010 on GPTV; however a hard drive failure deleted the logs.

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	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Distribute to at least 50% of businesses during industrial inspections		Years 1 – 5

All activities for this BMP are complete for Year 4.

BMP 1.7 Activities Completed

Date: 08/12/2011 **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 300 contacts via email.

Date: 08/12/2011 **Responsible Party: Environmental Quality Division**

H2O Line

Approximate Cost = \$582 to print; Labor = 40 hours (10 hours each)

The Environmental Quality Division created and distributed four quarterly H2O Line newsletters.

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 4 BMP.

BMP 1.8 Activities Completed

Date: 08/25/2010 **Responsible Party: Environmental Quality Division**

3rd Quarter 2010

Approximate Cost = \$1,143 for awards, \$715 for food; Labor = 20 hours

This compliance meeting was the annual award luncheon recognizing Grand Prairie industries achieving 100% compliance and pollution prevention award winners.

Date: 11/17/2010 **Responsible Party: Environmental Quality Division**

4th Quarter 2010

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

Tonya Hunter, Emergency Management Coordinator for the City of Grand Prairie, spoke on emergency management and how it relates to local businesses.

Date: 02/17/2011 **Responsible Party: Environmental Quality Division**

1st Quarter 2011

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

The topic for the 1st quarter compliance meeting was storm water discharge regulations. John Aquilino, Compliance Assistance Specialist with the TCEQ Small Business and Local Government Assistance Program, spoke on compliance issues, frequent violations, and procedures for renewing discharge permits or NECs.

Date: 06/08/2011 **Responsible Party: Environmental Quality Division**

2nd Quarter 2011

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

The topic for this meeting was spill reporting and response. State and local reporting requirements were discussed. Rod Norwood, Service Center Manager for Eagle SWS Fort Worth, discussed preparedness and response measures based on his experiences with emergency response.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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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 4.

BMP 1.9 Activities Completed

Date: 08/13/2010 Responsible Party: Environmental Quality Division

Brochures on Web Site

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 Web site since Year 2. These brochures may be found at www.gptx.org/environmentalquality/FoodService and www.gptx.org/environmentalquality/Industrial, respectively.

Date: 08/12/2011 Responsible Party: Environmental Quality Division

Brochure Distribution

Approximate Cost = \$0.49/brochure; 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.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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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 4.

BMP 1.10 Activities Completed

Date: 08/13/2010 **Responsible Party:** Environmental Quality Division

ARB BMPs on Web Site

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.

Date: 08/12/2011 **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.

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 4.

BMP 1.11 Activities Completed

Date: 05/15/2011 **Responsible Party:** Environmental Quality Division

Major Rivers Program

Approximate Cost = \$1,369.50; Labor = 1 hour

The City purchased and distributed 26 Educational Packets and 3 Electronic Packets to GPISD.

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 4 BMP.

BMP 1.12 Activities Completed

Date: 09/09/2010 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Watersheds, Stormwater, and Pollution

Approximate Cost = \$0; Labor = 4 hours

Echo Rexroad, Senior Environmental Specialist, presented "Watersheds, Stormwater, and Pollution" to three classes with approximately 30 students each. She demonstrated the EnviroScape and taught the students how to label storm drains.

Date: 01/29/2011 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Trinity River Watershed Conference 2011

Approximate Cost = \$0; Labor = 3 hours

Echo Rexroad, Senior Environmental Specialist, presented "Stormwater/Point-Nonpoint Pollution" during the Trinity River Watershed Conference held at the South Grand Prairie High School. Echo performed a PowerPoint presentation to two classes (~30 students each) and demonstrated the EnviroScape during the presentations (Figure 2).

Figure 2: EnviroScape at the Trinity River Watershed Conference in 2011



Date: 04/02/2011 ***Responsible Party: Environmental Quality Division***

Cub Scouts Day

Approximate Cost = \$0; Labor = 4 hours

The City demonstrated the EnviroScape at a Cub Scout Fun Day at Camp Wisdom. Approximately 300 kids were in attendance.

Date: 04/29/2011 ***Responsible Party: Environmental Quality Division***

Arbor Day

Approximate Cost = \$0; Labor = 3 hours

The City held an Arbor Day festival at the Summit. Approximately 590 5th grade students and ~ 400 adults attended. Free trees were given to participants for planting and the EnviroScape was demonstrated.

Date: 05/21/2011 ***Responsible Party: Environmental Quality Division***

MayFest 2011

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 2011.

Date: 8/12/2011 ***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.

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 4 BMP.

BMP 1.13 Activities Completed

Date: 08/12/2011 **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 4. Eight (8) Pipeline articles contained information on Household Hazardous Waste issues and events and two (2) contained information on how to properly handle grass clippings. The Pipeline is distributed to ~44,000 households in Grand Prairie via the utility bill.

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

The City exceeded the goals for this Year 4 BMP.

BMP 1.14 Activities Completed

Date: 05/31/2011 **Responsible Party: Environmental Quality Division**

Watershed Sign Installation

Approximate Cost = \$720/six signs, \$428/equipment; Labor = 14 hours

Six (6) new signs were installed within the following watersheds: Johnson Creek, Kirby Creek, Bear Creek, Fish Creek, Cottonwood Creek, and Dalworth Creek (Figure 3).

Figure 3: Watershed Sign



<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 Web site and post		Year 2
		3. Provide and maintain Storm Water Pollution Prevention information on the city's Web site		Years 3 – 5

The City exceeded the goals for this Year 4 BMP.

BMP 1.15 Activities Completed

Date: 08/13/2010 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Web Site Information

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

Created and posted stormwater educational material for Environmental Quality Web site in Year 1 (Figure 4). 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 Web site was redesigned in Year 2 and was maintained in Years 3 and 4. The address to this Web site is: www.gptx.org/EnvironmentalQuality/Stormwater.

Figure 4: Stormwater Web Site



Date: 04/21/2011 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Ruthe Jackson Show

Approximate Cost = \$0; Labor = 4 hours/show (includes set up, shooting, and editing)

Echo Rexroad was a guest on the Ruthie Jackson Show, airing in April 2011. Echo spoke about MayFest: A Celebration of the Trinity River

and the importance of being aware of water quality issues.

Date: 08/07/2011 **Responsible Party: Environmental Services Department**

Green GPTV

Approximate Cost = \$0; Labor = 8 hours/show (includes set up, shooting, and editing)

"Green Grand Prairie" spotlights environmental endeavors and issues throughout Grand Prairie. Shows discuss issues such as recycling, water quality, Adopt-a-Stream, illegal dumping, rain barrel classes, household hazardous waste, and composting. In Year 4, "Green Grand Prairie" shows were aired approximately 200 times.

Date: 08/12/2011 **Responsible Party: Environmental Quality Division**

PSA Videos on GPTV

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

The "Doo the Right Thing" video was aired on GPTV every day, twice a day from January 2011 through August 2011. The video was also aired in 2010 on GPTV; however a hard drive failure deleted the logs. In addition, the City purchased other videos to play on GPTV (i.e. Fats, Oils, and Grease, Leave it on the Lawn, Automotive Fluids, etc.), but the hard drive failure deleted these videos from the system. They will be restored for Year 5.

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 4 BMP.

BMP 1.16 Activities Completed

Date: 08/13/2010 **Responsible Party: Environmental Quality Division**

Spanish Brochures

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

Well over 25% of the stormwater educational materials distributed by the City are translated into 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 4 BMP.

BMP 1.17 Activities Completed

Date: 01/21/2011 **Responsible Party: Environmental Quality Division**

Auto Watch - Volume 5, Issue 1

Approximate Cost = \$600 for 550 to print, \$300 to mail; Labor = 60 hours

Volume 5, Issue 1, Winter 2010-2011, Auto Watch newsletter given to automotive businesses in Grand Prairie explaining new local automotive regulations and other pertinent topics. English and Spanish versions were made available.

Date: 07/14/2011 **Responsible Party: Environmental Quality Division**

Auto Watch - Volume 5, Issue 2

Approximate Cost = \$745.50 for 700 to print, \$300 to mail; Labor = 60 hours

Volume 5, Issue 2, Summer 2011, 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 4 BMP.

BMP 1.18 Activities Completed

Date: 08/28/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Community Art Program Installations Related to Watershed Awareness

Approximate Cost = Convergent sculpture was \$69,594 plus \$4,000 for installation; the Willow Tree sculpture was approximately \$425,800, including installation and artist fees

The City's Community Art Program, which is coordinated by Keep Grand Prairie Beautiful, unveiled two new art projects that helped to educate the public about the importance of protecting our watersheds. The sculpture titled "Convergent" by Austin artist Damian Priour was fashioned from Texas Shell Limestone columns and shelves that are interspersed with 1 inch glass plates. The sculpture is a metaphor for the Trinity River with the Limestone columns and glass representing a waterfall with outcroppings.

The sculpture "Willow Tree" by San Francisco/Paris artists Andy Cao and Xavier Perrot, is situated in the midst of a stormwater retention pond. Willow trees can often be found near sources of water. The pond and the tree both serve the purpose of beautifying the space and reminding our community to care for our water.

Date: 09/17/2010 Responsible Party: City Manager's Office, Special Projects Coordinator

Community Garden Education About Organic Fertilizers

Approximate Cost = \$139.84; Labor = 5 hours

Keep Grand Prairie Beautiful sponsors a Community Garden Program. Each community garden meets monthly to learn more about gardening and to plan projects. Each community garden was given a presentation related to non-point stormwater pollution prevention as it relates to fertilizers. Explanations were given related to the importance of timing fertilization (so as not to fertilize prior to a rain) and to use the proper amount of fertilizer. We also discussed the importance of conducting soil tests to see what nutrients were needed. All gardens received education about the benefits of using compost as an organic fertilizer and other about organic fertilizers that are slow release formulas.

Date: 10/15/2010 Responsible Party: City Manager's Office, Special Projects Coordinator

KGPB Booth at the Senior Citizens Expo

Approximate Cost = NA, (previous purchase); Labor = 5 hours

Keep Grand Prairie Beautiful sponsored a booth at the 1st Annual 50+ Expo for Senior Citizens at the Summit. The booth included information about our litter prevention programs, including our Adopt-A-Street and Adopt-A-Stream programs.

Date: 10/15/2010 Responsible Party: City Manager's Office, Special Projects Coordinator

Fall 2010 ShadeMakers Class

Approximate Cost = \$362.50; Labor = 15 hours

Fall 2010 ShadeMakers Community Forestry Class hosted by Keep Grand Prairie Beautiful: Three day class that educates residents about the importance of trees. We cover how trees can filter stormwater pollution, capture rainwater and how their roots can help prevent stream bank erosion. We teach how to select the right trees for our soils and how to properly plant and care for the trees. We also teach about composting and that fertilizers can runoff in to the streams and create problems. Six (6) participants took this three-day class that ran from 10/15/2010 to 10/17/2010.

Date: 12/28/2010 Responsible Party: City Manager's Office, Special Projects Coordinator

Cable Television Taping - Hart to Heart Show

Approximate Cost = \$0; Labor = 5 hours

KGPB Litter Prevention Programs were highlighted on the City's Hart to Heart program with City Manager Tom Hart. The episode is running perpetually via the City's Web site.

Date: 05/01/2011 Responsible Party: City Manager's Office, Special Projects Coordinator

Spring 2011 ShadeMakers Community Forestry Class

Approximate Cost = \$275.31; Labor = 26 hours

Three day class that educated residents about the importance of trees. We covered how trees can filter stormwater pollution, capture rainwater, and how their roots can help prevent stream bank erosion. We taught how to select the right trees for our soils and how to properly plant and care for the trees. We also taught about composting and that fertilizers can runoff into the streams and create problems. 19 participants took this three-day class that ran from 04/28/11 to 05/01/11.

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.	<ol style="list-style-type: none"> 1. Create or find brochure and/or link on construction BMPs and erosion control requirements 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 	<p>Environmental Services Department, Environmental Quality Division</p> <p>Planning and Development Department and Environmental Services Department</p>	<p>Year 2</p> <p>Years 2– 5</p>

All activities for this BMP are complete for Year 4.

BMP 1.19 Activities Completed

Date: 08/13/2010 **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>) Web sites. "Preventing Stormwater Pollution at Construction Sites" brochures were available at the Development Center, on the Environmental Quality Division's Stormwater Web site (www.gptx.org/EnvironmentalQuality/Stormwater), and on Engineering's Construction General Permit & BMP FAQ Web site (<http://www.gptx.org/index.aspx?page=1296>).

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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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
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There are no required activities listed for this BMP for Year 4; however, the City continued this activity in Year 4.

BMP 1.20 Activities Completed

Date: 08/13/2010 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Stormwater Web Site

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

Created and posted stormwater educational material for Environmental Quality Web site 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 Web site was redesigned in Year 2 and was maintained in Years 3 and 4. The address to this Web site is: www.gptx.org/EnvironmentalQuality/Stormwater.

Date: 08/13/2010 **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.

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 4; however, the City continued this activity in Year 4.

BMP 1.21 Activities Completed

Date: 08/13/2010 **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

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 Web site and at the Environmental Services Department office	Environmental Services Department, Environmental Quality Division	Years 1 – 5
		2. Make presentations to applicable city council committees		Year 1

All activities for this BMP are complete for Year 4.

BMP 2.1 Activities Completed

Date: 08/13/2010 ***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: 08/13/2010 ***Responsible Party: Environmental Quality Division***

SWMP and Survey on Web Site

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

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 4.

BMP 2.2 Activities Completed

Date: 01/19/2011 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Phase I with Dubiski High School

Eight (8) students and one (1) teacher from Dubiski High School completed Phase I of Texas Stream Team training.

Date: 01/27/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Phase II with Dubiski High School

Four (4) students from Dubiski High School completed Phase II of Texas Stream Team training.

Date: 03/10/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Phase III with Dubiski High School

Four (4) students from Dubiski High School completed Phase III of Texas Stream Team training.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 2.3 Activities Completed

Date: 04/08/2011 **Responsible Party: Solid Waste Division**

Master Composter Classes

The Solid Waste Division conducted the following Master Composter classes in Year 4:

Fall 2010 (October 7-9, 2010) - 18 participants

Spring 2011(April 6-8, 2011) - 28 participants.

Date: 04/08/2011 **Responsible Party: Solid Waste Division**

Master Composter Educational Materials

The Solid Waste Division distributed Rodale's Composting Book and the TCEQ Green Guide to Yard Care to at least 46 master composter participants in Year 4.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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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
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All activities for this BMP are complete for Year 4.

BMP 2.4 Activities Completed

Date: 08/12/2011 **Responsible Party:** Environmental Quality Division

Storm Drain Markers

Grand Prairie High School, Cub Scout Pack 504, and City Staff participated in storm drain labeling using "Don't Dump" markers. A total of 112 storm drains were labeled during Year 4.

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 4.

BMP 2.5 Activities Completed

Date: 05/21/2011 **Responsible Party:** Environmental Quality Division

Stream Simulator

Cassius McAlister with Tarrant County demonstrated the stream simulator during MayFest 2011.

Date: 05/21/2011 **Responsible Party:** Environmental Quality Division

MayFest Survey

During MayFest 2011, 37 surveys were collected in order to evaluate the success of the event.

Date: 05/21/2011 **Responsible Party: Environmental Quality Division**

MayFest 2011

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.

Article in April Pipeline:

MayFest Educational Event:

Each year the GPISD and City of Grand Prairie co-host this FREE educational event that focuses on water quality issues. This year's event will take place on Saturday, May 21st from 10am to 4pm at the Summit at Central Park - 2975 Esplanade. MayFest goers will enjoy a wide variety of aquatic and wildlife demonstrations, Country Critters Petting Farm, the Eco Shopping Game, Wildlife on the Move, Purple Martin Landlords, rainwater harvesting, Master Composters, water quality exhibits, monitoring, and conservation tips, a recycle relay, Prairie Paws pet adoption information, kids arts and crafts, GPISD musical and dramatic performances, and other programs. Enjoy arts and crafts vendors, festival foods, and more!!! For more information contact Tracy Hollis at tracy.hollis@gpisd.org.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 Web site.	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
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All activities for this BMP are complete for Year 4.

BMP 2.7 Activities Completed

Date: 08/13/2010 **Responsible Party: Code Enforcement Division**

Code Enforcement Web Site

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

"Illegal Dumping Hotline: 972-237-8064"

Date: 08/13/2010 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Stormwater Web Site

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."

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 4.

BMP 2.8 Activities Completed

Date: 04/27/2011 **Responsible Party: Environmental Quality Division**

Renewal of Small MS4

Cindy Mendez, Echo Rexroad, Brent Redd, T Sury, and Andrew Krentz, all with the Environmental Quality Division, attended a Webinar hosted by the TCEQ. The topic was "Renewal of Small Municipal Separate Storm Sewer System (MS4) General Permit TXR040000." The

MS4 permit was discussed among the attendees following the Webinar.

Date: 05/04/2011 **Responsible Party: Environmental Quality Division**

Upper Trinity TMDL Project

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). Topics included TMDL basics and impacted local waters, TCEQ expectations for implementation plan development, project scope and activities for 2011 and beyond, and stakeholder opportunities for involvement.

Date: 05/17/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Trinity River Watershed Meeting: West Fork and Elm Fork Watersheds

Echo Rexroad attended this watershed meeting held by North Central Texas Council of Governments (of which the City is a member). Topics of interest included: TMDLs for bacteria, Trinity River COMMON VISION, stormwater management and iSWM, and wastewater planning.

Date: 08/11/2011 **Responsible Party: T Sury, Environmental Specialist**

NCTCOG TMDL Stakeholder Meeting

T Sury attended a TMDL Stakeholder meeting held by NCTCOG. Dania Grundmann discussed "Fish Consumption Use Impairments on Clear Fork, West Fork and Upper Trinity River" and "Total Maximum Daily Loads for PCBs in the Trinity River."

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4 BMP.

BMP 2.9 Activities Completed

Date: 08/14/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

3rd Quarter Adopt-A-Street Cleanups

Adopt-A-Street volunteers participated in 3rd quarter Adopt-A-Street cleanups.

Date: 10/02/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Fall Trash Off and 4th Quarter Adopt-A-Street Cleanups

Adopt-A-Street Groups conducted their 4th Quarter Adopt-A-Street cleanups. Most groups cleaned up in a group effort called the "Fall Trash-Off." Other groups completed their cleanups between October 1 - December 31, 2010.

Date: 10/23/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Trinity Trash Bash Watershed Awareness Event

Keep Grand Prairie Beautiful sponsored a Trinity Trash Bash Watershed Awareness Event for a Girl Scout Troop. The event featured

Council Member Ruthe Jackson speaking on volunteerism, Shannon Davis, a reporter speaking on the need to protect the Fish Creek watershed and fossils there, and Bob Horton, a representative of the Trinity River Environmental Education Society (T.R.E.E.S.) which sponsors the Trinity Trash Bash regionally.

Date: 10/30/2010 **Responsible Party:** City Manager's Office, Special Projects Coordinator
Kirby Creek and Fish Creek Cleanup

Keep Grand Prairie Beautiful's Adopt-A-Stream program sponsored a cleanup of Fish Creek in partnership with the North Texas River Runners and Boy Scouts.

Date: 11/18/2010 **Responsible Party:** City Manager's Office, Special Projects Coordinator
Mountain Creek Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of Mountain Creek with students from Dubiski Career and Technical High Schools Skills USA/VICA program.

Date: 02/12/2011 **Responsible Party:** City Manager's Office, Special Projects Coordinator
1st Quarter Adopt-A-Street Cleanups

Adopt-A-Street Groups completed their 1st Quarter cleanups between January 1 and March 31, 2011.

Date: 04/02/2011 **Responsible Party:** City Manager's Office, Special Projects Coordinator
Spring Trash-Off and 2nd Quarter Adopt-A-Street Cleanups

Adopt-A-Street Groups completed their 2nd Quarter Adopt-A-Street Cleanups. Most groups participated in a joint cleanup called the Spring Trash-Off on Saturday, April 2, 2011. Other groups completed their cleanups between April 1 - June 30, 2011.

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 4 BMP.

BMP 2.10 Activities Completed

Date: 10/04/2010 **Responsible Party:** City Manager's Office, Special Projects Coordinator

Creation of the Bush Neighborhood Association

On Monday, October 4, 2010, Keep Grand Prairie Beautiful initiated the process of setting up a new Neighborhood Association in the Bush Elementary area. As part of this effort, Special Projects/Keep Grand Prairie Beautiful Program Manager Tammy Chan, spoke to the neighborhood about the Clean & Beautiful Neighborhood Program, which includes the following resources related to keeping watersheds and stormwater clean:

- Adopt-A-Street
- Adopt-A-Stream
- Litter Free Hotline
- Illegal Dumping Hotline
- ShadeMakers Citizen Forestry Program
- Weed & Seed Litter Collection Program
- Community Garden Program
- Compost 101 Classes

The residents subsequently voted to start a Neighborhood Association as well as a neighborhood community garden.

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

Beacon Hill HOA Adopt-A-Stream Cleanup

Members of the Beacon Hill Homeowner's Association participated in an annual Adopt-A-Stream cleanup of the Rodger's Branch - a creek that flows through their neighborhood.

Date: 03/19/2011 **Responsible Party:** City Manager's Office, Special Projects Coordinator

Amesbury Estates Adopt-A-Stream Cleanup

Keep Grand Prairie Beautiful sponsored an Adopt-A-Stream Cleanup with residents from the Amesbury Estates Adopt-A-Stream group. There was less trash than the previous cleanups.

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

The City exceeded the goals for this Year 4 BMP.

BMP 2.11 Activities Completed

Date: 09/27/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
2010-2011 Green & Clean Campus Kick-Off

Keep Grand Prairie Beautiful sponsored a Kick-Off event for our 2010-2011 Green & Clean Campus program. Teachers and principals from 37 campuses attended and learned about the resources and programs we have to offer for the schools' environmental education efforts. They were educated by the City Manager's Office on the TEKS correlated curriculums, including Jr. Master Composter, Jr. Master Gardener, National Wildlife Federation's School Yard Habitat Program, GO GREEN Schools, 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: 10/19/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Litter Hurts Presentation to EarthForce at Jackson Middle School

Tammy Chan, Special Projects/Keep Grand Prairie Beautiful Manager presented a PowerPoint about floatable litter called "Litter Hurts" to students participating in the after school EarthForce environmental program at Jackson Middle School.

Date: 10/25/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Green & Clean Campus Coordinators Meeting

Keep Grand Prairie Beautiful sponsored a meeting of the Green & Clean Campus Coordinators. The meeting included planning for Texas America Recycles Day, determining which schools want to use KGPB's Trash Can and Water Drop mascots for their events and discussing the Junior Master Composter Training Class on October 30, 2010.

Date: 10/30/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Green & Clean Campus Junior Master Composting Workshop

Keep Grand Prairie Beautiful's Green & Clean Campus program sponsored a Junior Master Composter training for GPISD teachers. The training was hosted at Barbara Bush Elementary and including information about fertilizers in stormwater runoff as well as the opportunity to build a compost pile. Each participant also got to make and take a Vermicompost (worm compost) bin.

Date: 11/04/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Outdoor Learning Area Education Event at Marshall Elementary

KGPB and the Grand Prairie Independent School District partnered with Real School Gardens to host an education event featuring the outdoor learning garden we worked together to build at Marshall Elementary. The outdoor learning area features a pond for aquatic studies and a stream table for erosion studies.

Date: 11/12/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Zavala Slant 45 Recycling Event

After seeing Keep Grand Prairie Beautiful's "Litter Hurts" presentation showing the impact of floatable litter on watersheds, Zavala Elementary's Green & Clean Campus Green Team hosted an event in the evening to get their parents to sign pledge cards to recycle. They also distributed recycling bins provided by the City's Recycling Division. This was part of their Texas/America Recycles Day programming and also their entry to the National Football League's Slant 45 Service Learning promotion.

Date: 11/12/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Zavala Elementary Floatable Litter Prevention Presentation

Special Projects Manager, Tammy Chan, who manages the Keep Grand Prairie Beautiful Program, spoke to the entire student body of Zavala Elementary about litter and how it impacts our environment with a special focus on floatables to tie in with Texas America Recycles Day (November 15, 2010).

Date: 11/18/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Dubiski High School Adopt-A-Stream Cleanup

Keep Grand Prairie Beautiful's Green & Clean Campus and Adopt-A-Stream Programs sponsored a cleanup of Mountain Creek with students participating in the Skills USA/VIC program at Dubiski Career and Technology High School.

Date: 11/19/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Benefits of School Gardening Workshop

Keep Texas Beautiful and Keep Grand Prairie Beautiful hosted a workshop for teachers and other Keep City Beautiful programs about the benefits of school gardening, which include opportunities to teach about organic gardening, composting, vermicomposting, aquatic science, and much more. Information about teaching the concept of erosion was also included.

Date: 03/18/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Teeples Homeschool Junior Master Gardener Presentation

Keep Grand Prairie Beautiful's Community Garden Program sponsors several Junior Master Gardener Programs. Members of the Teeples Homeschool Junior Master Gardener Program made presentations about what they were learning about (i.e., composting, organic gardening, cleaning up) to the Lockett Community Garden and Tree Farm in the Dalworth Neighborhood garden meeting.

Date: 04/18/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Bush Elementary Earth Day Event

Students and staff at Barbara Bush hosted an Earth Day event featuring a lesson on stormwater runoff and erosion using their stream table built by an Eagle Scout. Community members from the Bush Neighborhood Association also helped with a cleanup of the outdoor habitat.

Date: 05/04/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Powell Elementary Litter Hurts Presentation

Special Projects/Keep Grand Prairie Beautiful Manager, Tammy Chan, gave a "Litter Hurts" PowerPoint presentation to students and faculty at Powell Elementary. The students then participated in a recycling fashion show demonstrating new uses for floatables litter.

Date: 06/01/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Green & Clean Campus End of 2010-2011 School Year Recognition Event

Keep Grand Prairie Beautiful and the Grand Prairie Independent School District recognized teachers' and schools' environmental accomplishments at an appreciation event on at The Oasis - a floating restaurant. The schools organized litter collection, stream cleanup, recycling, and education events for the students, faculty, and families throughout the school year.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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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 4 BMP.

BMP 2.12 Activities Completed

Date: 09/10/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Jeldwen Clean Company Project

Jeldwen, a Grand Prairie-based window and door manufacturer, and Clean Company member brought their employees out to the Luckett Community Garden and Tree Farm to build compost piles with sawdust as a carbon material, help fix a drainage problem, and install a new component to the Tree Farm. As a Clean Company member, Jeldwen recycles production waste within their plant and has a litter container in the front of their business.

Date: 09/26/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
First Presbyterian Church Garden Committee

The First Presbyterian Church of Grand Prairie formed a committee to plan a Community Garden at the Church. After much discussion, the church agreed to partner with Keep Grand Prairie Beautiful's Community Garden program which requires gardens to compost and use organic fertilizers as well as host monthly garden support meetings where these topics can be discussed regularly.

Date: 11/13/2010 **Responsible Party: City Manager's Office, Special Projects Coordinator**
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. Girl Scout Troop 3217 volunteered 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: 03/10/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Lockheed Martin Adopt-A-Stream Cleanup

Lockheed Martin Missiles and Fire Control employees conducted their annual Adopt-A-Stream Cleanup on March 20, 2011. They cleaned floatable litter out of the South fork of Cottonwood Creek Watershed.

Date: 04/23/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**
Clean Company Earth Day E-Waste Collection Event

Keep Grand Prairie Beautiful's Clean Company program sponsored an E-Waste Collection event for participating companies. This event is part of our overall encouragement for the companies to recycle. The event was also open to the public.

Date: 04/23/2011 **Responsible Party: City Manager's Office, Special Projects Coordinator**

Clean Company Trash Can Distribution for Earth Day

Keep Grand Prairie Beautiful distributed seven waste receptacles along Main Street for the pedestrian traffic visiting our local business to place their litter. Keep Grand Prairie Beautiful's Weed & Seed Job Training Program empties the trash cans every week.

Date: 04/28/2011 **Responsible Party: Environmental Quality Division**

Lockheed Martin MFC Earth Day

T Sury and Brent Redd, Environmental Specialist, attended the Lockheed Martin MFC Earth Day to distribute stormwater educational materials to employees. They distributed pet waste brochures, doggie waste bags, stormwater brochures, and information on how to become involved in Texas Stream Team.

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 4; however, the City continued this activity in Year 4.

BMP 2.13 Activities Completed

Date: 05/21/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

"It's in the Air!" Art Contest

An art contest was held for all Grand Prairie ISD students. 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. Winners also received gift cards.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 2.14 Activities Completed

Date: 08/12/2011 **Responsible Party: Engineering Division**

Request for Drainage and Design Comments

In our consultant Halff Associates preparation of the 2008 update to the Drainage Design Manual, the review services of Espey Consultants, Inc. was requested on September 30, 2008 to review the drainage policies and drainage manual and make recommendations. Tom Mountz, P.E. with Espey Consultants provided comments to the city on October 3, 2008 by email to Romin Khavari, P.E. City Engineer. These comments were forwarded to Halff Associates, our consultant in charge of the 2008 Drainage Design Manual update for review and with any warranted revisions to be incorporated into the manual update. The 2008 Drainage Design Manual update was released to the development and consultant community on December 4, 2008.

In the preparation of the 2009 update to the Drainage Design Manual, review comments were received from Halff Associates, URS Corporation, AECOM, and the Texas Water Development Board. Comments from these environmental consultants were reviewed and any warranted revisions were incorporated into the manual update. The approved 2009 Drainage Design Manual updated was released to the development and consultant community on November 20, 2009.

In our 2010 update of the Drainage Design Manual we requested comments from Tom Mountz, P.E. with Espey Consultants, Kelly Dillard, P.E. from Freese and Nichols, Richard Albin, P.E. from URS Corporation, Edward Gutierrez, P.E. from JEA Hydo Tech Engineering, and Stephen Crawford, P.E. from Halff Associates. Warranted revisions were incorporated into the 2010 update. The 2010 Drainage Design Manual update was released to the development and consultant community on December 16, 2010.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4 BMP.

BMP 2.15 Activities Completed

Date: 08/13/2010 **Responsible Party: Environmental Quality Division**

Contract with Fort Worth ECC

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

during HHW events to the collection center.

Date: 08/12/2011 **Responsible Party:** Environmental Quality Division

HHW Events

The Environmental Quality Division held nine (9) Household Hazardous Waste events in Year 4. During this time 1,074 residents participated in the events and ~26,300 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 4.

BMP 2.16 Activities Completed

Date: 08/25/2010 **Responsible Party:** Environmental Quality Division

2010 Annual Compliance Awards

Companies received an award for compliance with effluent limits, reporting requirements, storm water regulations, and cross connection requirements. These companies were recognized for 100% compliance for the 2009-2010 pretreatment year: ABC Compounding, American Eurocopter, DeLaval Manufacturing, International Paper Box Plant, Lockheed Martin Missiles & Fire Control – LOSAT, Neos Therapeutics, Pepsico, Pratt & Whitney Inc. - 1174, Pratt & Whitney Inc. - 1177, Siemens Industry, Inc., Smurfit-Stone, Specialty Adhesives, Strayer Voigt, Triumph Accessory Services - Grand Prairie, Turbomeca-USA, and Microturbo, Inc.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 2.17 Activities Completed

Date: 08/13/2010 **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 530 contacts using a maintained mailing list. This list is made up of English and Spanish speaking contacts.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4; however, the City continued this activity in Year 4.

BMP 2.18 Activities Completed

Date: 07/09/2011 ***Responsible Party: Public Works Department***
Rain Barrel Classes

The City held three (3) Rainwater Harvesting classes in Year 4: 1) September 14, 2010 – 46 barrels made- 55 attended, 2) April 9, 2011- 55 barrels made- 62 attended (Farmer’s Market), and 3) July 9, 2011- 20 barrels made - 16 attended (Farmer’s Market).

MCM 3: Illicit Discharge Detection & Elimination

A list of allowable non-stormwater discharges was *not* developed. *No* SWMP changes are needed to meet local controls, conditions, and/or programs being established for non-stormwater discharge.

<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 4.

BMP 3.1 Activities Completed

Date: 08/10/2011 **Responsible Party:** GIS Division

Year 4 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. New outfalls are added as they are constructed.

<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 4.

BMP 3.2 Activities Completed

Date: 08/13/2010 **Responsible Party:** Environmental Quality Division

Garrison

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

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4 BMP.

BMP 3.3 Activities Completed

Date: 08/12/2011 **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 4. The average response time for complaints in Year 4 was 1.5 days. Thirty-seven (37) spills and twenty-eight (28) 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 4.

BMP 3.4 Activities Completed

Date: 08/12/2011 **Responsible Party: Cheri Hebison, Sr. Environmental Specialist**
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, 2012.

Date: 08/12/2011 **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 4 BMP.

BMP 3.5 Activities Completed

Date: 08/12/2011 **Responsible Party: Environmental Quality Division**

Certificate of Occupancy Inspections

The Environmental Quality Division received 619 Certificate of Occupancy applications in Year 4. 100% of the COs with the potential to impact stormwater were inspected for water quality hazards.

Date: 08/12/2011 **Responsible Party: Terri Blocker, Senior Environmental Specialist**

Plans Reviewed

The Environmental Quality Division received 378 Building Projects in Year 4. 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 4.

BMP 3.6 Activities Completed

Date: 08/12/2011 **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 4 is attached in Appendix C. A few areas of concern were identified after the sampling results were obtained. This information was used to more closely examine the areas in the respective watersheds and identify unauthorized discharges. Table 2 is a summary of the actions taken to mitigate atypical stream sampling results.

Table 2: Atypical Stream Sampling Results

DATE	LOCATION	PARAMETER	VALUE	RESOLUTION
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2/23/11	Site 22 – Crockett Branch @ Brannon	Ammonia	2.37 mg/L	There were no reported SSO's in the area. Re-sampled on 2/25/11 and found ammonia readings had come down to 0.4 mg/L. The ammonia levels remained low in March 2011 and subsequent months. The high value may have been due to a one time discharge from a restaurant/grocery store upstream.
6/20/11	Site 19- Mountain Creek @ Singleton	Ammonia	1.76 mg/L	This was investigated with the help of TRA personnel as this site is at the entrance to their facility. There were no SSO's in the area. Per TRA personnel, this may be related to the dewatering from the construction of Water / Waste water lines in the area by Dallas Water Utilities. The readings had come down to an acceptable level of 0.42 mg/L in the July sampling on 7/19/11.

Additional Information:

- 1) On August 9, 2011, Grand Prairie Water Utilities found approximately 30 dead fish (minnows and shad) in Arbor Creek while investigating an SSO of nearly 500 gallons. This creek was previously removed from the City's routine stream monitoring as there was no flow during most of the year. (The change in flow rate was due to the change in drainage patterns that resulted from the construction of Hwy 161.) There was no in flow in the creek on August 9, 2011. It was determined that this fish kill was due to the drought, heat, and lack of oxygen, not the SSO. TCEQ was notified of the fish kill.
- 2) Turbidity readings in downstream sites are generally showing an improving trend. The majority of construction activities related to Hwy 161 are now below ground level. This may be a contributing factor towards this trend.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4

BMP 3.7 Activities Completed

Date: 08/13/2010 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.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4

BMP 3.8 Activities Completed

Date: 10/14/2010 ***Responsible Party: Environmental Quality Division***

New Employee Orientation

Presented "Preventing Storm Water Pollution: What We Can Do" video to 11 new City employees during the New Employee Orientation.

Date: 06/28/2011 ***Responsible Party: T Sury, Environmental Specialist***

NCTCOG Training Video

Presented applicable sections of "Municipal Employee Training Series. Preventing Storm Water Pollution: What We Can Do" video to 4 Airport Staff on 6/1/11, 11 Landfill Staff on 6/10/11, and 63 Streets Staff on 6/28/11. These videos were created by NCTCOG. Airport Staff viewed the Parks and Grounds Maintenance section of the video, the Landfill Staff viewed the Solid Waste Management section, and the Streets staff viewed the Streets and Drainage Maintenance section.

Date: 07/28/2011 ***Responsible Party: Environmental Quality Division***

IDDE Training

Gregg Kidd (Senior Environmental Technician), Brent Redd (Environmental Specialist), and Andrew Krentz (Environmental Specialist) attended the Dry Weather Field Screening Workshop held by NCTCOG. Gregg Kidd and Brent Redd attended on June 22, 2011 and Andrew Krentz attended on July 28, 2011.

Date: 08/12/2011 ***Responsible Party: Environmental Quality Division***

City Facility Posters

"Preventing Stormwater Pollution: What We Can Do" posters were purchased from NCTCOG in Year 2. Posters were designed to address specific City functions such as: Fleet Maintenance, Material Storage and Spill Cleanup, Parks and Grounds Maintenance, Streets and Drainage Maintenance, Land Disturbances, and Solid Waste Operations. Posters were distributed to applicable City facilities for display in Year 2 and remained at these facilities throughout Years 3 and 4.

Date: 08/12/2011 **Responsible Party:** Environmental Quality Division

ARB Posters

Environmental Specialist 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: 08/12/2011 **Responsible Party:** Environmental Quality Division

Illicit Discharge Brochures

Stormwater educational materials addressing illicit discharges were distributed throughout Year 4. 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.

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 4.

BMP 3.9 Activities Completed

Date: 08/12/2011 **Responsible Party:** Environmental Quality Division

Implemented Stormwater Ordinance

The Stormwater Ordinance was implemented in Year 4. Multiple citations, summonses, and Notice of Violations were issued as a result of stormwater violations discovered throughout Year 4.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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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 4 BMP.

BMP 3.10 Activities Completed

Date: 08/10/2011 **Responsible Party: Cindy Mendez, Environmental Quality Manager**
MSGP Renewal Letter

Cindy Mendez, Environmental Quality Manager, sent letters to 238 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: 08/10/2011 **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 4.

BMP 3.11 Activities Completed

Date: 08/12/2011 **Responsible Party:** Environmental Quality Division

Floatables Enforcement

Environmental Specialists issued Notice of Violations and citations for floatables during inspections and complaint investigations in Year 4 of the permit.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 3.12 Activities Completed

Date: 08/12/2011 **Responsible Party:** Solid Waste Division

Litter Collection

Throughout Year 4, 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 13.35 TN of litter in Year 4.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 3.13 Activities Completed

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

Illegal Dumping Response

The City responded to 90 illegal dumping complaints in Year 4. 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).

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4.

BMP 3.14 Activities Completed

Date: 08/13/2010 ***Responsible Party: Environmental Quality Division***

Floatables Data

Data collected from the floatables assessment conducted on 2/6/10 and 2/27/10 revealed an average of 75% and 65% recyclable materials, 45% and 30% fast food/grocery store materials, and 85% and 90% residential materials, respectively. Specific chains of fast food restaurants were identified and will be the focus of education and enforcement efforts in Year 5.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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 4.

BMP 3.15 Activities Completed

Date: 03/30/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Emergency Planning Meeting: SSO SOPs

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.

Date: 07/28/2011 **Responsible Party: Environmental Quality Division**

IDDE Training

Gregg Kidd (Senior Environmental Technician), Brent Redd (Environmental Specialist), and Andrew Krentz (Environmental Specialist) attended the Dry Weather Field Screening Workshop held by NCTCOG. Gregg Kidd and Brent Redd attended on June 22, 2011 and Andrew Krentz attended on July 28, 2011. (See also BMP 3.8).

Date: 07/29/2011 **Responsible Party: Environmental Quality Division**

Dry Weather Screening

In Year 4, 189 of 715 or 26% 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.

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 4.

BMP 3.16 Activities Completed

Date: 06/20/2011 **Responsible Party:** Environmental Quality Division

Joe Pool Lake Inlet Sampling

Three inlet locations at Joe Pool Lake were sampled during Year 4. Bowman Creek at Mirabella, Loyd Creek at Loyd Park, and Walnut Creek at Highway 360 were sampled for E. Coli, Fecal Coliforms, and Fecal Streptococcus (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 June 20, 2011			
Location	E. Coli MPN / 100ML	Fecal Coliforms col/ 100ML	Fecal Streptococcus col/ 100ML
Bowman Creek at Mirabella	56	173	27
Loyd Creek at Loyd Park	4	18	240
Walnut Creek at Hwy 360	8	18	45

1. This is the first year of sampling at these sites.
2. This sampling was done during a period of an extended dry weather with low flows.
3. The General Criteria for E Coli for primary contact recreation in fresh water are 399 MPN / 100ml for single samples and 126 MPN / 100 ml for Geometric Mean.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 3.17 Activities Completed

Date: 8/13/2010 **Responsible Party:** Environmental Quality Division

Beach Sampling SOP

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

Date: 8/12/2010 **Responsible Party:** T Sury, Environmental Specialist
Joe Pool Lake Beach Sampling Results

Table 4 is a summary of the sampling data collected at Loyd Park and Lynn Creek in Year 4.

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

Beach Sampling 2011 – E Coli MPN/100ML						
Month	Loyd Park West	Loyd Park Middle	Loyd Park East	Lynn Creek West	Lynn Creek Middle	Lynn Creek East
May	6	10	10	10	10	8
June	4	4	4	4	30	48
July	4	4	16	4	8	4
Aug	92	10	177	24	22	6
Geom. Mean	10.40			10.53		

1. Results that are less than reportable limits are conservatively treated as at detection limits (i.e. <4 is 4).
2. The General Criteria for E Coli for primary contact recreation in fresh water are 399 MPN / 100ml for single samples and 126 MPN / 100 ml for Geometric Mean.
3. The spikes in August are attributable to summer vacation in area schools and the unusually hot weather, drawing more people to the beach area.

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 4.

BMP 3.18 Activities Completed

Date: 05/25/2011 **Responsible Party:** Echo Rexroad, Sr. Environmental Specialist

Training and Supplies

Supplies purchased for the bioassessment program in Year 4 include items such as: flashcards, triple lens magnifier, sieve set, entomology dissection kit, scrub brush, 10 quart pail, ice cube tray, 17 quart dishpan, 5 quart colander, and a baster. EPA's "Rapid Bioassessment Protocols for Use in Wadeable Streams and Rivers" will be referenced for sampling procedures. Online training videos from Streamhealth will be used for training.

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.	<ol style="list-style-type: none"> 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	<p>Years 1 – 5</p> <p>Years 1 – 5</p>

All activities for this BMP are complete for Year 4.

BMP 3.19 Activities Completed

Date: 11/11/2010 **Responsible Party: Terri Blocker, Senior Environmental Specialist**
Complaints and Enforcement

Only one (1) complaint regarding onsite sewage systems was received in Year 4. A citation was given to the responsible party.

Date: 11/16/2010 **Responsible Party: Terri Blocker, Senior Environmental Specialist**
Permitted OSSF

Only three (3) OSSFs were permitted in Year 4.

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 4 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 4 BMP.

BMP 3.21 Activities Completed

Date: 08/13/2010 ***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.

Date: 08/12/2011 ***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 2010, during which inspectors ensured ARBs were in compliance with local, state, and federal stormwater regulations. From January 2011 to October 2011, 471 of 531 or 88.70% of the ARB inspections were completed.

<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 4.

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>
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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
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All activities for this BMP are complete for Year 4.

BMP 4.1 Activities Completed

Date: 08/12/2011 **Responsible Party: Planning and Development Department**

Review Infrastructure Plans and Designs

Engineering requires designers to submit drainage and erosion control plans to the City prior to any construction activity performed within the City boundaries. In the reviewing process engineering can determine the effectiveness of the drainage and erosion control measures in each plan and make any necessary comments to have the plan modified and/or changed by the designer to reduce to the maximum extent practicable potential site specific erosion control concerns. By using a system to count the number of drainage plans Planning and Development Department can keep track of potential construction activities. A total of 66 drainage and erosion control plans were approved from August 13, 2010 through August 12, 2011.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 4.2 Activities Completed

Date: 08/12/2011 **Responsible Party: Planning and Development Department**

Inspect Erosion Control Measures

A total of 707 erosion control measure inspections were performed from August 13, 2010 through August 12, 2011. A total of 56 violations and erosion control measure follow-up inspections were performed from August 13, 2010 through August 12, 2011.

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 4.

BMP 4.3 Activities Completed

Date: 08/12/2011 **Responsible Party: Engineering Division**

Review Earthwork Permits

Permits are issued to owners and operators based on the grading and erosion control plans submitted to and approved by the City. Design of erosion control measures and approved BMPs in plans and specifications in all projects must be in compliance with the TPDES Construction General Permit and all local and State regulations.

Prior to any land disturbing activity all erosion controls must be in place according to the approved plan. By tracking the number of clearing and grubbing and earthwork permits that are issued, the City is able to monitor sites and take the necessary steps to maintain compliance before activities begin. A total of 52 clearing, grubbing, and earthwork permits were approved from August 13, 2010 through August 12, 2011.

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 4.

BMP 4.4 Activities Completed

Date: 08/12/2011 **Responsible Party: Planning and Development Department**

Storm Water Pollution Prevention Plan during Construction

Each construction site that has received a building or construction permit is required to produce a SWPPP in accordance with the TPDES general permit for construction, if applicable. The City requirement is for the owner/operator to provide a copy of the NOI and Construction Site Notice to the City based on Unified Development Code 14.3.2. By providing these documents to the City it shows that the owner/operator have met the guidelines established by the State and Local regulations. With the NOI and Site Notice presented to the City the site activity may commence and begin a monitoring process to make sure the SWPPP is being followed and that the SWPPP and erosion control devices are reducing the amount of sediment discharge to the Maximum Extent Practicable. A total of 31 permits were copied to the City from August 13, 2010 through August 12, 2011. Of these 31 NOI's, 30 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>
30

<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 4.

BMP 4.5 Activities Completed

Date: 08/12/2011 **Responsible Party: Planning and Development Department**

Complaint Response

The Planning and Development Department has in place a Standard Procedure for Drainage and Erosion Control Complaints. This procedure requires designated individuals to register the complaint, locate the area of concern, take the appropriate steps to bring the area back into compliance, and inform the complainant of the resolution. Complaint response gives the community an active role to help monitor and is

welcomed. Complaints are usually responded to within 15 working days from receipt and priority complaints are investigated sooner. A total of 8 complaints were received from August 13, 2010 through August 12, 2011 of which 7 or 88% were investigated within 15 working days from the day 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 4.

<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 4.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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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 4.

<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 4.

BMP 4.9 Activities Completed

Date: 03/23/2011 **Responsible Party: Planning and Development Department**

TPDES Construction Workshop

Chris Agnew and David McKee with the Planning Development Department and Echo Rexroad with the Environmental Quality Division attended the City of Dallas TPDES Construction Permit Requirements workshop.

Date: 08/12/2011 **Responsible Party: Planning and Development Department**

Redefine the Construction Site Inspection Program

Training of all department inspectors, both building inspectors and engineering construction inspectors, was completed on 4/19/2011. A memorandum of understanding was issued on 5/16/2011 to Building Inspection and Engineering Construction requiring all Construction inspectors to attend an annual training class in construction site erosion control plan inspections. This training was conducted by the Storm Water Utility Section of Engineering.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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
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There are no required activities for this BMP for Year 4.

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 4.

BMP 5.1 Activities Completed

Date: 08/12/2011 Responsible Party: Engineering Division

Development Review Process

The number of plans that have been approved reflect that the impact on post construction runoff will be minimal to the detention areas as well as the impact to floodplains associated with the site, if applicable. The review process at times may require a drainage plan to be modified several times by the engineer to allow the BMPs to operate at the maximum extent practicable. A total of 174 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>
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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
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All activities for this BMP are complete for Year 4.

BMP 5.2 Activities Completed

Date: 08/12/2011 **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.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 2. Research information through benchmarking and attending NCTCOG meetings and training seminars 3. Adopt the policies and design criteria as needed	Planning and Development Department	Years 2 Years 2 Year 3

	4. Affected city departments and divisions will implement the policy and design criteria manuals as adopted	Year 4
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All activities for this BMP are complete for Year 4.

BMP 5.3 Activities Completed

Date: 12/16/2010 **Responsible Party:** Planning and Development Department

Storm Water Design Criteria and Methods

The revised 2010 Drainage Design Manual was adopted by City Council on June 15, 2010 and implemented December 16, 2010.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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

All activities for this BMP are complete for Year 4.

BMP 5.4 Activities Completed

Date: 12/16/2010 **Responsible Party: Planning and Development Department**

Revise Policies and Design Criteria in the Unified Development Code

The revised 2008 Drainage Design Manual with revised stormwater design criteria and methods was adopted for use and implemented December 4, 2008. In 2009, feedback was received from staff and the engineering community concerning needed Drainage Design Manual revisions. The revised 2009 Drainage Design Manual was adopted by City Council on September 15, 2009 and implemented November 20, 2009. The revised 2010 Drainage Design Manual was adopted by City Council on June 15, 2010 and implemented December 16, 2010.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 maintenance and repairs directed by the city may result in penalties.	1. Document all inspections and violations	Planning and Development Department	Year 3
		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		Year 3

All activities for this BMP are complete for Year 4.

BMP 5.5 Activities Completed

Date: 08/12/2011 **Responsible Party: Planning and Development Department**

Long term operation and maintenance of BMPs

In Year 4, forty-four (44) inspections were performed. From inception to August 12, 2011 eighty-three (83) inspections were performed. A total of 5 basins had maintenance or repair issues identified in Year 4. The owners of these basins were notified and are working to resolve the issues.

MCM 6: 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

There are no required activities listed for this BMP for Year 4; however, the City continued this activity in Year 4.

BMP 6.1 Activities Completed

Date: 8/13/2010 **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 4.

BMP 6.2 Activities Completed

Date: 11/19/2010 **Responsible Party:** T Sury, Environmental Specialist
Annual Inspections

Annual comprehensive compliance inspections were conducted for each MSGP City facility. The Airport was inspected on 11/15/10, the

Landfill was inspected on 11/18/10 and 11/19/10, and the Service Center was inspected on 11/16/10 and 11/17/10.

Date: 04/21/2011 **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 Airport was monitored on 11/2/10, 2/24/11, 4/4/11, and 9/20/11 (Year 5). The Service Center was monitored on 9/2/10, 11/2/10, 2/24/11, and 4/4/11. The Landfill was monitored on 9/2/10, 11/2/10, 4/4/11, and 4/21/11. The landfill was monitored twice in the second quarter due to no flow conditions in the first quarter.

Date: 06/28/2011 **Responsible Party: T Sury, Environmental Specialist**

NCTCOG Training Video

Presented applicable sections of "Municipal Employee Training Series. Preventing Storm Water Pollution: What We Can Do" video to 4 Airport Staff on 6/1/11, 11 Landfill Staff members on 6/10/11, and 63 Streets Staff on 6/28/11. These videos were created by NCTCOG. Airport Staff viewed the Parks and Grounds Maintenance section of the video, the Landfill Staff viewed the Solid Waste Management section, and the Streets staff viewed the Streets and Drainage Maintenance section. (See also MCM 3.8).

Date: 08/12/2011 **Responsible Party: T Sury, Environmental Specialist**

SWPPP Updates

Airport Update:

- i) The site plan was modified to include the new administrative building.

Service Center Updates:

- i) Description of housekeeping measures (i.e., washing vehicles oriented longitudinally in two phases, front and back, to minimize runoff). ii) Non Structural controls (i.e., repainting of designated truck numbers on the fence line instead of the concrete pavement to avoid frequent fading).

Landfill Update:

- i) The site plan was revised to include the relocation and consolidation of southeast and southwest spillways to the middle of the south slope.

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 4.

BMP 6.3 Activities Completed

Date: 08/12/2011 **Responsible Party: Public Works Department**

Complaint Response

The Public Works Department responded to 100% of citizens' complaints in Year 4. Response included cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. 56 issues were resolved in Year 4 in response to complaints and field observations.

Date: 08/12/2011 **Responsible Party: Public Works Department**

Tracking Maintenance

Storm sewer and drainage maintenance was tracked for Year 4. Maintenance included 23 different type of activities conducted as a result of citizen complaints, field observations, and regular City storm sewer maintenance.

Date: 08/12/2011 **Responsible Party: Public Works Department**

Crew

The Public Works Department maintained employment for a crew of three in order to perform structural improvements along storm sewer inlets, ditches, pipes, and channels. This crew is made up of a crew leader and 2 equipment operators. The names change daily depending on the schedule. Needed improvements are noted through citizen 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 4.

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 2. Review Phase 1 city SWP3s as well as suggested EPA and TCEQ BMPs	Environmental Services Department, Environmental Quality Division	Year 2 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 4.

BMP 6.5 Activities Completed

Date: 10/14/2010 **Responsible Party: Environmental Quality Division**

New Employee Orientation

Presented "Preventing Storm Water Pollution: What We Can Do" video to 11 new City employees during the New Employee Orientation. (See also BMP 3.8.)

Date: 02/10/2011 **Responsible Party: Environmental Quality Division**

SPCC Amendments and Rule Update Audio Conference

Cindy Mendez, Bharati Maskey, and Echo Rexroad, all with the Environmental Quality Division, attended "SPCC Amendments and Rule Update: What Has EPA Changed?" audio conference.

Date: 03/24/2011 **Responsible Party: Echo Rexroad, Sr. Environmental Specialist**

Materials for City Employees

In Year 4, the City worked with NCTCOG to develop an Illicit Discharge Detection and Elimination field guide and Construction field guide for City employees. These guides were printed and purchased in Year 5.

Date: 04/07/2011 **Responsible Party: Environmental Quality Division**

Used Oil Regs: EPA Rules for Managing, Storing, and Transportation

Bharati Maskey, Brent Redd, Echo Rexroad, and T Sury, all with the Environmental Quality Division, attended "Used Oil Regs: EPA Rules for Managing, Storing, and Transportation" webinar.

Date: 07/13/2011 **Responsible Party: Andrew Krentz, Environmental Specialist**

TMDLs and WIPs Webcast

Andrew Krentz attended "The Top Actions That Local Governments Can Take To Address Numerical Goals, Such As TMDLs & WIPs" Webcast held by NCTCOG.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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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

All activities for this BMP are complete for Year 4.

BMP 6.6 Activities Completed

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

Sign Installation

Two signs were installed on 10/26/11 (Figure 5). 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. These signs were scheduled for installation in May 2011; however, due to the demand of the summer schedule on the Streets Department, the installation did not take place until Year 5.

Figure 5: Native and Adaptive Sign



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 4.

BMP 6.7 Activities Completed

Date: 08/13/2010 **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: 08/13/2010 **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 4.

BMP 6.8 Activities Completed

Date: 08/12/2011 **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 pick up operations. Depending on area, streets are cleaned on a weekly, semiannual, and annual basis. In Year 4, 315.52 TN were collected.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 4.

BMP 6.9 Activities Completed

Date: 07/18/2011 **Responsible Party: T Sury, Environmental Specialist**

City Facility Inspections

The City inspected 25% of the 28 City facilities selected for this program. The facilities inspected in Year 4 were Fire Stations 8 and 9, the Police Department/Jail, Bowles Life Center, Charlie Taylor Recreation Center, Dalworth Recreation Center, and the Grand Prairie Memorial Gardens.

<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 4.

BMP 6.10 Activities Completed

***Date:** 07/29/2011 **Responsible Party:** Dallas County Flood Control District #1
Complaints, Reviews, and Repairs*

No written complaints were filed in year 4. No repairs were done in the Grand Prairie portion of the DCFCD#1 for year 4. The annual maintenance review was conducted in March 2011, and the report was prepared in July 2011.

<i>BMP</i>	<i>BMP Description</i>	<i>Measurable Goals</i>	<i>Responsibility</i>	<i>Target Date</i>
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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
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No activities are listed for this BMP for Year 4.

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.

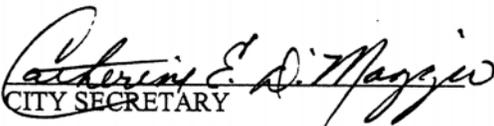
6. Neither party intends by entry into this agreement to waive any immunity that it might have in the performance of its governmental duties.

Executed on this 5th day of February, 2008.

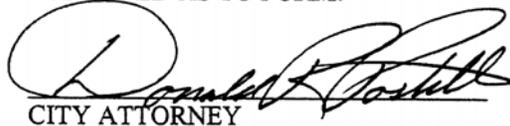
CITY OF GRAND PRAIRIE

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 Huchinson

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,	Year 1
		2. Create annual report	Environmental Quality Division	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		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

			<p>3. Install at least 1 sign for each area and define management area</p> <p>4. Identify future areas suitable for promotion of vegetation as the city continues to develop</p>		<p>Year 4 – 5</p> <p>Year 5</p>
6.7 Mosquito Management Program	Maintain mosquito management methods that will not result in illicit discharges to the MS4.	<p>1. Maintain integrated mosquito management methods when handling and applying pesticides</p> <p>2. Use low toxicity bio-controls for larvae control</p>	<p>Environmental Services Department, Environmental Quality Division</p>	<p>Years 1 – 5</p> <p>Years 1 – 5</p>	
6.8 Street Sweeping	Remove solid pollutants from the streets to avoid contamination of the storm sewer system.	<p>1. Sweep major thorough fares on an annual basis and more often on high traffic roads</p>	<p>Environmental Services Department, Solid Waste Division</p>	<p>Years 1 – 5</p>	
6.9 Inspect City Facilities	Inspect city facilities for Best Management Practices.	<p>1. Inspect 25% of city facilities annually</p>	<p>Environmental Services Department, Environmental Quality Division</p>	<p>Years 2 – 5</p>	
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.	<p>1. Respond to written complaints within the District</p> <p>2. Perform annual maintenance reviews and prepare report</p> <p>3. Make necessary repairs to District facilities</p>	<p>Dallas County Flood Control District #1</p>	<p>Years 1 – 5</p> <p>Years 1 – 5</p>	
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.	<p>1. Develop a SOP for waste disposal</p>	<p>Dallas County Flood Control District #1</p>	<p>Year 2</p>	

APPENDIX B: TCEQ Correspondence

Addendum sent to the TCEQ via e-mail on August, 13, 2008



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 2010

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
9	08/24/2010	12:45	GP10SW-25029		29.1	7.48	36	4.12	0.17	136	4600
22	08/24/2010	09:30	GP10SW-258 32		26.7	7.09	26	3.26	0.65	3400	
12	08/24/2010	10:10	GP10SW-25132		26.8	7.28	13	3.27	0.17	410	14000
28	08/24/2010	12:05	GP10SW-26434		27.2	7.33	90	4.68	0.42	5600	200
27	08/24/2010	10:45	GP10SW-26332		27.5	7.39	4.2	3.75	0.11	164	564
8	08/25/2010	10:35	GP10SW-24823		26.7	7.49	130	3.83	0.35	19200	
25	08/25/2010	11:55	GP10SW-26123		25.6	8.05	150	3.66	0.79	10000	
24	08/25/2010	12:25	GP10SW-26022		28	7.45	60	3.92	0.38	12400	
23	08/25/2010	08:25	GP10SW-259 23		24.9	8	280	4.05	0.66	14600	
20	08/25/2010	08:05	GP10SW-257A23		26.3	7.75	8.2	3.82	0.09	1536	664
20	08/25/2010	08:05	GP10SW-257 23		26.3	7.75	8.2	3.82	0.09	2400	2000
19	08/25/2010	1:20	GP10SW-256 23		24.6	7.83	110	5.18	0.11	930	9100
18	08/25/2010	1:00	GP10SW-254 22		25.7	7.93	370	5.07	0	1409	2400
17	08/25/2010	08:45	GP10SW-253 23		27.3	7.71	35	3.09	0.25	654	654
15	08/25/2010	09:05	GP10SW-252 23		27.3	7.58	40	2.65	0.32	1164	
11	08/25/2010	09:20	GP10SW-249 23		26	7.86	95	4.65	0.98	16300	
3	08/26/2010	08:55	GP10SW-244A24		25.6	8.01	85	7.74	0.14	950	12700
5	08/26/2010	09:30	GP10SW-245 26		25.3	8.01	38	4.14	0.23	1500	9700
6	08/26/2010	09:20	GP10SW-246 25		25.6	7.79	95	3.66	0.55	1191	
3	08/26/2010	08:55	GP10SW-244 24		25.6	8.01	85	4.74	0.14	1127	

Monthly Results

September 2010

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
9	09/21/2010	11:50	GP10SW-28129		27.4	8.02	18	6.97	0.16	191	791
19	09/21/2010	1:20	GP10SW-287	30	25.7	8.11	60	5.47	0.06	200	573
17	09/21/2010	10:25	GP10SW-28527		26.2	7.79	13	4.21	0.04	250	330
18	09/21/2010	1:10	GP10SW-286	30	25.9	8.23	45	4.95	0.08	127	560
8	09/21/2010	12:45	GP10SW-28030		27.4	7.57	9.5	5.13	0.07	1054	430
22	09/21/2010	12:20	GP10SW-28930		29.7	7.74	7.4	4.81	0.65	10	10
9	09/21/2010	11:50	GP10SW-28129		27.4	8.02	18	6.97	0.16	320	727
30	09/21/2010	9:35	GP10SW-297	25	24.2	7.65	34	3.61	0.05	390	91
12	09/21/2010	10:55	GP10SW-28329		28.4	7.65	38	4.26	0.01	1227	1454
15	09/21/2010	10:40	GP10SW-28427		27.9	7.35	18	2.33	0.17	400	200
27	09/21/2010	8:15	GP10SW-294	24	24.5	7.22	3	3.51	0.09	380	745
28	09/21/2010	9:00	GP10SW-295	24	24.8	7.77	3.1	3.51	0.1	530	818
20	09/21/2010	9:55	GP10SW-288	26	24.8	7.42	3.7	3.18	0.04	780	470
29	09/21/2010		GP10SW-296								
23	09/22/2010	8:30	GP10SW-290A24		26.3	7.84	28	3.79	0.04	400	1100
11	09/22/2010	10:20	GP10SW-28227		25.7	7.93	18		0.05	8100	2200
26	09/22/2010	10:10	GP10SW-29327		25.1	8.07	5.2	5.41	0.09	1409	3100
25	09/22/2010	10:00	GP10SW-29226		26	7.98	13	5.36	0.08	82	136
24	09/22/2010	9:40	GP10SW-291	26	26.3	7.82	17	3.99	0.12	340	1118
6	09/22/2010	9:10	GP10SW-278	26	27	7.84	50	3.68	0	330	991
3	09/22/2010	8:45	GP10SW-276	25	25.6	7.91	23	3.77	0.04	390	882
7	09/22/2010	8:10	GP10SW-279	25	25.3	7.73	25	4.71	0.13	3900	
23	09/22/2010	8:30	GP10SW-290	24	26.3	7.84	28	3.79	0.04	430	260
5	09/22/2010	9:30	GP10SW-277	26	26.3	7.84	35	4.01	0.04	136	1018

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Monthly Results

October 2010

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
9	10/19/2010	10:55	GP10SW-31326		19.5	7.75	4.5	5.24	0.05	54	36
12	10/19/2010	10:35	GP10SW-31524		19.9	7.74	9.5	4.15	0.03	640	764
28	10/19/2010	8:30	GP10SW-327	18	18.8	7.47	6.5	5.16	0.04	260	145
30	10/19/2010	8:50	GP10SW-329	19	18.5	7.57	7.4	4.92	0.03	91	54
20	10/19/2010	9:20	GP10SW-320	20	20.1	7.83	7.1	4.2	0.09	290	18
20	10/19/2010	9:20	GP10SW-320A	20	20.1	7.83	7.1	4.2	0.09	300	82
15	10/19/2010	10:20	GP10SW-31623		21.6	7.76	18	4.11	0.04	270	100
22	10/19/2010	11:10	GP10SW-32127		21	7.75	30	4.85	0.14	1209	280
11	10/19/2010	11:30	GP10SW314	27	22.5	7.99	30	6.65	0.3	1173	1064
29	10/19/2010	9:45	GP10SW-328								
19	10/19/2010	11:55	GP10SW-31927		23	7.89	14	5.87	0.24		
27	10/19/2010	7:45	GP10SW-326	19	19.9	7.52	10	3.4	0.04	270	390
17	10/19/2010	10:00	GP10SW-31722		20.4	7.78	22	2.66	0	154	10
24	10/20/2010	9:15	GP10SW-323	18	21.3	7.87	8.4	6.36	0.04	164	240
26	10/20/2010	9:45	GP10SW-325	21	20.4	8.04	2.5	7.26	0.04	290	320
8	10/20/2010	10:05	GP10SW-31221		23.1	8.08	1.6	4.5	0.06	560	1600
25	10/20/2010	9:30	GP10SW-324	20	20.4	8	3.9	6.09	0.03	27	10
6	10/20/2010	8:45	GP10SW-310	18	23.4	7.95	430.4	5.1	0.14	145	320
3	10/20/2010	8:25	GP10SW-308A	18	21	7.88	20	4.91	0.03	380	727
3	10/20/2010	8:25	GP10SW-308	18	21	7.88	20	4.91	0.03	450	618
23	10/20/2010	8:05	GP10SW-322	17	20.9	7.79	19	4.71	0.04		
7	10/20/2010	7:45	GP10SW-311	18	19.3	7.75	34	4.33	0.51	780	1082
18	10/20/2010	10:35	GP10SW-31821		25.4	8.14	45	5.64	0	64	18
5	10/20/2010	9:00	GP10SW-309	20	22	7.99	22	5.24	0.01	136	73

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Monthly Results

November 2010

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
18	11/16/2010	1:00	GP10SW-344	17	18.5	8.01	78.4	5.74	0.12		
18	11/16/2010	13:00	GP10SW-344	17	18.5	8.01	78.4	5.74	0.12	64	27
19	11/16/2010	13:25	GP10SW-345	17	17.9	7.89	19.4	5.79	0.16	27	36
11	11/16/2010	12:34	GO10SW-338	16	18.1	7.96	20	5.48	0.1	290	109
9	11/16/2010	11:49	GP10SW-337	13	15.6	8.4	152	5.61	0.19	10000	15700
19	11/16/2010	1:25	GP10SW-345	17	17.9	7.89	19.4	5.79	0.16		
22	11/16/2010	12:19	GP10SW-347	15	15.1	7.94	23.5	4.65	0.13	2800	5900
8	11/16/2010	12:49	GP10SW-336	16	18.9	8.05	8	5.08	0.11		
11	11/16/2010	12:34	GP10SW-338	16	18.1	7.96	20	5.48	0.1		
22	11/16/2010	12:19	GP10SW-347	15	15.1	7.94	23.5	4.65	0.13		
9	11/16/2010	11:49	GP10SW-337	13	15.6	8.4	152	5.61	0.19		
8	11/16/2010	12:49	GP10SW-336	16	18.9	8.05	8	5.08	0.11	6500	2200
15	11/17/2010	10:30	GP10SW-340	18	15.3	7.84	51.9	4.59	0	2000	1673
7	11/17/2010	13:00	GP10SW-335	21	23.2	8.22	13.4	4.75	0.13		
12	11/17/2010	11:00	GO10SW-339	20	18.1	7.83	17.9	4.79	0.04	2100	1391
30	11/17/2010	8:45	GP10SW-341	13	12.4	8.03	29	5.45	0.03	145	100
17	11/17/2010	10:00	GP10SW-343	17	15.3	8.16	37.4	6.12	0.03	173	230
7	11/17/2010	13:00	GP10SW-335	21	23.2	8.22	13.4	4.75	0.13	740	736
23	11/17/2010	13:20	GP10SW-348	22	16.3	8.07	10.26	6.68	0.06	118	154
27	11/17/2010	7:45	GP10SW-352	12	12	8.14	9.88	3.71	0.02	370	390
28	11/17/2010	8:03	GP10SW-353	12	12.6	8.04	11.8	5.53	0.11	600	4100
30	11/17/2010	8:45	GP10SW-341	13	12.4	8.03	29	5.45	0.03		
20	11/17/2010	9:16	GP10SW-346	14	14.7	8.26	89	5.83	0.02	136	64
20	11/17/2010	9:16	GP10SW-346A	14	14.7	8.26	89	5.83	0.02		

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Monthly Results

November 2010

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
28	11/17/2010	08:03	GP10SW-353	12	12.6	8.04	11.8	5.53	0.11		
27	11/17/2010	07:45	GP10SW-352	12	12	8.14	9.88	3.71	0.07		
12	11/17/2010	11:00	GP10SW-33920		18.1	7.83	17.9	4.79	0.04		
23	11/17/2010	01:20	GP10SW-348	22	16.3	8.07	10.26	6.68	0.06	410	370
20	11/17/2010	09:16	GP10SW-346	14	14.7	8.26	89	5.83	0.02		
17	11/17/2010	10:00	GP10SW-34317		15.3	8.16	37.4	6.12	0.03		
15	11/17/2010	10:30	GP10SW-34018		15.3	7.84	51.9	4.59	0		
7	11/17/2010	01:00	GP10SW-335	21	23.2	8.22	13.4	4.75	0.13		
6	11/18/2010	08:30	GP10SW-334	7	13.4	7.9	21.4	6.55	0.07	136	636
24	11/18/2010	09:20	GP10SW-349	7	12.3	7.97	13.3	7.97	0.09	270	550
5	11/18/2010	08:50	GP10SW-333A7		10.9	8.12	9.51	5.88	0.03	91	390
3	11/18/2010	08:00	GP10SW-332	6	10.3	8.06	22.4	6.68	0.02	145	127
26	11/18/2010	10:09	GP10SW-351	8	11.8	8.09	24.4	6.83	0.05	1036	3300
25	11/18/2010	09:50	GP10SW-350	8	12	7.86	11.4	3.55	0.2	810	15300
26	11/18/2010	10:09	GP10SW-351	8	11.8	8.09	24.4	6.83	0.05		
25	11/18/2010	09:50	GP10SW-350	8	12	7.86	11.4	3.55	0.2		
5	11/18/2010	08:50	GP10SW-333	7	10.9	8.12	9.51	5.88	0.03	118	290
24	11/18/2010	09:20	GP10SW-349	7	12.3	7.97	13.3	5.31	0.09		
6	11/18/2010	08:30	GP10SW-334	7	13.4	7.9	21.4	6.55	0.07		
5	11/18/2010	08:50	GP10SW-333	7	10.9	8.12	9.51	5.88	0.03		
5	11/18/2010	08:50	GP10SW-333A7		10.9	8.12	9.51	5.88	0.03		

Monthly Results

December 2010

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
28	12/15/2010	09:15	GP11SW-020	14	10.4	6.91	7.45	7.16	0.16	260	210
27	12/15/2010	08:55	GP11SW-019	14	10.3	6.82	13.3	7.72	0.07	18	9
22	12/15/2010	12:25	GP11SW-01422		14	7.48	3.1	7.22	0.12	290	440
20	12/15/2010	10:05	GP11SW-01317		11.5	8.01	19.3	10.01	0.09	82	10
9	12/15/2010	12:05	GP11SW-00621		13.7	7.56	8.63	9.47	0.39	91	18
19	12/15/2010	13:15	GP11SW-01223		13.8	7.83	18.8	11.1	0.35	10	9
17	12/15/2010	10:50	GP11SW-01017		12.1	7.52	17.4	7.31	0.02	9	10
18	12/15/2010	13:00	GP11SW-01123		12.3	8.11	23.6	11.99	0.02	9	10
30	12/15/2010	09:45	GP11SW-022	16	12.3	7.05	3.96	8.92	0.07	9	10
15	12/15/2010	11:05	GP10SW-00918		11.4	7.45	16.3	7.45	0	64	64
12	12/15/2010	11:35	GP10SW-00819		12.1	7.65	4.02	8.03	0.19	200	300
11	12/15/2010	12:35	GP!!SW-007	22	12.9	7.87	11.8	9.64	0	280	220
8	12/16/2010	11:45	GP11SW-005	9	13.7	8.35	8.66	9.61	0.26	9	9
5	12/16/2010	10:30	GP11SW-002	8	11.2	7.87	10.02	10.47	0	36	9
26	12/16/2010	11:20	GP11SW-018	9	10.6	7.84	3.2	10.62	0.21	250	27
25	12/16/2010	11:05	GP11SW-01710		9.9	7.71	5.37	8.28	0.15	55	109
24	12/16/2010	10:45	GP11SW-016	8	11.5	7.77	4.99	10.8	0.01	109	145
23	12/16/2010	09:30	GP11SW-015	7	11.4	7.68	4.3	9.57	0.03	91	45
6	12/16/2010	10:10	GP!!SW-003	8	15.4	7.82	23.8	9.14	0.14	73	100
7	12/16/2010	09:05	GP11SW-004	7	12.2	7.66	8.38	9.66	0.11	230	73
3	12/16/2010	09:55	GP11SW-001	7	11	7.73	10.88	10.38	0.01	91	109

Monthly Results

January 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
27	01/19/2011	9:35	GP11SW-041	4	8.1	7.73	2.25	10.89	0.08	136	54
19	01/19/2011	14:30	GP11SW-034	13	12.4	7.98	19.9	10.68	0.26		
30	01/19/2011	10:30	GP11SW-044	6	8.5	8.02	47.9	9.58	0.02	670	45
28	01/19/2011	9:55	GP11SW-042	6	8.9	7.65	11.5	9.6	0.04	118	54
26	01/19/2011	9:15	GP11SW-040	4	8.8	7.72	25.6	10.71	0.01	145	18
25	01/19/2011	8:50	GP11SW-039	4	10	7.92	15.8	7.68	0.08	54	118
22	01/19/2011	13:45	GP11SW-036	12	12.6	7.92	5.8	13.2	0.45	118	82
20	01/19/2011	10:50	GP11SW-035	7	9.1	7.92	10.2	10.75	0.01	109	10
17	01/19/2011	13:00	GP11SW-032	12	10.6	8.32	20.6	10.73	0.08	9	18
15	01/19/2011	13:10	GP11-SW-031	12	11.5	7.91	31.2	7.46	0.14	154	2000
12	01/19/2011	12:40	GP11SW-030	10	11.8	7.81	7.25	9.24	0.07	280	300
11	01/19/2011	13:25	GP11SW-029	12	10.3	8.16	19.4	9.58	0.22		
29	01/19/2011	11:05	GP11SW-043	7	10.2	8.18	14.3	10.4	0.22	10	10
8	01/19/2011	14:05	GP11SW-027	13	12.7	8.25	6.82	9.29	0.5	10	10
18	01/19/2011	14:15	GP11SW-033	13	12.6	8.1	25.9	8.1	0.14	45	10
9	01/19/2011	11:55	GP11SW-028	8	11.9	8.02	11	9.62	0.13	64	9
5	01/20/2011	10:15	GP11SW-024	0	11	7.8	12.9	10.48	0.13	118	36
23	01/20/2011	9:15	GP11SW-037	2	11.9	7.8	11.3	11.19	0.15	136	91
6	01/20/2011	10:00	GP11SW-025	0	13.3	7.64	22.4	10.14	0.36	470	64
24	01/20/2011	10:35	GP11SW-038-1		8.9	7.59	11.4	10.89	0.23	4900	791
3	01/20/2011	9:35	GP11SW-023	1	10.9	7.62	56.3	12	0.09	240	64
3	01/20/2011	9:35	GP11SW-023	1	10.9	7.62	56.3	12	0.09	290	91
7	01/20/2011	8:50	GP11SW-026	2	11	7.29	11.7	11.41	0.15	5900	320

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Monthly Results

February 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
27	02/21/2011	18:55	GP11SW-064	21	17.8	7.38	0.15	6.21	0.3	82	64
25	02/21/2011	14:10	GP11SW-062	19	18.4	7.7	8	8.4	0.31	10	18
29	02/21/2011	11:25	GP11SW-066	27	17.4	7.63	13	6.92	0.41	10	10
30	02/21/2011	10:15	GP11SW-067	24	18.5	7.34	13	9.02	0.33	145	36
17	02/21/2011	12:05	GP11SW-055	24	13.5	7.43	18	8.53	0.18	10	18
15	02/21/2011	12:25	GP11SW-054	21	13.4	7.61	0.95	7.8	0.28	210	27
12	02/21/2011	12:50	GP11SW-053	20	19.4	7.74	8	8.37	0.2	570	330
9	02/21/2011	13:46	GP11SW-051	20	18.4	7.66	30	8.06	0.2	550	27
23	02/22/2011	11:03	GP11SW-060	15	13.5	7.36	6.06	8.44	0.21	54	173
5	02/22/2011	13:25	GP11SW-047	16	15.6	7.18	11.1	9.89	0.12	10	18
17	02/22/2011	10:25	GP11SW049	13	13.5	7.43	12.2	8.53	0.21	10	18
29	02/22/2011		GP11SW-021	17	14.3	7.87	25.7	9.25	0.08	36	27
7	02/22/2011	10:25	GP11SW-049	12	12.9	7.1	12.2	11.5	0.21	520	310
3	02/22/2011	12:00	GP11SW-046	15	14.4	7.38	11.3	12.29	0.1	27	36
20	02/22/2011	9:25	GP11SW-058	22	14.1	7.38	4.61	6.68	0.31	27	10
6	02/22/2011	12:15	GP11sw-048	17	18	7.24	8.21	7.75	0.21	118	27
26	02/23/2011	9:35	GP11SW-063	14	15.3	7.38	32	11.98	0.2	145	310
28	02/23/2011	9:35	GP11SW063	23	18.2	7.32	4	8.18	0.18	64	118
22	02/23/2011	10:15	GP11SW-059	21	15.2	7.28	9.03	6.62	2.37	2100	
8	02/23/2011	13:20	GP11SW-050	22.5	16.1	7.27	13.7	11.26	0.3	9	27
18	02/23/2011	13:55	GP11SW-056	26	17.1	7.57	27.3	8.23	0.08	154	27
11	02/23/2011	10:45	GP11SW-052	21	16.9	7.16	12.6	7.13	0.21	450	73
19	02/23/2011	14:15	GP11SW-057	23	17.3	7.42	34	11.99	0.11	145	127
24	02/23/2011	8:55	GP11SW-061	20	15.5	6.92	4.92	9.61	0.36	54	36

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Monthly Results

March 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
25	03/22/2011	18:00	GP11SW092	19	19.9	7.55	5.2	7.38	0.18		
30	03/22/2011	19:50	GP11SW097	22	18.7	7.81	5.59	8.3	0.11		
29	03/22/2011	10:40	GP11SW096	22	18.9	7.97	28	8.72	0.16	210	36
28	03/22/2011	19:20	GP11SW095	21	19.2	7.73	8.77	8.84	0.17	300	82
26	03/22/2011	18:40	GP11SW093	21	17.9	7.81	5.2	9.13	0.14	1345	1164
22	03/22/2011	12:50	GP11SW089	23	19.6	7.55	8.65	6.66	0.27	400	370
20	03/22/2011	10:10	GP11SW088A22		19.7	7.71	18.6	7.71	0.11	220	210
19	03/22/2011	13:40	GP11SW087	24	21.2	7.88	22.3	8.56	0.17	36	54
27	03/22/2011	19:05	GP11SW094	21	18.2	7.62	6.87	8.25	0.16	36	27
15	03/22/2011	11:35	GP11SW084	22	20.5	7.88	18.6	8.44	0.04	127	9
12	03/22/2011	12:20	GP11SW083	23	20.1	7.69	18.1	7.71	0.21	6700	510
11	03/22/2011	13:05	GP11SW082	23	20.5	7.57	12.7	6.75	0.28	620	400
17	03/22/2011	11:20	GP11SW085	22	18.1	8.16	40.6	8.33	0.16	27	10
9	03/22/2011	12:35	GP11SW081	23	20.2	7.73	7.57	8.07	0.12	145	36
7	03/23/2011	18:35	GP11SW079	19	18.9	7.87	14	9.19	0.24	310	73
5	03/23/2011	11:13	GP11SW077	22	20.2	7.9	22.6	9.26	0.14	64	10
8	03/23/2011	10:45	GP11SW080	23	18.3	7.52	15.9	9.27	0.3	27	10
24	03/23/2011	10:10	GP11SW091	22	20.1	7.68	14.8	9.19	0.19	82	54
23	03/23/2011	18:55	GP11SW090A20		19.9	7.89	10.11	8.7	0.17	250	270
18	03/23/2011	11:00	GP11SW086	23	19.9	8.19	87.6	9.2	0.05	45	136
3	03/23/2011	19:20	GP11SW076	20	20.2	7.97	13.3	8.82	0.13	420	100

Monthly Results

April 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
30	04/26/2011	19:50	GP11SW-128	18	18.7	7.36	10.82	6.83	0.24	109	9
17	04/26/2011	11:06	GP11SW-116	18	20.7	7.81	51.6	8.64	0.13	200	45
26	04/26/2011	8:40	GP11SW-124	17	19.6	7.5	7.16	8.32	0.3	1109	480
27	04/26/2011	8:55	GP11SW-125	18	19.1	6.74	2.23	7.26	0.32	880	791
22	04/26/2011	12:40	GP11SW-120	18	19.6	7.53	7.87	5.23	0.14	910	580
20	04/26/2011	10:15	GP11SW-119	18	21.1	7.06	10.99	4.79	0.38	850	1018
28	04/26/2011	9:15	GP11SW-126	18	20.7	7.37	11.6	7.72	0.42	1054	540
18	04/26/2011	13:20	GP11SW-117	20	21.9	8.1	55.6	7.84	0.04	510	490
15	04/26/2011	11:20	GP11SW-115	18	20.8	7.28	51.2		0.34	1109	1154
12	04/26/2011	11:35	GP11SW114	18	20.1	7.36	13.7		0.18	4100	4200
11	04/26/2011	12:50	GP11SW-113	19	20.6	7.47	30.5	4.33	0.38	1291	1309
9	04/26/2011	12:35	GP11SW-112	18	21.1	7.51	41.9	5.26	0.17	2100	2900
8	04/26/2011	13:10	GP11SW-111	18	20.7	7.59	10.19	7.11	0.19	220	82
11	04/26/2011	12:50	GP11SW-113	19	20.6	7.47	30.5	4.33	0.38	1064	230
25	04/26/2011	8:10	GP11SW-123	16	20.6	7.15	7.9	4.02	0.44	2200	7500
29	04/26/2011	10:35	GP11SW-127	18	19.6	7.51	29.9	6.74	0.25	500	182
3	04/27/2011	9:10	GP11SW-107	17	20.5	7.73	24.6	5.92	0.3	570	600
23	04/27/2011	8:55	GP11SW-121	17	20.6	7.66	24.4	5.83	0.32	970	2300
19	04/27/2011	10:30	GP11SW-118	18	21.1	7.84	28	6.81	0.2	340	340
7	04/27/2011	8:35	GP11SW-110	17	19.2	7.37	3.54	6.51	0.3	1391	1060
5	04/27/2011	9:50	GP11SW-108	18	20.4	7.76	2.72	3.77	0.36		
6	04/27/2011	9:30	GP11SW-109	18	21.5	7.69	41.7	5.99	0.36	640	570
24	04/27/2011	10:05	GP11SW-122	18	21.1	7.68	12.9	5	0.36	670	836

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Monthly Results

May 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
29	05/24/2011	13:10	GP11SW-15029		24.5	6.94	27	7.91	0.04	330	2100
19	05/24/2011	14:10	GP11SW-14132		25.3	7.2	80	8.28	0.14	940	2200
17	05/24/2011	13:50	GP11SW-13930		25.7	6.91	70	7.82	0.24	118	1400
25	05/24/2011	9:36	GP11SW-146 26		23.4	6.88	35.6	6.8	0.59	18000	11600
26	05/24/2011	10:25	GP11SW-14727		22.8	6.82	76.4	6.8	0.54	19900	12500
27	05/24/2011	10:25	GP11SW-14827		23.7	6.95	9.3	7.59	0.49	6900	4400
28	05/24/2011	10:55	GP11SW-14927		23.8	6.79	26	8.13	0.47	9000	1164
20	05/24/2011	12:20	GP11SW-14228		24.4	7	15	5.23	0.3	370	618
30	05/24/2011	11:55	GP11SW-15127		23.6	6.97	0.19	6.88		118	10
9	05/24/2011	9:06	GP11SW-135 26		22.8	6.95	87.8	8.52	0.63	10000	15400
22	05/25/2011	9:55	GP11SW-143 27		22.1	7.18	11	6.93	0.33	10600	10400
24	05/25/2011	13:25	GP11SW-14530		25.3	7.28	31	6.05	0.76	2500	4200
6	05/25/2011	12:40	GP11SW-13229		25.6	7.13	190	5.53	0.23	6100	11400
18	05/25/2011	14:30	GP11SW-14032		27.2	7.4	260	5.69	0.17	7300	19100
15	05/25/2011	9:00	GP11SW-138 27		24.2	7.08	65	5.7	0.6	3200	
12	05/25/2011	9:25	GP11SW-137 27		23.5	7.1	29	6.81	0.21	5700	11300
11	05/25/2011	10:15	GP11SW-13628		23.6	7.2	55	6.75	0.48	5000	5200
8	05/25/2011	14:10	GP11SW-13432		26.5	7.23	17	6.96	0.34	2300	1854
7	05/25/2011	10:35	GP11SW-13327		23	7.48	20	7.15	0.36	1209	2800
3	05/25/2011	12:10	GP11SW-13029		25.8	7.3	160	6.79	0.39	15600	14400
23	05/25/2011	11:05	GP11SW-14427		24.3	7.2	280	6.7	0.32	10000	17400
5	05/25/2011	13:05	GP11SW-13131		27.1	7.72	38	7.65	0.44	1164	2100

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June 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
19	06/20/2011	14:05	GP11SW-17436		28.9	7.84	31	6.82	1.76	64	4000
20	06/20/2011	11:00	GP11SW-17533		24.4	7.68	6.6	10.54	0.23	700	520
22	06/20/2011	13:25	GP11SW-17636		26.5	7.71	3.8	6.42	0.21	780	745
25	06/20/2011	8:45	GP11SW-179 28		27.4	7.6	4.8	5.74	0.23	127	430
26	06/20/2011	9:30									
28	06/20/2011	9:50	GP11SW-182 30		26.4	7.63	3.3	7.42	0.25	164	10
9	06/20/2011	13:00	GP11SW-16833		26.9	7.93	23	6.65	0.14	73	200
18	06/20/2011	13:55	GP11SW-17336		28.2	8.12	75	6.47	0.06	18	330
27	06/20/2011	9:30	GP11SW-181 29		24.4	7.38	2.5	5.69	0.18	740	2000
15	06/20/2011	12:37	GP11SW-17134		28.8	7.65	25	5.69	0.5	91	390
11	06/20/2011	13:35	GP11SW-16935		27.9	7.9	8.9	5.1	0.32	270	864
8	06/20/2011										
12	06/20/2011	12:50	GP11SW-17033		26.6	7.42	7.1	5.99	0.19	1264	1400
17	06/20/2011	12:25	GP11SW-17233		27.2	7.92	45	8.53	0.15	670	36
6	06/21/2011	10:00	GP11SW-16527		25.8	7.51	450	13.71	0	14900	
5	06/21/2011	9:45	GP11SW=164 26		25.2	7.43	70	9.03	0.89	10300	
7	06/21/2011	8:32	GP11SW-166 23		23.5	7.23	170	8.82	0.85	13900	
24	06/21/2011	9:25	GP11SW-178 23		24.5	7.28	90	7.9	0.78	15800	
23	06/21/2011	8:50	GP11SW-177 23		23	7.45	900	7.62	0.28	37000	19000
3	06/21/2011	10:15	GP11SW-16327		24.1	7.63	700	13.71	0.37	43000	152000

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Monthly Results

July 2011

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
8	07/19/2011	11:05	GP11SW-19837		29.7	7.5	7.2	5.4	0.19	320	540
18	07/19/2011	11:15	GP11SW-20437		32.3	8.08	95	5.96	0.13	36	10
24	07/19/2011	12:25	GP11SW-20936		32.2	7.65	7.4	6.54	0.25	27	410
23	07/19/2011	11:06	GP11SW-20834		30.2	7.52	6.7	7.76	0.18	18	550
22	07/19/2011	10:35	GP11SW-20733		29	7.65	5.8	5.29	0.2	2100	10800
19	07/19/2011	11:30	GP11SW-20537		32.5	8.17	35	9.14	0.42	38	636
9	07/19/2011	9:52	GP11SW-199 32		30.8	7.78	11	4.89	0.13	36	10
6	07/19/2011	11:40	GP11SW-19634		30.4	7.75	28	6.32	0.19	740	745
5	07/19/2011	12:45	GP11SW-19536		32.1	8.14	23	5.91	0.07	260	400
3	07/19/2011	11:20	GP11SW-19434		31	7.89	14	6.32	0.22	820	1027
11	07/19/2011	10:50	GP11SW-20034		29.2	7.78	9.6	4.63	0.2	350	772
15	07/20/2011	10:40	GP11SW-20231		29	7.47	21	3.39	0.12	191	27
17	07/20/2011	10:30	GP11SW-20332		28.4	7.77	21	4.43	0.09	490	10
12	07/20/2011	10:55	GP11SW-20132		27	7.65	6.2	5.43	0.23	1291	827
20	07/20/2011	9:45	GP11SW-206 31		27.8	7.97	9.2	3.43	0.37	380	250
25	07/20/2011	8:25	GP11SW-210 28		29	7.91	3.5	7.49	0.08	9	10
27	07/20/2011	8:50	GP11SW-212 28		25.6	7.59	3.5	4.17	0.08	191	236
28	07/20/2011	9:00	GP11SW-213 29		26.3	7.87	2.3	5.69	0.1	300	700

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APPENDIX D: Dry Weather Screening

Dry Weather Screening
Year 4, 8/13/10 to 8/12/11
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