Grand Prairie
TEXAS

City of Grand Prairie

&

Dallas County Flood Control District #1

TPDES Phase II Small MS4 General Permit

Annual Report

Year 2: August 13, 2008 - August 12, 2009

Table of Contents

Appendices

List of Tables

List of Figures

List of Acronyms

BMP	Best Management Practice
CRP	Clean Rivers Program
DCFCD	Dallas County Flood Control District #1
EPA	Environmental Protection Agency
ESD	City of Grand Prairie Environmental Services Department
GIS	Geographic Information Systems
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 2 Reporting Period: August 13, 2008 – August 12, 2009

Primary Contact: Cindy Mendez Title: Environmental Quality Manager

Telephone #: (972) 237-8055 Email: cmendez@gptx.org

Mailing Address: 201 NW 2nd Street, Suite 100, Grand Prairie TX 75050

Secondary Contact: Echo Rexroad Title: Senior Environmental Specialist

Telephone #: (972) 237-8082 Email: erexroad@gptx.org

Mailing Address: 201 NW 2nd Street, Suite 100, Grand Prairie TX 75050

This report was prepared for and sent to:

Texas Commission on Environmental Quality
Storm Water & Pretreatment Team; MC -148
P.O. Box 13087
Austin, Texas 78711-3087

A *copy* of this report was sent to:

Texas Commission on Environmental Quality
Water Section; Attn: Sid Slocum
2309 Gravel Drive
Fort Worth, TX 76118-6951

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 2**.

   No changes are proposed for the SWMP for year 3.

   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 has ***not*** annexed lands since obtaining permit coverage.

3. ***No*** receiving waterbodies are newly listed as impaired for the MS4.

   No TMDLs have been established for the MS4.

4. The MS4 ***has*** conducted analytical monitoring of stormwater quality. See BMP 3.6 and BMP 3.17 for the discussion and summary of stream and lake 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 2 BMPs for Reducing Pollutants

Each of the year 2 BMPs were assessed as appropriate. Table 1 describes the estimated level of effectiveness of all year 2 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

BMP	*Description*	*Effectiveness*	*Comment*
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 garden, 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	H20 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	GPISD has not needed additional copies of the curriculum
1.12	Interactive watershed model	Low	Increases awareness through visualization
1.13	Utility Bill Insert	High	This is the most widely read city publication
1.14	Stream/Watershed Road Signs	Low	This BMP is in the initial stages of being implemented. Sign design was approved and two signs were created in year 2. Signs will be installed in year 4

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 than the City's stream monitoring locations. 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
2.6	Public Comment on Ordinance	Low	Open meetings were held to discuss the new Ordinance; however, the City did not receive comments from the public
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 benchmark cities design criteria and manual requirements
2.15	HHW Events	High	Actively allows citizens to participate and dispose of HHW properly. 806 residents participated in the events in year 2 and ~15, 040 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
2.18	Rain Barrel Class	Moderate	Reinforces principles taught in other environmental programs such as master-composting classes, SmartScaping, and the Don't Bag It Program. Proper application of rain-barrel instruction results in the gradual distribution of rainwater over student's property, potentially reducing pollutant runoff and erosion

3.1	GIS MS4 Database	High	Map used to trace illicit discharges to water bodies. 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 and videos were used to target 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 196 tons of litter were collected in year 2 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. A project plan was developed in year 2
3.15	IDDE	High	Detects illicit discharges which are then mitigated
3.16	Joe Pool Lake Sampling	Low	This BMP is in the initial stages. Sampling point locations were determined in year 2
3.17	Beach Sampling Program	Moderate	Reduces health risks to citizens
3.19	On Site Sewage System Permitting	Low	Only one (1) permit request and two (2) complaints were received in year 2
3.20	Mobile Wash Policy	Moderate	Revised to better discourage illicit discharges and reflect new Stormwater Ordinance
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, and recorded in the database
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
4.5	Complaint Response	High	City investigator ensures problem areas are brought back into compliance, thus reducing pollution runoff

4.6	Construction Ordinance	High	The construction ordinance has been written, approved and adopted for use by the City Council, and is currently in practice
4.7	Site Development Plan Reviews	Moderate	The Site Development Plan Review process has been amended by city council to enhance storm water quality considerations and is being implemented by City staff
4.8	Recording and Public Complaint Response	High	The process for recording and public complaint response has been amended, staff has been fully trained and the amended process has been fully implemented
4.10	Construction Site Storm Water Public Education Program	Moderate	Links to storm water education are located on City web site, which include Construction General Permit and BMP information
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	A staff was assembled to evaluate current criteria, and through NCTCOG and iSWM benchmarking meetings, a Drainage Design Manual was prepared and approved by the City Council on November 18, 2008
5.4	Revise Policies and Design Criteria in Unified Development Code	High	A NCTCOG/ISWM committee was established to review current criteria and policies of the Unified Development Code (UDC). The Development Review Committee (DRC) reviewed the proposed UDC amendments to Article 14 and 15, and these amendments were approved by the City Council on November 18, 2009.
6.1	SWMP Data Tracking	Low	Tracks City's SWMP activities
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
6.4	SOP for MS4 Waste Disposal	High	Ensures MS4 is maintained properly and that waste removed is disposed of appropriately
6.5	SWPP for City	Moderate	This BMP is in the initial stages of implementation. Target audiences were selected and educational materials (posters and videos) were used to increase water quality awareness
6.6	Native/Adaptive Vegetation	Low	This BMP is in the initial stages of implementation. Two areas were chosen for promotion of native/adaptive vegetation
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. Over 620 tons of materials were collected during year 2 and delivered to the Grand Prairie Landfill for proper disposal

6.9	Inspect City Facilities	High	Twenty-eight (28) 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 will help to reduce the discharge of pollutants
6.11	DCFCD SOP for MS4 Waste Disposal	Low	The DCFCD covers a very small area of Grand Prairie. If debris is in an outlet channel that is within the DCFCD's right-of-way or easement, the DCFCD will properly remove the debris. This SOP also addresses the steps implemented by the DCFCD to remove debris from streams.

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 3 as described by the *Target Date*.

See Table 4 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

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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).

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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 2.

BMP 1.2 Activities Completed

Date: 7/2/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Clean Rivers Program on Web site
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 2. Maintenance of Texas SmartScape™ Demonstration Garden at the Prairie Paws Adoption Center	Environmental Services Department, Environmental Quality Division	Years 1 – 5 Years 1 – 5

The City exceeded the goals for this year 2 BMP.

BMP 1.3 Activities Completed

Date: 9/28/2008 ***Responsible Party: Susan Henson, Horticulturist***
Fall Gardening Class Pipeline article:
Approximate Cost = $1,700 to print and free to mail in utility bill; however, contains multiple articles; Labor = 1.5 hours
Fall is a great time for gardening. All classes will be held at 6 p.m. at the Charley Taylor Recreation Center, 601 E. Grand Prairie Rd.
• Thursday, Oct. 9 - Proper Pruning – This class will take the mystery out of when and how to prune trees correctly. Pruning the wrong way can kill trees—an asset you can not afford to lose.
• Thursday, Oct. 16 - Organic Pest Control – Is Organic Better? Take the mystery out of organic pest and disease control in the landscape while improving our environment. For more information call 972-264-6890.

Date: 3/2/2009 to 3/31/2009 ***Responsible Party: Environmental Quality Division and Public Works Department***
WFAA.com Banner Ad
Approximate Cost = $290; Labor = 1 hour
Purchased an animated banner ad with a linked flash page to help promote the Texas SmartScape program.

Date: 7/2/2009 ***Responsible Party: Environmental Quality Division***
Texas SmartScape
Approximate Cost = $0; Labor = 0.5 hours/month
Texas SmartScape educational materials were distributed at the Memorial Library and the Development Center.

Date: 7/2/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Native and Adaptive Plants on Web site
Approximate Cost = $0; Labor = 0.5 hours
The following link is from the City's Web site and includes a Texas SmartScape link as well as information on how to use lawn chemicals in an environmentally friendly manner: www.gptx.org/EnvironmentalQuality/LawnChemicals

Date: 7/2/2009 ***Responsible Party: Environmental Services Department***
Maintenance of Prairie Paws Demonstration Garden
Approximate Cost = $3,757; Labor = 1 hour/week
The Prairie Paws SmartScape demonstration garden was maintained in year 2.

Date: 8/12/2009 ***Responsible Party: Public Works Department***
Water Utilities Garden
Approximate Cost = $860/month; Labor = 2 hours/week
The Water Utilities SmartScape demonstration garden was maintained in year 2 (Figure 1).

Figure 1: Water Utilities Demonstration Garden

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 2 BMP.

BMP 1.4 Activities Completed

Date: 7/2/2009 ***Responsible Party: Environmental Quality Division***

Wheel Distribution
Approximate Cost = $725 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.

Date: 7/8/2009 ***Responsible Party: Environmental Quality Division***
HHW Magnets
Approximate Cost = $1.10 per magnet; Labor = 1 hour/month
The City distributed approximately 1000 Household Hazardous Waste magnets in year 2. Magnets were distributed during Household Hazardous Waste events, during which we had 805 participants, and were made available to visitors at the development center and during complaint inspections.

Date: 8/31/2008 to 8/9/2009 ***Responsible Party: Environmental Quality Division***
Pipeline Articles
Approximate Cost = $1,700 to print each Pipeline and free to mail in utility bill; however, contains multiple articles; Labor = 1.5 hours each
Nine (9) articles advertising HHW events and/or discussing the hazards of disposing of household hazardous waste improperly were printed in the Pipeline.

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

All activities for this BMP are complete for year 2.

<u>BMP 1.5 Activities Completed</u>

Date: 4/26/2009 ***Responsible Party: Solid Waste Division***
Don't Bag It!
Approximate Cost = $1,700 to print the Pipeline and free to mail in utility bill; however, the Pipeline has multiple articles; Labor = 1.5 hours
Don't Bag It! article was printed in the Pipeline.

Date: 7/2/2009 ***Responsible Party: Environmental Services Department***

Educational Materials
Approximate Cost = $0.50 to $1.00/brochure; Labor = 0.5 hour/month
Distributed "Don't Bag It", "Hop To It" and "A Green Guide to Yard Care" materials at Development Center, City libraries, and City Landfill.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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

All activities for this BMP are complete for year 2.

<u>BMP 1.6 Activities Completed</u>

Date: 8/13/2008 Responsible Party: Environmental Quality Division
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: 8/13/2008 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 seven (7) times a week for fifty-two (52) weeks for a total of 364 plays.

Date: 8/31/2008 and 2/22/2009 Responsible Party: Environmental Quality Division
Pet Waste Pollution
Approximate Cost = $1,700 to print and free to mail in utility bill; however, the Pipeline has multiple articles; Labor = 1 hour
Two (2) articles were printed in the Pipeline discussing the environmental and health issues associated with pet waste and how to prevent such issues from occurring.

Date: 8/12/2009 Responsible Party: Environmental Services Department
Pet Waste Brochures
Approximate Cost = $0.94/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.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
1.7 H_2O 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 2.

BMP 1.7 Activities Completed

Date: 10/1/2008 ***Responsible Party: Environmental Quality Division***
Volume 2, Issue 4, Fall 2008 H2O Line
Approximate Cost = $175 to print; Labor = 15 hours

Date: 1/1/2009 ***Responsible Party: Environmental Quality Division***
Volume 3, Issue 1, Winter 2009 H2O Line
Approximate Cost = $175 to print; Labor = 15 hours

Date: 4/1/2009 ***Responsible Party: Environmental Quality Division***
Volume 3, Issue 2, Spring 2009 H2O Line
Approximate Cost = $175 to print; Labor = 15 hours

Date: 7/1/2009 ***Responsible Party: Environmental Quality Division***
Volume 3, Issue 3, Summer 2009 H2O Line
Approximate Cost = $205 to print; Labor = 15 hours

Date: 7/2/2009 ***Responsible Party: Environmental Quality Division***
H2O Line Distribution
Approximate Cost = $0; Labor = 0.5 hours to email
City inspectors regularly distributed the H2O Line during industrial inspections. In addition, each H2O Line was sent out to over 200 contacts via email.

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

All activities for this BMP are complete for year 2.

BMP 1.8 Activities Completed

Date: 10/23/2008 ***Responsible Party: Environmental Quality Division***
4th Quarter 2008
Approximate Cost = $800 for awards, $600 for food; Labor = 20 hours
Annual Awards luncheon was held to recognize compliance and pollution prevention projects. In addition, Steve Remley of Environmental Light Recyclers gave a presentation on mercury bulb waste management and disposal processes.

Date: 1/21/2009 ***Responsible Party: Environmental Quality Division***
1st Quarter 2009
Approximate Cost = $75 to $100 for food; Labor = 15 hours
Cindy Mendez, Environmental Quality Manager, gave a presentation on "Everything You Ever Wanted to Know About Industrial Pretreatment."

Date: 4/9/2009 ***Responsible Party: Environmental Quality Division***
2nd Quarter 2009
Approximate Cost = $75 to $100 for food; Labor = 15 hours
Kurt Middelkoop with the Texas Manufacturing Assistance Center discussed "Cost Reductions Through Lean and Clean Integration."

Date: 7/14/2009 ***Responsible Party: Environmental Quality Division***
3rd Quarter 2009
Approximate Cost = $75 to $100 for food; Labor = 15 hours
Heather Woodward, Senior Consultant with W&M Environmental Group, spoke on "Pollution Prevention for Manufacturing Environments."

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
1.9 Commercial and Industrial Activity Education on the Impacts of Floatables	Awareness of and responsibility for floatables control and responsibility of commercial and industrial businesses will be integrated into existing activities by distributing information to selected facilities during routine inspections. (Refer to BMP 3.11).	1. Find or create informative handouts about litter associated with commercial and industrial activity to distribute	Environmental Services Department, Environmental Quality Division	Year 2
		2. Distribute informative brochures to 60% of the food permit holders inspected each calendar year; make both English and Spanish versions available		Years 2 – 5
		3. Make available on the city website		Years 2 – 5

All activities for this BMP are complete for year 2.

<u>BMP 1.9 Activities Completed</u>

Date: 3/29/2009 ***Responsible Party: Environmental Quality Division***
Clean It Right brochures on Web site
Approximate Cost = $0; Labor = 0.5 hours
The Clean It Right brochures were placed on the Environmental Quality's Web site under Food Service Permits Education. www.gptx.org/EnvironmentalQuality/FoodService

Date: 7/2/2009 ***Responsible Party: Environmental Quality Division***
Food Brochure Distribution
Approximate Cost = $0.50/brochure; Labor < 0.1 hour/inspection
Distributed English and Spanish "Clean It Right" brochures to food permit holders during inspections.

Date: 7/29/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Industrial Brochure
Approximate Cost = $0 (brochures were printed in year 3); Labor = 15 hours
Echo Rexroad created "An Industry's Guide for Protecting Grand Prairie's Watershed" for distribution. The brochure explains what watersheds are, discusses the City's MS4 permit, then lists good housekeeping measures, spill prevention measures, when and how to report spills, spill response measures, training necessary, and volunteer opportunities. This brochure was also posted on the City's Web site at www.gptx.org/EnvironmentalQuality/Industrial.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
1.10 Informational Material for Automotive Related Businesses	Awareness of the impact of the automotive sector's pollutants on water quality will be integrated into existing activities by distribution of information on BMPs and use of BMPs for automotive activities during routine Certificate of Occupancy inspections.	1. Distribute automotive and storm water quality informative material during Certificate of Occupancy inspections 2. Make auto related business BMPs available on the city website	Environmental Services Department, Environmental Quality Division	Years 1 – 5 Years 2 – 5

All activities for this BMP are complete for year 2.

BMP 1.10 Activities Completed

Date: 3/29/2009 ***Responsible Party: Environmental Quality Division***
ARB BMPs on City Web site
Approximate Cost = $0; Labor = 5 hours
Auto related BMPs were created and posted on Environmental Quality's Auto Related Business Education Web page at

www.gptx.org/EnvironmentalQuality/ARB.

Date: 7/9/2009 ***Responsible Party: Diane Castillo, Environmental Specialist***
Automotive Related Education
Approximate Cost = Not available (previous and current purchases); Labor = 110 hours
Diane Castillo, an Environmental Specialist with the Environmental Quality Division, distributes automotive and stormwater quality educational materials during auto-related business annual inspections and Certificate of Occupancy inspections. Materials may include, but are not limited to "7 Ways to Keep a Clean Shop" 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, An Environmental Guide for Texas Automotive/Auto body Repair Shops, and Solid Waste Collection information.

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 2.

BMP 1.11 Activities Completed

Date: 7/8/2009 ***Responsible Party: Environmental Quality Division***
Major Rivers 2008-2009
Approximate Cost = $0; Labor = 0.5 hours
The Grand Prairie Independent School District did not need additional Major Rivers programs for year 2.

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 2. Annually display an interactive watershed model or similar display during the child related water quality education events	Environmental Services Department, Environmental Quality Division	Year 1 Years 1 – 5

All activities for this BMP are complete for year 2.

BMP 1.12 Activities Completed

Date: 4/18/2009 ***Responsible Party: Environmental Quality Division***
Earth Day Festival
Approximate Cost = $5 for refill materials; Labor = 4 hours
The Environmental Quality Division demonstrated the EnviroScape at the Earth Day festival held at the Development Center.

Date: 4/24/2009 ***Responsible Party: Environmental Quality Division***
Arbor Day Festival
Approximate Cost = $5 for refill materials; Labor = 3 hours
Environmental Quality Division demonstrated the importance of keeping our watersheds clean of pollution by displaying the EnviroScape during the Arbor Day festival held at City Hall.

Figure 2: EnviroScape at Arbor Day 2009

Date: 5/16/2009 ***Responsible Party: Environmental Quality Division***
MayFest 2009
Approximate Cost = $0; Labor = 0 hours
MayFest 2009, our planned water quality educational event, was scheduled to take place in year 2; however, this event was canceled on the morning of the 16th due to thunderstorms that persisted into the afternoon.

Date: 7/8/2009 ***Responsible Party: Environmental Quality Division***
Replacement Parts
Approximate Cost = $25; 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

All activities for this BMP are complete for year 2.

BMP 1.13 Activities Completed

Date: 1/25/2009 to 7/5/2009 ***Responsible Party: Environmental Quality Division***
Pipeline articles
Approximate Cost = $1,700 to print each Pipeline and free to mail in utility bill; each Pipeline has multiple articles; Labor = 1.5 hours
Four (4) Pipeline articles were printed and distributed with water quality information: Winter Fertilizing, What is a Watershed?, Pool Maintenance, and Prevent Vehicle Spills. 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

All activities for this BMP are complete for year 2.

BMP 1.14 Activities Completed

Date: 9/2/2008 ***Responsible Party: Environmental Quality Division***
Design Approval
Approximate Cost = $85/sign plus $50 set up fee; Labor = 20 hours
A watershed sign design was approved in year 2. Jessica Albert, graphic designer, created the design. Two signs were created in year 2 (one for Fish Creek and one for Johnson Creek).

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

All activities for this BMP are complete for year 2.

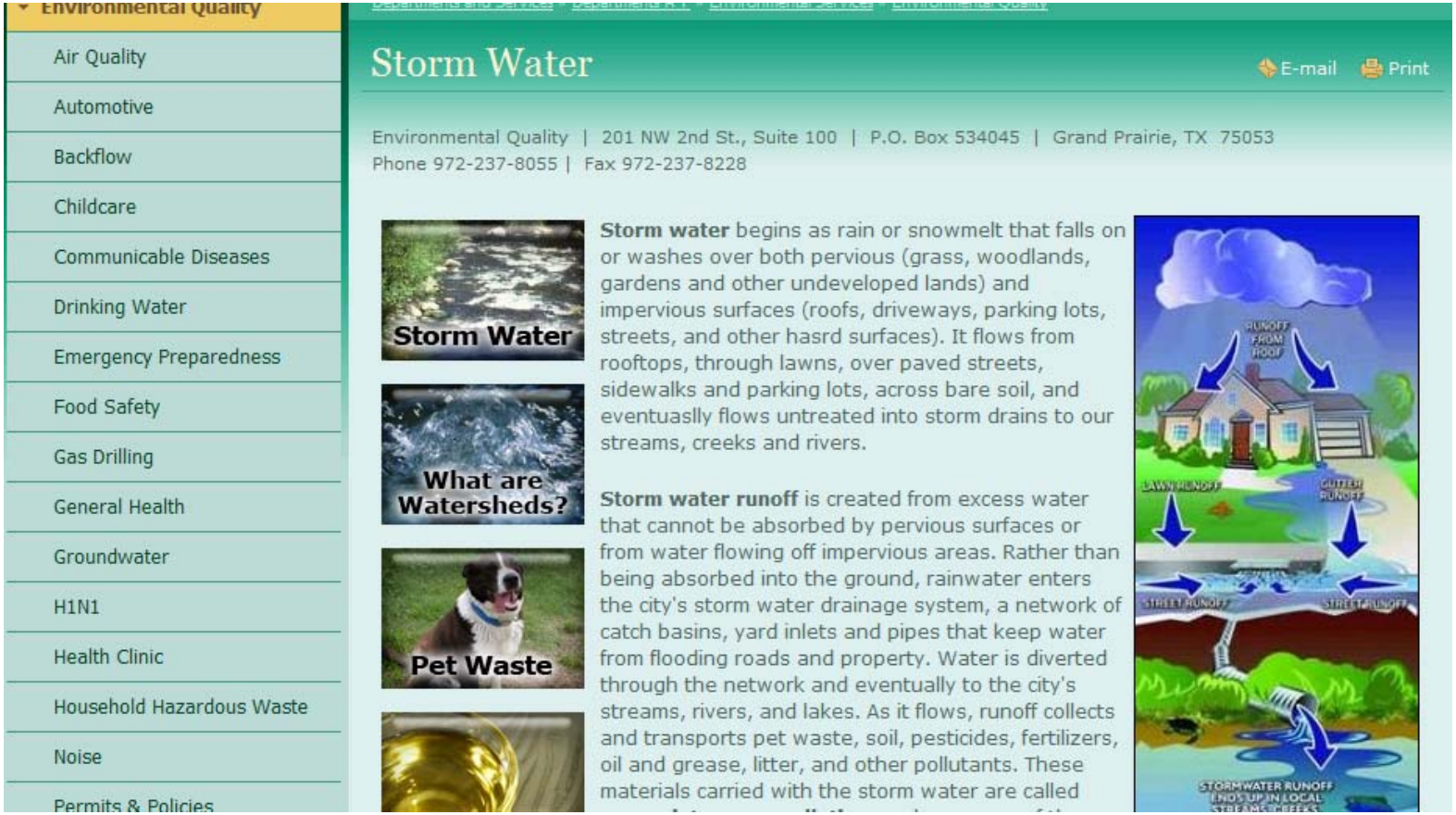
BMP 1.15 Activities Completed

Date: 8/13/2008 ***Responsible Party: Environmental Quality Division***
Doo the Right Thing Video
Approximate Cost = NA (previous purchase); Labor = 0.10 hrs/day
The "Doo the Right Thing" video was aired on GPTV seven (7) times a week for fifty-two (52) weeks for a total of 364 plays (see BMP 1.6).

Date: 9/11/2008 ***Responsible Party: Cheri Hebison, Senior Environmental Specialist***
Know the Code - Paint Disposal
Approximate Cost = N/A; Labor = 8 hours (includes set up, shooting, and editing)
Cheri Hebison, Senior Environmental Specialist, spoke about the proper disposal of paints on Know the Code, a GPTV production.

Date: 7/9/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Web Site Information
Approximate Cost = $75 (purchased "Know Where It All Goes" DVDs); Labor = 80 hours
Created and posted stormwater educational material for Environmental Quality Web site in year 1. This information is continuously updated. Includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team. The City's Web site was redesigned in year 2. The address to this Web site is www.gptx.org/EnvironmentalQuality/Stormwater.

Figure 3: Stormwater Web site



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

There are no required activities listed for this BMP for year 2.

BMP 1.16 Activities Completed

Date: 7/9/2009 ***Responsible Party: Environmental Quality Division***
Web Site Translation
Approximate Cost = $0; Labor = 0 hours
The City's Web site was redesigned in year 2 and now provides the option to literally translate every page into Spanish. This includes most links and documents that are posted to each page. As a result, visitors to the Web site may now read the following pages in Spanish: Stormwater, What are Watersheds, Pet Waste, Cooking Oils, Lawn Chemicals, Stream Monitoring, Volunteering, Kids Activities, Storm Water Management Program, and Texas Stream Team.

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

All activities for this BMP are complete for year 2.

BMP 1.17 Activities Completed

Date: 1/3/2009 ***Responsible Party: Environmental Quality Division***
Auto Watch - Volume 3 Issue I

Approximate Cost = $900 to print, $300 to mail; Labor = 60 hours
Volume 3, Issue 1, January 2009, Auto Watch newsletter was distributed to at least 300 automotive businesses in Grand Prairie explaining new local automotive regulations and other pertinent topics. English and Spanish versions were made available.

Date: 7/10/2009 Responsible Party: Environmental Quality Division
Auto Watch - Volume 3, Issue 2
Approximate Cost = $645 to print, $250 to mail; Labor = 60 hours
Volume 3, Issue 2, July 2009, Auto Watch newsletter was distributed to at least 300 automotive businesses in Grand Prairie explaining new local automotive regulations and other pertinent topics. English and Spanish versions were made available.

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

All activities for this BMP are complete for year 2.

BMP 1.18 Activities Completed

Date: 3/9/2009 Responsible Party: City Manager's Office, Special Projects Coordinator
International Adopt-A-Highway Day Celebration
Approximate Cost = $30; Labor =6 hours
Keep Grand Prairie Beautiful celebrated International Adopt-A-Highway Day with the renewal of our Adopt-A-Street contracts and a proclamation. The event offered us the opportunity to educate others about the importance of picking up litter.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator
Great American Cleanup Main Event Day Post Cleanup Party
Approximate Cost =$3,500; Labor = 100 hours
Keep Grand Prairie Beautiful hosted a Post Cleanup Party for all the groups who participated in the Great American Cleanup Main Event Day. More than 30 groups participate, including Green & Clean Campuses, Clean & Beautiful Neighborhoods, Clean Companies and Adopt-A-Street volunteers. The party included announcements related to litter statistics and appearances from KGPB's Water Drop Mascot and Trash Can Man. Mood cups that list the seven sources of litter and our Litter Free hotline were distributed. KGPB explained how the Litter Free hotline works (call 972-237-8330 and report litter along the side of roads and/or call and report the license of a vehicle from which you saw someone toss litter). KGPB also explained that calls for litter are referred to the City's litter contractor to get it picked up and calls regarding litterers are referred to the Texas Department of Transportation's Report a Litterer Program (the owner of the vehicle receives a written warning about the consequences and penalties for littering).

Date: 4/18/2009 Responsible Party: City Manager's Office, Special Projects Coordinator
Earth Day Celebration

Approximate Cost = $560; Labor = 30 hours
Keep Grand Prairie Beautiful sponsored an Earth Day Celebration at City Hall. Educational booths included, Stormwater, Solid Waste, Recycling, Adopt-A-Street, Adopt-A-Stream, Youth for Environmental Action (YEA!), and we showed the film "An Inconvenient Truth." The event was attended by the general public, as well as youth groups and a Girl Scout Troop.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
1.19 Educational Material for Construction Site Personnel	Create or find educational materials on BMPs and erosion control for construction site personnel.	1. Create or find brochure and/or link on construction BMPs and erosion control requirements	Environmental Services Department, Environmental Quality Division	Year 2
		2. Distribute at least 200 brochures a year at the Development Center and/or provide a link to the educational material on the city's website	Planning and Development Department and Environmental Services Department	Years 2– 5

All activities for this BMP are complete for year 2.

BMP 1.19 Activities Completed

Date: 8/18/2008 ***Responsible Party: Environmental Quality Division***
Preventing Stormwater Pollution at Construction Sites
Approximate Cost = NA (previous purchase); Labor = 0.5 hours/3 months
"Preventing Stormwater Pollution at Construction Sites" brochures were available in English and Spanish at the Development Center.

Date: 8/18/2008 ***Responsible Party: Environmental Quality Division***
Steps to Obtain Construction Permits for Storm Water Discharges
Approximate Cost = $0.78/brochure; 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 (www.gptx.org/index.aspx?page=949) Web sites.

Date: 7/10/2009 ***Responsible Party: Environmental Quality Division***
BMPs on Engineering Web Site
Approximate Cost = $0; Labor = 3 hours

Information on the TCEQ's Construction General Permit and construction BMPs was placed on the Engineering Web site. The Web site address is www.gptx.org/index.aspx?page=949.

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

All activities for this BMP are complete for year 2.

BMP 1.20 Activities Completed

Date: 8/18/2008 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Stormwater Web Site
Approximate Cost = $0; Labor = 2 hours/month
Created and posted stormwater educational material for Environmental Quality Web site in year 1. This information is continuously updated. Includes pages for the following topics: Stormwater, What are Watersheds?, Pet Waste, Cooking Oils, Lawn Chemicals, Volunteering, Stream Monitoring, Kids Activities, Storm Water Management Program, and Texas Stream Team.

The City's Web site was redesigned in year 2. The address to this Web site is www.gptx.org/EnvironmentalQuality/Stormwater.

Date: 8/18/2008 ***Responsible Party: Environmental Quality Division***
Visitor's Center Education
Approximate Cost = $0.46/brochure; Labor = 0.5 hours/month
The Environmental Quality Division placed the "Nonpoint Source Pollution: You are the Key to the Cleanup" brochure in the Visitor's Center for distribution.

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 2.

BMP 1.21 Activities Completed

Date: 8/18/2008 ***Responsible Party: Environmental Quality Division***
Take Care of Texas Brochures
Approximate Cost =$0; Labor = 0.5 hours/month
"Take Care of Texas-Do Your Part!" brochures were made available for distribution at the Development Center.

MCM 2: Public Involvement & Participation

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
2.1 Public Notice in Development of SWMP	Comply with federal, state, and local public notice requirements when implementing the SWMP.	1. Continue to make the document available for comments on the city Web site and at the Environmental Services Department office 2. Make presentations to applicable city council committees	Environmental Services Department, Environmental Quality Division	Years 1 – 5 Year 1

All activities for this BMP are complete for year 2.

BMP 2.1 Activities Completed

Date: 8/18/2008 ***Responsible Party: Environmental Quality Division***
SWMP Survey on Web Site
The Environmental Quality Division posted a Web site survey to better understand citizens' views on water quality issues. The link to the survey may currently be found at www.gptx.org/EnvironmentalQuality/SWMP.

Date: 8/18/2008 ***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 Services Department office located at 201 Northwest 2nd Street, Ste 100 Grand Prairie Texas 75050.

Date: 10/16/2008 Responsible Party: Environmental Quality Division
SWMP at Memorial Library
A copy of the City's Storm Water Management Program is available for public review and comments at the Memorial Library located at 901 Conover Drive Grand Prairie Texas 75051.

Date: 2/18/2009 Responsible Party: Environmental Quality Division
SWMP Presentation for Public Safety, Health, and Environmental Committee
Echo Rexroad presented the Storm Water Management Program to the Public Safety, Health, and Environmental Committee. This meeting was open to the public.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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

The City has exceeded the goal for BMP 2.2.

BMP 2.2 Activities Completed

Date: 9/9/2008 Responsible Party: Echo Rexroad, Sr. Environmental Specialist
Reagan Middle School, Phase I and II
Thad Myers, a teacher at Reagan Middle School, and 25 6th and 7th grade students completed Phase I and II of the Texas Stream Team training.

Date: 10/25/2008 Responsible Party: Echo Rexroad, Sr. Environmental Specialist
GPISD Teachers, Phase I and II
Seven teachers with the Grand Prairie Independent School District (Mario Orozco, Janice Billups, Jackie Lindsey, Phillip Kinstley, Deidra Johnson, Deborah Slocum, and Tracy Hollis) and Diane Castillo with the City of Grand Prairie Environmental Services Department completed Phase I and II of the Texas Stream Team training.

Date: 10/31/2008 Responsible Party: Echo Rexroad, Sr. Environmental Specialist
Thad Myers Phase III
Thad Myers with GPISD completed Phase III of Texas Stream Team training. The sampling site is located at the Castle branch north of Regan Middle School.

Date: 11/18/2008 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Phillip Kinstley Phase III

Phillip Kinstley with GPISD completed Phase III of Texas Stream Team. His sampling site is located at Kirby Creek at 3303 Corn Valley Road behind the Nature Center.

Date: 12/5/2008 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Pratt and Whitney Phase I and II

Ted Thomas with Pratt and Whitney completed Phase I and II of the Texas Stream Team training.

Date: 1/14/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

International Paper Phase I and II

Paul Bucek with International Paper completed Phase I and II of Texas Stream Team training.

Date: 2/6/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Pratt and Whitney Phase III

Ted Thomas with Pratt and Whitney completed Phase III of the Texas Stream Team training. The sampling point is located at Johnson Creek and North Great Southwest parkway.

Date: 2/17/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

International Paper Phase III

Paul Bucek with International Paper completed Phase III Texas Stream Team training. The sampling location is located at the Santree branch of the Trinity River on Sunnyvale between King Richard and Robinhood Drive.

Date: 2/26/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Sterigenics Phase I and II

Richard Carlson from Sterigenics completed Phase I and II of Texas Stream Team training.

Date: 3/2/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Tia Rosa Bakery Phase I and II

Brett Estes and Terezo Rivera from Tia Rosa Bakery completed Phase I and II of Texas Stream Team training.

Date: 3/20/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Eagle Scout Troop 500 for Bell Helicopter

Six participants from Eagle Scout Troop 500 completed Phase I and II of Texas Stream Team training. Tammy Chan and Meco Nathan from Keep Grand Prairie Beautiful also completed the training.

Date: 3/27/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Deidre Johnson, Phase III

Deidre Johnson with the Grand Prairie Independent School District completed Phase III Texas Stream Team training.

Date: 4/7/2009 Responsible Party: Echo Rexroad, Sr. Environmental Specialist

Tia Rosa Bakery Phase III
Brett Estes and Terezo Rivera from Tia Rosa Bakery 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

The City exceeded the goals for this year 2 BMP.

BMP 2.3 Activities Completed

Date: 8/31/2008 ***Responsible Party: Solid Waste Division***
Pipeline article: Dig This! - Confessions of a GP Master Composter
About eight years ago, I went completely organic in my gardening and decided to build a compost bin. Thinking I had a pretty good idea of how to start, I built my bin out of paving stones and added grass clippings and dried leaves in the pile. I also added food scraps into the mixture and covered everything with a tarp to "heat up the pile." The only thing I got out of it was a bunch of fat worms (not a bad thing) and gigantic rats! After all, I was providing a nice home and meals. I decided it was time to learn the right way to compost and attended the City of Grand Prairie's composting class in May. Not only did I make great new friends, but for my $10 fee, I gleaned invaluable information. During the three-day class, I learned that 75 percent of our trash can be recycled, and that made me take a closer look at our family's trash. Whereas before we put out four or five large bags of trash each pick up day, we now have one small bag that goes out. If one family can reduce the waste going to our landfill by three bags per week, think of what an entire community could do! Keeping our resources sustainable is everyone's job, and this composting class is a great start! If you would like more information about composting or our upcoming fall class, please email dwillingham@gptx.org or mbell@gptx.org.

Date: 4/4/2009 ***Responsible Party: Solid Waste Division***
Master Composter Class
One Master Composter class was held in year 2. Twenty-one individuals participated (this includes 4 volunteers and 1 unofficial participant). Each individual received the following educational materials: 1) "A Green Guide to Yard Care" and 2) the "Don't Bag It" brochure.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date

2.4 Storm Drain Markers	Install storm drain markers "Protect Our Water, Don't Dump" to promote awareness of the storm drain system.	1. Purchase and have installed through volunteer help 100 of the city's unmarked storm drain curb inlets annually	Environmental Services Department, Environmental Quality Division	Years 2 – 5

The City has exceeded the goal for BMP 2.4.

BMP 2.4 Activities Completed

Date: 6/1/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
2009 Storm Drain Projects
Students and teachers from Reagan Middle School, Lee Middle School, and Jackson Middle School participated in storm drain labeling using "Don't Dump" markers. A total of 212 storm drains were labeled during year 2.

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

MayFest 2009 was the City's planned water quality educational event that was scheduled to take place in year 2; however, this event was canceled on the morning of the event due to thunderstorms that persisted into the afternoon. As a result, no surveys were collected. The City did hold other educational events (i.e. Arbor Day, Earth Day, Aquatic Day) (see BMP 1.12 and 1.18).

BMP 2.5 Activities Completed

Date: 5/16/2009 ***Responsible Party: Environmental Quality Division***
Pipeline article: MayFest 2009
"Celebrate Spring at MayFest"
It is that time of year again! Join the City of Grand Prairie and Grand Prairie Independent School District to celebrate MayFest 2009. Each year the City of Grand Prairie and GPISD co-hosts this great educational event that focuses on water quality issues. This year's event will take place on Saturday, May 16, 9 a.m. to 3 p.m. at the Kirby Creek Nature Center, 3303 Corn Valley Road. MayFest goers will enjoy a wide

variety of aquatic and wildlife demonstrations, exhibits and conservation tips, information on summer camps, musical and dramatic performances, and other programs. Participants will also have the opportunity to test Kirby Creek's water quality. Enjoy arts and crafts vendors, festival foods and more. For more information call 972-264-8729.

Date: 5/16/2009 ***Responsible Party: Environmental Quality Division***
MayFest Event and Survey
MayFest 2009, the City's planned water quality educational event, was scheduled to take place in year 2; however, this event was canceled on the morning of the event due to thunderstorms that persisted into the afternoon. As a result, no surveys were collected.

Date: 5/22/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Truman Middle School Career Fair 2009
Echo Rexroad gave a presentation on what an Environmental Specialist for the City of Grand Prairie does on a daily basis to ~75 6th, 7th, and 8th graders. The presentation included a discussion on stormwater, storm drains, watersheds, and the importance of not polluting.

Date: 7/14/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Aquatic Day
On 6/16/2009, 6/23/2009 and 7/14/2009 Echo Rexroad spoke with 35, 35, and 24 campers, respectively, about water quality issues. In addition, campers collected and tested water samples from Joe Pool Lake using World Water Monitoring Day kits. Campers ranged in age from 9-17 years old.

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

All activities for this BMP are complete for year 2.

BMP 2.6 Activities Completed

Date: 5/14/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Public Health Advisory Committee
Echo Rexroad presented a draft of the City's Stormwater Ordinance to the Public Health Advisory Committee. This was an open meeting.

Date: 6/17/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Public Safety, Health and Environment Committee
Echo Rexroad presented a draft of the City's Stormwater Ordinance to the Public Safety, Health and Environment Committee. This was an

open meeting.

Date: 7/7/2009 ***Responsible Party: James Cummings, Environmental Services Director***
City Council
James Cummings presented the City's revised Stormwater Ordinance to City Council for adoption. This was an open meeting.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
2.7 Illegal Dumping Hotline	Encourage citizens to report violators of dumping by participating in an inter-local response to an illegal dumping hotline.	1. Continue to make the Illegal Dumping Hotline available on the city's 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

All activities for this BMP are complete for year 2.

BMP 2.7 Activities Completed

Date: 8/24/2008 ***Responsible Party: Environmental Quality Division***
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."

Date: 8/24/2008 ***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 www.gptx.org/index.aspx?page=219.

"Illegal Dumping Hotline: 972-237-8064"

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

All activities for this BMP are complete for year 2.

BMP 2.8 Activities Completed

Date: 9/15/2008 ***Responsible Party: Environmental Quality Division***
Revisions to SWMP
The Environmental Quality Division met with Planning and Development staff to discuss revisions to the SWMP as directed by Gordon Cooper with the TCEQ.

Date: 2/5/2009 ***Responsible Party: Planning and Development Department***
Drainage and General Permit Complaint Procedure
Staff from the Planning and Development Department met to discuss the purpose of the drainage complaint procedure, contact persons, first responders, and non-compliance enforcement.

Date: 3/10/2009 ***Responsible Party: Environmental Quality Division***
Floatables Project Design
Cindy Mendez, Environmental Quality Manager, and Echo Rexroad, Senior Environmental Specialist, met to discuss the Floatables Project Design.

Date: 4/14/2009 ***Responsible Party: Environmental Quality Division***
Native and Adaptive Vegetation
Echo Rexroad met with Ron McCuller and Joe Sherwin with the Planning and Development Department to discuss possible areas to promote native or adaptive vegetation as described in BMP 6.6.

Date: 4/14/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Waste Disposal
Echo Rexroad met with Loyal Rowland and Barry D. Fulfer with the Streets Department to discuss the standard operating procedures used to dispose of waste from the MS4.

Date: 5/14/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Public Health Advisory Committee
Echo Rexroad presented a draft of the City's Stormwater Ordinance to the Public Health Advisory Committee. This was an open meeting.

Date: 6/17/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Public Safety, Health and Environment Committee

Echo Rexroad presented a draft of the City's Stormwater Ordinance to the Public Safety, Health and Environment Committee. This was an open meeting.

Date: 7/17/2009 ***Responsible Party: James Cummings, Environmental Services Director***
City Council
James Cummings presented the City's revised Stormwater Ordinance to City Council for adoption. This was an open meeting.

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

All activities for this BMP are complete for year 2.

BMP 2.9 Activities Completed

Date: 8/16/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Quarterly Adopt-A-Street Cleanup
Adopt-A-Street volunteers representing 91 groups participated in a cleanups of litter - floatables - on city streets for a total of 237 volunteer hours.

Date: 10/4/2008 ***Responsible Party: City Manager's Office, Special Project Coordinator***
Quarterly Adopt-A-Street Cleanups
Adopt-A-Street volunteers representing 91 groups participated in a cleanups of litter - floatables - on city streets for a total of 728 volunteer hours.

Date: 10/18/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Kirby Creek and Fish Creek Adopt-A-Stream Cleanup
Volunteers from the North Texas River Runners and Dallas Down River Club spent a total of 60 volunteer hours kayaking and canoeing along sections of Kirby Creek and Fish Creek. The cleanup provided the opportunity to educate the participants about water quality and to celebrate World Wide Water Quality Monitoring Day.

Date: 1/17/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Mountain Creek Adopt-A-Stream Cleanup
Volunteers from the Boy Scouts Order of The Arrow volunteers spent a total of 252 volunteer hours doing a shore based cleanup along Mountain Creek. During the post-cleanup luncheon, we educated the youth about water quality as it relates to point and non-point pollution.

Date: 1/24/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Quarterly Adopt-A-Street Cleanups

Adopt-A-Street volunteers representing 91 groups participated in cleanup events of litter – floatables - on city streets for a total of 369 volunteer hours.

Date: 3/21/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
OHSV Fish Creek Adopt-A-Stream Cleanup
Oak Hollow - Sheffield Village Neighborhood Association and its Clean & Beautiful Neighborhood Sub-Committee participated in a Fish Creek shore based clean up with 87 volunteer hours.

Date: 4/4/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Quarterly Adopt-A-Street Cleanups
Adopt-A-Street volunteers representing 91 groups participated in cleanup events of litter - floatables - on city streets for a total of 712 volunteer hours.

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 2 BMP.

BMP 2.10 Activities Completed

Date: 4/4/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
OHSV Clean & Beautiful Neighborhood Cleanup
Keep Grand Prairie Beautiful sponsored a cleanup of the Oak Hollow- Sheffield Village neighborhood in partnership with their Clean & Beautiful Neighborhood Committee. Volunteers cleaned litter from along Great Southwest Parkway and Bardin Road. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Northeast Connection Clean & Beautiful Neighborhood Cleanup
Keep Grand Prairie Beautiful sponsored a cleanup of the Northeast Connection neighborhood in partnership with their Clean & Beautiful Neighborhood Committee and volunteers from Travis Elementary. Volunteers cleaned litter from along 17th - 19th Streets, Pine Street and Small Hill, as well as other intra-neighborhood streets. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Burbank Gardens Clean & Beautiful Neighborhood Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of the Burbank Gardens neighborhood in partnership with their Clean & Beautiful Neighborhood Committee and Garcia Elementary. Volunteers cleaned litter from along Graham, NE 29th, NE 28th and other intra-neighborhood streets. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Matthew Road Mobile Home Estates Clean & Beautiful Neighborhood Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of the Matthew Road Mobile Home Estates neighborhood in partnership with their Clean & Beautiful Neighborhood Committee. Volunteers cleaned litter from along Matthew Road, Ranch Road, Corral and Camp Wisdom. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Grand Peninsula Owners Clean & Beautiful Neighborhood Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of the Grand Peninsula neighborhood in partnership with the Grand Peninsula Owners Clean & Beautiful Neighborhood Committee. Volunteers cleaned litter from along Arlington Webb-Briton Road, Charles England parkway and along the stormwater retention area that is located within their neighborhood. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Trailwood Clean & Beautiful Neighborhood Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of the Trailwood neighborhood in partnership with the Trailwood Clean & Beautiful Neighborhood Committee and Dickinson Elementary. Volunteers cleaned litter from along Matthew Road, Polo Road, Palmer Street and along the creek channel between Lewis and Clark Streets. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Country Club Estates Clean & Beautiful Neighborhood Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of the Country Club Estates neighborhood in partnership with the Country Club Estates Clean & Beautiful Neighborhood Committee. Volunteers cleaned litter from along Fish Creek Road, Belt Line Road, and intra-neighborhood streets. Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. The Trash Can and Water Drop mascots were at the party to help educate the residents about litter prevention and stormwater pollution prevention.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Bear Creek Clean & Beautiful Neighborhood Cleanup

Keep Grand Prairie Beautiful sponsored a cleanup of the Bear Creek neighborhood in partnership with the Bear Creek Clean & Beautiful Neighborhood Committee. Volunteers cleaned litter from along Shady Grove, Gilbert Rd. (N, W, E & S), Wright Street and Jones Street.

Afterwards, they celebrated at a post cleanup party at the Bowles Life Center. We had our trash can and water drop mascots at the party to help educate the residents about litter prevention and stormwater pollution prevention.

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

All activities for this BMP are complete for year 2.

BMP 2.11 Activities Completed

Date: 8/27/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Green & Clean Campus Meeting
The facilitators of the Green & Clean Campus program met to organize the 2007-2008 Green & Clean Campus season and kick-off event.

Date: 9/22/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
2008-2009 Green & Clean Campus Kick-Off
Keep Grand Prairie Beautiful sponsored a Kick-Off event for our 2008-2009 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: 11/14/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
Texas America Recycles Day Events With GCCP Campuses
Keep Grand Prairie Beautiful helped to sponsor a number of Texas America Recycles Day events at various schools, including Daniels Elementary Academy, Barbara Bush Elementary and Immaculate Conception school.

Date: 11/17/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
November GCCP Meeting
Keep Grand Prairie Beautiful sponsored a Green & Clean Campus meeting in partnership with the GPISD. Green & Clean Campus Coordinators from 37 schools attended. The coordinators shared their unique campus environmental education efforts. KGPB answered questions about their programs and promoted their Recycling Contest in January and Arbor Day Poster Contest for which entries were due in February.

Date: 1/12/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***
January GCCP Meeting

Keep Grand Prairie Beautiful sponsored a meeting of the Green & Clean Campus Coordinators from 37 schools in partnership with the GPISD. KGPB announced a new partnership with Real School Gardens, which offers funding for the development of outdoor learning areas (gardens) for qualifying Title 1 schools. All schools, be they a Title 1 school or not, were also invited to participate in professional development days which includes trainings about native plants, erosion, pond studies and why composting is better than using chemical fertilizers.

Date: 3/16/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

March GCCP Meeting

Keep Grand Prairie Beautiful sponsored a meeting of the Green & Clean Campus Program in partnership with the GPISD. During this meeting the teachers were advised that the upcoming MayFest event would focus on water quality issues. KGPB also encouraged them to attend the Arbor Day event and ShadeMakers Citizen Forestry class.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Daniels Elementary Academy GCCP E-Waste Collection Event

Keep Grand Prairie Beautiful co-sponsored an e-waste collection event with Daniels Elementary Academy's Green & Clean Campus program. This event provided an opportunity to collect electronic waste that can't be put out for normal trash collection. This type of event helps prevent e-waste from being dumped into Grand Prairie's waterbodies. These e-waste collection events also provide opportunities to educate the public about proper disposal of these items. This event was promoted with flyers sent home with every student, throughout the Dalworth neighborhood, and announcements over the school PA.

Date: 4/4/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Dickinson Elementary GCCP E-Waste Collection Event

Keep Grand Prairie Beautiful co-sponsored an e-waste Collection event with the Dickinson Elementary Green & Clean Campus program. This event provided an opportunity to collect electronic waste that can't be put out for normal trash collection. This type of event helps prevent e-waste from being dumped into Grand Prairie's waterbodies. These e-waste collection events also provide opportunities to educate the public about proper disposal of these items. This event was promoted with flyers sent home with every student, throughout the Trailwood neighborhood, and announcements over the school PA.

Date: 4/16/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

GCCP Real School Gardens Professional Development Event

Keep Grand Prairie Beautiful, the GPISD, and our Green & Clean Campus Program co-hosted a "Real People Event" in partnership with Real School Gardens at Florence Hill Elementary School. The event included a presentation by Jane Kirkland, author of the acclaimed Take-A-Walk book series. Kirkland's series has won many awards, including the National Arbor Day Foundation’s Education Award for 2005 and a Teachers Choice Award in 2006, among others. The series is endorsed as an important resource for students, educators and parents, by the National Science Teachers Association and Animal Planet TV star Jeff Corwin of The Jeff Corwin Experience. The latest in the series is “No Student Left Indoors: Creating a Field Guide to Your Schoolyard.”

Date: 4/18/2009 Responsible Party: City Manager's Office, Special Projects Coordinator

Earth Day Celebration

Keep Grand Prairie Beautiful partnered with other City departments to host an Earth Day celebration that included education booths about stormwater, solid waste, recycling, and water quality. Participating students were able to create Earth Day T-shirts with environmental

messages. We also showed the movie "An Inconvenient Truth."

Date: 4/24/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***

Texas Arbor Day Celebration

Keep Grand Prairie Beautiful participated in the City's annual Arbor Day celebration by hosting a booth dedicated to our ShadeMakers Citizen Forestry classes. We also revealed the District winners of the State Arbor Day Poster Contest. Through these programs, participating students, teachers and families learn about how trees can buffer stormwater.

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

All activities for this BMP are complete for year 2.

BMP 2.12 Activities Completed

Date: 8/21/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***

Clean Company Meeting

Met with representatives of the Grand Prairie Chamber of Commerce -- co-sponsors of the Clean Company Program -- to plan upcoming events including our annual Clean Company Luncheon (Nov. 13, 2008) and an e-waste collection event. Three representatives attended this meeting.

Date: 11/13/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***

Texas America Recycles Day Clean Company Luncheon

Keep Grand Prairie Beautiful sponsored a Clean Company Recruitment luncheon at Lone Star Park in Grand Prairie. The event was attended by existing Clean Company members, some of whom shared about their programs. A Senior Environmental Specialist, Echo Rexroad, shared about the Texas Stream Team water quality monitoring program and how companies can participate. Three new companies signed up for the Clean Company program as a result of the luncheon.

Date: 11/15/2008 ***Responsible Party: City Manager's Office, Special Projects Coordinator***

Texas America Recycles Day E-Waste Collection Event for Clean Companies

Keep Grand Prairie Beautiful sponsored an e-waste collection event in partnership with the Chamber of Commerce. KGPB distributed information about KGPB environmental programs to participating companies.

Date: 4/22/2009 ***Responsible Party: City Manager's Office, Special Projects Coordinator***

Lockheed Martin Missiles and Fire Control Green Affinity Group Earth Day Event

Keep Grand Prairie Beautiful supported an Earth Day Fair for the employees of Lockheed Martin Missiles and Fire Control. The event held in coordination with their Green Affinity Group, which is an employee participation program Lockheed started. They have different Affinity Groups employees can join. The Green Affinity Group is for those employees who are interested in volunteering for environmental causes. The establishment of a Green Affinity Group is a Level 5 Clean Company activity. The event featured a KGPB informational booth, as well as booths from the City's Water Quality Division and the Tarrant County Master Gardeners. Each of the booths included information pertinent to keeping stormwater clean.

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 were no required BMP activities for year 2.

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 2.

BMP 2.14 Activities Completed

Date: 9/30/2008 ***Responsible Party: Engineering Division***

Request to Consultant

In its preparation of the 2008 update to the Drainage Design Manual, the review services of Espey Consultants, Inc. were requested on September 30, 2008. Specifically, Espey Consultants were asked to review the drainage policies and drainage manual and to 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, the City's consultant in charge of the 2008 Drainage Design Manual update and revisions.

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

The City exceeded the goals for this year 2 BMP.

BMP 2.15 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***

Contract with Fort Worth

The City of Grand Prairie has 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: 6/15/2009 ***Responsible Party: Environmental Quality Division***

HHW Events

The Environmental Quality Division held eight (8) Household Hazardous Waste events throughout the period of October 3, 2008 through June 16, 2009. During this time 806 residents participated in the events and ~15, 040 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 2.

BMP 2.16 Activities Completed

Date: 10/23/2008 ***Responsible Party: Cheri Hebison, Sr. Environmental Specialist***

2008 Annual Compliance Awards
The following businesses were recognized in the Fall H2O Line and given 100% Compliance Awards at the 2008 Environmental Compliance Annual Awards Ceremony:

Advanced Rubber Molding, American Animal Health, Composite Technology, Fruit of the Earth, Keystone Circuit Boards, Lockheed Martin Missiles & Fire Control – Shook, Lockheed Martin, Missiles & Fire Control – LOSAT, Lockheed Martin Missiles & Fire Control – Marshall, Pratt & Whitney Services -1177, Pratt & Whitney Services - 1174, Rheaco, Inc., Siemens Energy & Automation, Smurfit Stone Container, Strayer Voight, Sun Chemical, Valspar Coating, Vecta, and International Paper Box Plant.

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 2.

BMP 2.17 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***
Distribution Lists
The City currently distributes the H2O Line newsletter to ~300 contacts via email using a maintained e-mail contact list. In addition, the Auto Watch newsletter is distributed to approximately 450 contacts using a maintained mailing list. This list is made up of English and Spanish speaking contacts.

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

The City exceeded the goals for this year 2 BMP.

BMP 2.18 Activities Completed

Date: 8/21/2008 ***Responsible Party: Public Works Department***
Rain Barrel Classes
The City held Rain Barrel classes on the following dates:

Aug 21, 2008	30 customers
April 7, 2009	40 customers
May 21, 2009	17 customers
July 16, 2009	10 customers

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.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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 2.

BMP 3.1 Activities Completed

Date: 8/12/2009 ***Responsible Party: GIS Division***

Year 2 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.

Outfall and discharge point locations are also field verified by Engineering and GIS staff using Global Positioning System. From January 12, 2009 to June 24, 2009, 503 of 1,468 discharge points were field verified. This comprises 34% of the City's discharge points. Of the discharge points that were inspected, 351 were outfalls (points discharging directly into a waterbody). The City currently has a total of 1,014 outfalls. As a result, in year 2, 35% of the City's outfalls were field verified (Appendix C).

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*

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 2.

BMP 3.2 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***
Garrison
The Environmental Quality Division uses Garrison, a Web based database, to track all citizen complaints regarding stormwater.

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

All activities for this BMP are complete for year 2.

BMP 3.3 Activities Completed

Date: 8/12/2009 ***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 2. Forty-three (43) spills and 49 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 2.

BMP 3.4 Activities Completed

Date: 8/13/2008 ***Responsible Party: Environmental Quality Division***
Eagle Construction & Environmental Services, L.P.

The Environmental Quality Division has contract that took effect on April 18, 2008, with Eagle Construction and Environmental Services L.P. for hazardous materials emergency response. This contract was extended through year 2.

Date: 8/13/2008 ***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 monthly 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

All activities for this BMP are complete for year 2.

BMP 3.5 Activities Completed

Date: 8/12/2009 ***Responsible Party: Terri Blocker, Senior Environmental Specialist***

Plans Reviewed

The Environmental Quality Division received 401 Building Projects in year 2. 100% of the Projects with the potential to impact stormwater were reviewed for water quality hazards.

Date: 8/12/2009 ***Responsible Party: Environmental Quality Division***

Certificate of Occupancy Inspections

The Environmental Quality Division received 646 Certificate of Occupancy applications in year 2. 100% of the COs with the potential to impact stormwater were inspected 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 2.

BMP 3.6 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***

Stream Monitoring

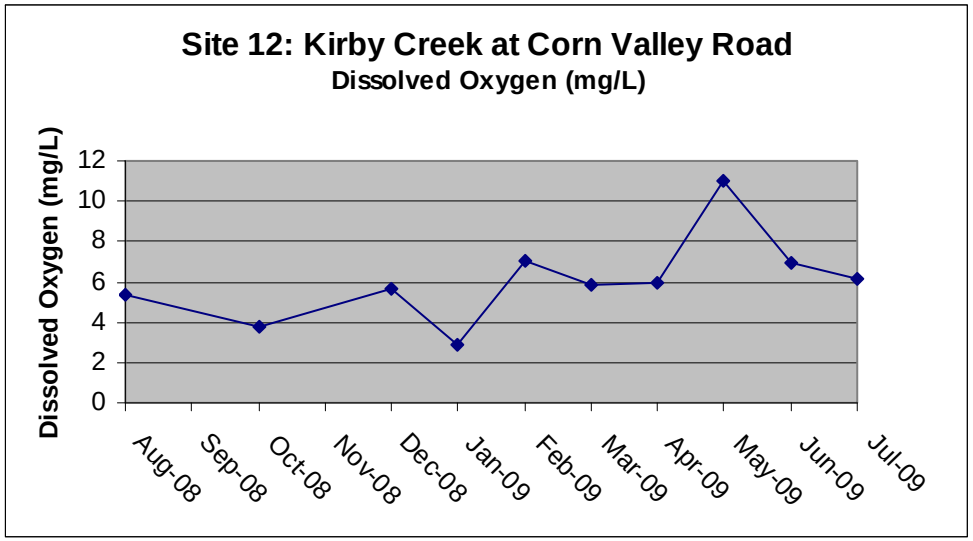
The Environmental Quality Division has voluntarily conducted stream sampling since 1986.
Currently, 22 stream sites are sampled on a monthly, quarterly, and annual basis. The data collected during these monitoring events is used to detect and eliminate illicit discharges or other threats to human and 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.

In year 2, the City progressively modified the stream sampling locations. The revised sampling locations ensure that areas of new development are monitored. More importantly, the revised plan monitors streams in the City's different subwatersheds at an upstream location close to its entry into Grand Prairie and a downstream location as it exits Grand Prairie or discharges into a waterbody.

A monthly summary of the stream sampling data collected in year 2 is attached in Appendix D. 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. The following is a summary of the actions taken to mitigate atypical stream sampling results.

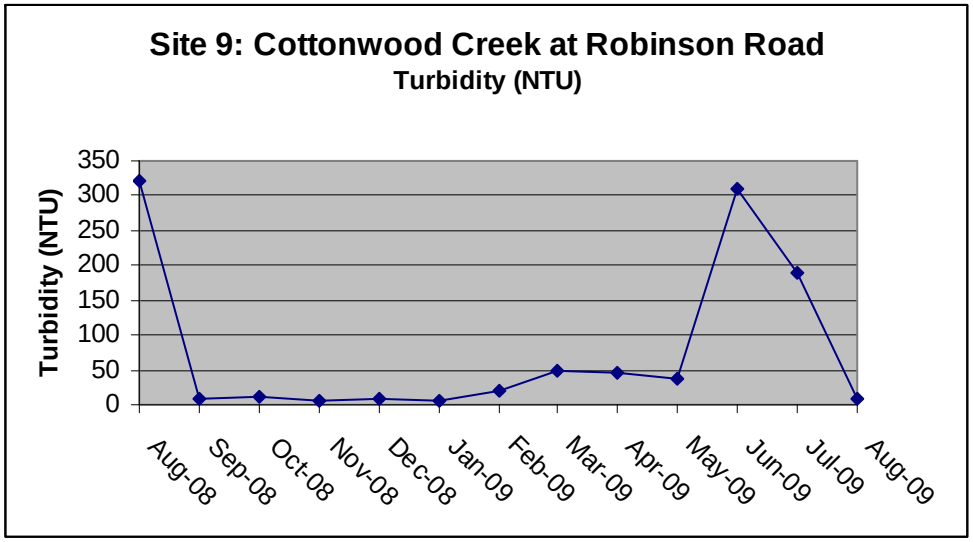
1) During the monthly stream sampling on January 13, 2009, lower than normal dissolved oxygen readings of 2.92 mg/L was observed in Site #12 located on Kirby Creek at Corn Valley (Figure 4). This was considered particularly low for the winter months, which was reflected in low DO % saturation of 27.2%. This is primarily a residential area and a drive and walk around the watershed did not show abnormal discharges or SSO's. There was, however, excessive brush/vegetation upstream of the sampling area. The flow was also very sluggish on this day. After clearing the brush/vegetation and after additional rain events resulting in normal flow levels, the site was resampled on February 17, 2009. DO had recovered to a normal level of 7.01 mg/L and % saturation of 68.6%.

Figure 4: Dissolved Oxygen (mg/L) at Kirby Creek and Corn Valley Road



2) During the monthly stream sampling on June 23, 2009, higher than normal turbidity at 310 NTU's was observed in Site #9 located at S Cottonwood Creek at Robinson Rd (Figure 5). This could be traced to the construction projects in the area related to the water tower and Hwy 161 expansion. This was brought to the attention of the contractors who took immediate corrective actions to repair the breaches in their sediment control system. The quality of the stream gradually improved to 190 NTU's by the July 21, 2009 and recovered to a better than normal level of 9 NTU's by August 18, 2009.

Figure 5: Turbidity (NTU) at Cottonwood Creek at Robinson Road



3) During monthly sampling on June 23, 2009, a large amount of trash and floatables were found at Site #15 located at Fish Creek and SE 14th. This is in a heavily wooded area at the downstream point of Fish Creek at its confluence with Mountain Creek Lake. As a result of this discovery, the Keep Grand Prairie Beautiful cleanup program has included this site as one of their regular stream cleanup locations.

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

All activities for this BMP are complete for year 2

BMP 3.7 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***

Standard Operating Procedure

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

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

The City has exceeded the goal for BMP 3.8.

BMP 3.8 Activities Completed

Date: 3/4/2009 ***Responsible Party: Environmental Quality Division***
SPCC: Spill Prevention and Response; Controlling Oil, Employee Training for Parks
Three participants from Lynn Creek Park and 11 participants from Loyd Park viewed a video created by Excal Visual called Spill Prevention and Response: Controlling Oil.

Date: 3/11/2009 ***Responsible Party: Environmental Quality Division***
SPCC: Spill Prevention and Response; Controlling Oil, Employee Training for Golf Courses
Two participants from Prairie Lakes Golf Course and 9 participants from Tangle Ridge Golf Course viewed a video created by Excal Visual called Spill Prevention and Response: Controlling Oil.

Date: 7/15/2009 ***Responsible Party: Environmental Quality Division***
City Facility Posters
"Preventing Stormwater Pollution: What We Can Do" posters were purchased from NCTCOG.
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.

Date: 7/30/2009 ***Responsible Party: Environmental Quality Division***
NCTCOG Training Videos
Presented "Preventing Storm Water Pollution: What We Can Do" video to 22 City employees during the New Employee Orientation on 11/21/2008. "Preventing Storm Water Pollution: What We Can Do" training video was shown to three Airport staff on 10/15/08. Six individuals from the Airport staff viewed the "Preventing Storm Water Pollution: What We Can Do - Fleet Maintenance and Materials

Handling" video on 7/20/09. Thirty-three (33) Landfill staff members viewed the "Preventing Stormwater Pollution: What We Can Do -Fleet Maintenance and Materials Handling" video on 7/30/09. These videos were created by NCTCOG.

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

All activities for this BMP are complete for year 2.

BMP 3.9 Activities Completed

Date: 7/7/2009 ***Responsible Party: Environmental Quality Division***

Stormwater Ordinance Finalized and Adopted

The City's Stormwater Ordinance (Appendix E) was finalized and adopted in year 2. The ordinance includes the following sections: 1) Statement of Purpose, 2) Scope of Article, 3) Abbreviations, 4) Definitions, 5) Allowable Discharges, 6) Specific Prohibitions and Requirements, 7) Construction Activity Prohibitions and Requirements, 8) Post-Construction Requirements, 9) Regulated Activities Associated with Facilities, 10) Watercourse Protection, 11) Releases, 12) Right of Entry, 13) Punishment For Violations and Other Remedies, 14) Remedies Nonexclusive, 15) Right of Revision, 16) Search Warrants, 17) Responsibility for Cleanup Costs and Damages, 18) Administrative Liability, and 19) Stormwater Charges and Fees.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*

3.10 Storm Water Industrial Inspection Program	Require that facilities comply with any NPDES or TPDES storm water permit applicable under the SIC code.	1. Continue to provide 75% of industries the applications for coverage, when applicable	Environmental Services Department, Environmental Quality Division	Years 1 – 2
		2. Enforce failure to apply for or obtain permit coverage		Years 3 – 5
		3. Perform inspections once every 3 years		Years 3 – 5

All activities for this BMP are complete for year 2.

BMP 3.10 Activities Completed

Date: 8/9/2009 ***Responsible Party: Environmental Quality Division***
Applications for Coverage
100% of industries were provided applications for NPDES or TPDES coverage, when applicable.

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 2.

BMP 3.11 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***
Floatables Enforcement
Environmental Specialists issued floatables Notice of Violations and citations during inspections and complaint investigations in year 2 of the permit.

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***

Food Establishment Checklist

Environmental Specialists inspect food establishments for "floatables." This is item number 28 on the City's Food Establishment Inspection Report checklist.

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 2.

BMP 3.12 Activities Completed

Date: 8/13/2008 ***Responsible Party: Solid Waste Division***

Litter Collection

The City of Grand Prairie has a litter collection contract with Grand Prairie Disposal, DBA Republic Waste Services of Texas, Ltd. Litter from major through fares is removed on a weekly basis.

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 2.

BMP 3.13 Activities Completed

Date: 8/12/2009 ***Responsible Party: Code Enforcement Division***

Illegal Dumping Response

The City responded to over 160 illegal dumping complaints from August 13, 2008 to August 12, 2009. Complaints included illegally dumped brush, trash, tires, furniture, hazardous waste, etc. Once on site, City staff cleaned up the debris or required the property owner or responsible party to do so. Citations and warnings were issued as necessary. Illegally dumped debris was usually removed within a week of receiving the

complaint (it was always removed within 30 days).

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

All activities for this BMP are complete for year 2.

BMP 3.14 Activities Completed

Date: 7/29/2009 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***

Floatables Project Design

A project design was created to determine the main contributing sources of floatables in Grand Prairie (Appendix F).

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*

3.15 Illicit Discharge Detection and Elimination	Develop a program to detect and address non-storm water discharges, including illegal dumping, into the storm sewer system. Standard operating procedures will be developed for the detection of and elimination of illicit discharges.	1. Identify additional program requirements and resource/ training needs	Environmental Services Department, Environmental Quality Division	Year 2
		2. Create a project plan and an assessment, enforcement, and elimination process and acquire needed resources		Year 3
		3. Conduct dry weather screening of 20% of city's outfalls per year		Year 1 – 5

All activities for this BMP are complete for year 2.

BMP 3.15 Activities Completed

Date: 6/18/2009 ***Responsible Party: Environmental Quality Division***

IDDE Web Cast

Eight City staff viewed the EPA's Web cast: Conducting Illicit Discharge Detection and Elimination Investigations (IDDE 201).

Date: 6/18/2009 ***Responsible Party: Engineering Division***

Dry Weather Screening

From January 12, 2009 to June 24, 2009, 503 of 1,468 discharge points were inspected for anomalies. This comprises 34% of the City's discharge points. Of the discharge points that were inspected, 351 were outfalls (points discharging directly into a waterbody). The City currently has a total of 1,014 outfalls. As a result, in year 2, 35% of the City's outfalls were inspected for anomalies (Appendix C). The inspector looked for and reported issues such as erosion, siltation, debris, vegetation, structure damage, and illicit discharges.

Date: 7/22/2009 ***Responsible Party: Environmental Quality Division***

Dry Weather Field Screening Workshop

T Sury and Echo Rexroad attended the Dry Weather Field Screening Workshop held at the Trinity River Authority and hosted by NCTCOG.

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 2.

BMP 3.16 Activities Completed

Date: 8/3/2009 ***Responsible Party: Environmental Quality Division***

Sampling Points

Three sampling points and one alternate sampling point were chosen for Joe Pool Lake outfall sampling:

1. Soap Creek at Highway 287
2. Loyd Creek in Loyd Park
3. Bowman Creek at Mirabella
4. Walnut Creek at Highway 360 (alternate)

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 2.

BMP 3.17 Activities Completed

Date: 8/17/2008 ***Responsible Party: Environmental Quality Division***

Beach Sampling SOP

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

Date: 8/26/2008 ***Responsible Party: T Sury, Environmental Specialist***
Joe Pool Lake Beach Sampling Results

Table 2 is a summary of the sampling data collected at Loyd Park in year 2.

Table 2: Results for Loyd Park Beach Sampling

Loyd Park E. Coli Sampling Results		
Date	Location	Result MPN / 100ML
8/26/2008	West	2
	Middle	2
	East	2
9/25/2008	West	2
	Middle	<2
	East	<2
5/27/2009	West	4
	Middle	<4
	East	8
6/29/2009	West	4
	Middle	21
	East	16
7/16/2009	West	4
	Middle	<4
	East	8
Aug 08 – Jul 09	**Geom Mean E. Coli**	**4.07**

Notes:
1. Results that are less than reportable limits are treated as being at reportable limits e.g <2 is 2.
2. The abnormal spike during the June sampling is attributable to periods of rain in the catchment areas of Loyd Park prior to sampling.
3. The recommended limits for coastal beach sampling are 200 MPN/100ML for single samples and 126 MPN/100ML for Geom Mean. The results are indicative of an acceptable water quality for contact recreation.

Table 3 is a summary of the sampling data collected at Lynn Creek in year 2.

Table 3: Results for Lynn Creek Beach Sampling

Lynn Creek Park E. Coli Sampling Results		
Date	Location	Result MPN / 100ML
8/26/2008	West	19
	Middle	6
	East	13
9/25/2008	West	4
	Middle	2
	East	8
5/27/2009	West	202
	Middle	120
	East	110
6/29/2009	West	12
	Middle	12
	East	12
7/16/2009	West	25
	Middle	8
	East	4
Aug 08 – Jul 09	**Geom Mean E. Coli**	**10.16**

Notes:
1. Results that are less than reportable limits are treated as being at reportable limits e.g <2 is 2
2. The abnormal spike during the May sampling is attributable to periods of rain in the catchment areas prior to sampling and a o.32" rain on the day of sampling. There was no swimming in the beach on this day.
3. The recommended limits for coastal beach sampling are 200 MPN/100ML for single samples and 126 MPN/100ML for Geom Mean. The results are generally indicative of an acceptable water quality for contact recreation.

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 2. Acquire necessary training and supplies 3. Begin rapid bioassessment program; monitor 3 sites annually	Environmental Services Department, Environmental Quality Division	Year 3 Year 4 Year 5

Implementation of BMP 3.18 does not occur until Year 3.

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

All activities for this BMP are complete for year 2.

BMP 3.19 Activities Completed

Date: 11/18/2008 ***Responsible Party: Environmental Quality Division***
Permitted OSSF
Only one (1) OSSF was permitted in year 2.

Date: 8/6/2009 ***Responsible Party: Environmental Quality Division***
Complaints
Only two (2) complaints regarding onsite sewage systems were received in year 2. A Notice of Violation was given to each of the responsible parties.

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

All activities for this BMP are complete for year 2.

BMP 3.20 Activities Completed

Date: 8/3/2009 ***Responsible Party: Environmental Quality Division***
Revised Mobile Vehicle Wash Policy
The Operational Requirements for Mobile Wash Vendors and Commercial Facilities policy was revised to reflect the City's new Stormwater Ordinance.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
3.21 Auto Inspection Program	Develop inspection program for auto-related businesses.	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 2 BMP.

BMP 3.21 Activities Completed

Date: 8/17/2008 ***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: 8/12/2009 ***Responsible Party: Diane Castillo, Environmental Specialist***
ARB Inspections
The Environmental Quality Division and Code Enforcement Division inspected 100% of the auto-related businesses in Grand Prairie in 2008, during which inspectors ensured ARBs were in compliance with local, state, and federal stormwater regulations. Inspections for 2009 are currently ahead of schedule: from January 2009 to October 2009, 472 of 535 or 88.22% of the ARB inspections were completed. 620 inspections were conducted from August 13, 2008 to August 12, 2009.

BMP	BMP Description	Measurable Goals	Responsibility	Target Date
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 listed for this BMP for year 2. The Stormwater Sampling Manual was completed and made available in year 1.

MCM 4: Construction Site Storm Water Runoff Control

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

All activities for this BMP are complete for year 2.

BMP 4.1 Activities Completed

Date: 8/12/2009 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, the Planning and Development Department is able to keep track of potential construction activities. 63 Drainage and Erosion Control Plans were approved in year 2.

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 2.

BMP 4.2 Activities Completed

Date: 8/12/2009 ***Responsible Party: Engineering Division***

Inspect Erosion Control Measures

Permits are issued to owners and operators based on the construction 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 control devices and BMPs must be in place according to the approved plan. By tracking the number of erosion control measure inspections that are performed, the City insures sites are being monitored and the necessary steps are maintained to ensure compliance. Inspections are preformed before and during construction until the site is stabilized. For this reporting period, 1,470 inspections/reinspections were performed.

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 2.

BMP 4.3 Activities Completed

Date: 8/12/2009 ***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 earthwork permits that are issued, the City is able to monitor sites and take the necessary steps to maintain compliance before activities begin. Thirty-one (31) clearing, grubbing, and earthwork permits were approved in year 2.

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

The City exceeded the goal for this year 3 BMP.

BMP 4.4 Activities Completed

Date: 8/12/2009 ***Responsible Party: Planning and Development Department***

Storm Water Pollution Prevention Plan and NOI

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 has 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 49 permits were submitted to the City in year 2.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*

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 2.

BMP 4.5 Activities Completed

Date: 8/12/2009 ***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. In year 2, 19 complaints were received, 17 or 89.5% were investigated within 15 working days from the day the complaint was received.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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

The City exceeded the goals for this year 2 BMP.

BMP 4.6 Activities Completed

Date: 7/7/2009 ***Responsible Party: Planning and Development Department***

Stormwater Ordinance

The City's Stormwater Ordinance was finalized and adopted in year 2 (see BMP 3.9). Included in the ordinance are 1) construction activity prohibitions and requirements and 2) post-construction requirements.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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 2. Revise and adopt the site plan review procedures 3. Amend site plan review procedures as necessary and implement compliance requirements	Planning and Development Department	Year 1 Year 2 Year 3

All activities for this BMP are complete for year 2.

BMP 4.7 Activities Completed

Date: 8/3/2009 ***Responsible Party: Planning and Development Department***

Site Development Plan Reviews

The current Site Plan Approval process included in Article 16, Site Plan Approval, and in Article 17, Concept Plans, was reviewed by Bill Crolley, Ron McCuller, Romin Khavari, Rob Ard, Kevin Lasher, Kathe Houk and Chris Agnew and proposed revised articles 16 and 17 were prepared and approved by the Planning and Zoning Commission on August 3, 2009. City Council adopted the new site plan review procedures on August 18, 2009. The August 18, 2009 adoption date exceeds permit year 2 by six days; however, this was approved by the TCEQ as determined through communications with TCEQ (see Appendix G).

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
4.8 Recording and Public Complaint	Refine the system for recording and responding to calls from the public. This approach will include clarifying	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

All activities for this BMP are complete for year 2.

BMP 4.8 Activities Completed

Date: 7/17/2009 ***Responsible Party: Planning and Development Department***

Recording and Public Complaint Response

A draft procedure for drainage and construction general permit complaint response was prepared and circulated to staff for review and comment. A meeting among stakeholders was held for feedback and an approved procedure was adopted. The approved procedure describes the procedure for handling all drainage complaints including those on construction sites concerning erosion and sediment pollution of the MS4. Responsibilities for initial complaint response, inspection, and effecting corrective action are identified.

BMP	***BMP Description***	***Measurable Goals***	***Responsibility***	***Target Date***

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

Implementation of BMP 4.9 does not occur until Year 3.

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 2. Create fact sheets and distribute to developers and homebuilders regarding requirements for permitting and pollution prevention	Planning and Development Department	Year 2 Year 3

All activities for this BMP are complete for year 2.

BMP 4.10 Activities Completed

Date: 7/10/2009 ***Responsible Party: Environmental Quality Division***

Engineering Web site

Information on the TCEQ's Construction General Permit, construction BMPs, and preventing stormwater pollution was placed on the Engineering Web site. The Web site address is www.gptx.org/index.aspx?page=949.

Table 4: Non-Municipal Construction Activities

Number of Non-Municipal Construction Activities Within Jurisdiction of Permittee
34

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

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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 2.

BMP 5.1 Activities Completed

Date: 8/12/2009 ***Responsible Party: Engineering Division***

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. The review of these plans is used in the mitigation of impact. 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. Sixty-three (63) drainage plans were approved in year 2.

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

All activities for this BMP are complete for year 2.

BMP 5.2 Activities Completed

Date: 8/12/2009 ***Responsible Party: Planning and Development Department***

Stream Buffer Preservation

All development plans are reviewed for compliance with floodplain requirements, for adequacy of infrastructure design for drainage, and for use of detention ponds. The review of these plans is used in the mitigation of impact. The preservation of stream buffers during plan reviews is encouraged by requiring the dedication of drainage or floodplain management easements for the 100-year floodplain.

By 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. After all site design and nonstructural options have been exhausted, the City attempts 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	Planning and Development Department	Years 2
		2. Research information through benchmarking and attending NCTCOG meetings and training seminars		Years 2
		3. Adopt the policies and design criteria as needed		Year 3
		4. Affected city departments and divisions will implement the policy and design criteria manuals as adopted		Year 4

All activities for this BMP are complete for year 2.

BMP 5.3 Activities Completed

Date: 9/3/2008 ***Responsible Party: Planning and Development Department***

Tools and Guidance for Developing BMPs Webcast

David McKee, Environmental Inspector, and Echo Rexroad, Senior Environmental Specialist attended "Tools and Guidance for Developing Your Post-Construction Stormwater Management Program" Webcast and discussion hosted by North Central Texas Council of Governments.

Date: 11/18/2008 ***Responsible Party: Engineering Division***

Storm Water Design Criteria and Methods

A NCTCOG iSWM coordination committee of Ron McCuller, Director of Public Works, Romin Khavari, P.E., City Engineer and Christian Agnew, P.E., Assistant Storm Water Utility Manager was designated to attend COG meetings, review iSWM manual criteria and recommendations and consider addressing iSWM manual issues in the 2008 drainage design manual update. Halff Associates was contracted to review benchmark cities drainage criteria and manual requirements, review the iSWM manual for site development, review public, city and consultant comments on the 2006 Drainage Design Manual and prepare the 2008 Drainage Design Manual update. Previous public, City and consultant comments together with iSWM and benchmark issues were furnished to Halff Associates for preparation of the proposal for the contract and the first draft. Halff Associates produced a draft of the 2008 Drainage Design Manual and submitted it to the city on September 24, 2009. An internal review committee of Ron McCuller, Romin Khavari, Chris Agnew, Joe Sherwin, and an outside consultant group of Lopez Garcia and Espey Consultants, Inc. reviewed the draft of the manual and provided comments to Halff Associates. UDC Article 14 and

15 and the 2008 Drainage Design Manual were approved by City Council on November 18, 2008.

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 2.

BMP 5.4 Activities Completed

Date: 11/18/2008 ***Responsible Party: Planning and Development Department***

Research and Committee

A NCTCOG iSWM coordination committee of Ron McCuller, Director of Public Works, Romin Khavari, P.E., City Engineer and Christian Agnew, P.E., Assistant Storm Water Utility Manager was designated to attend COG meetings, review iSWM manual criteria and recommendations and consider addressing iSWM manual issues in the 2008 drainage design manual update. Halff Associates was contracted to review benchmark cities' drainage criteria and manual requirements, review the iSWM manual for site development, review public, City and consultant comments on the 2006 Drainage Design Manual and prepare the 2008 Drainage Design Manual update. Previous public, City and consultant comments together with iSWM and benchmark issues were furnished to Halff Associates for preparation of the 2008 Drainage Design Manual. The Development Review Committee (DRC) chaired by Kevin Lasher, of which Chris Agnew was a member, reviewed the proposed Unified Development Code (UDC) amendments to Articles 14 and 15 UDC which comprise the Drainage Design Manual and recommended approval on October 30, 2008. The proposed amendments to UDC Article 14 and 15 were approved by the Planning and

Zoning Commission and subsequently approved by the City Council on November 18, 2008.

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 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	Planning and Development Department	Year 3 Year 3

Implementation of BMP 5.5 does not occur until Year 3.

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 2. Create annual report	Environmental Services Department, Environmental Quality Division	Year 1 Year 2

All activities for this BMP are complete for year 2.

BMP 6.1 Activities Completed

Date: 11/7/2008 ***Responsible Party: Echo Rexroad, Sr. Environmental Specialist***
Year 1 Annual Report
The Environmental Quality Division submitted the SWMP year 1 Annual Report to the TCEQ.

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 2.

BMP 6.2 Activities Completed

Date: 10/15/2008 ***Responsible Party: T Sury, Environmental Specialist***
Airport Training Video "Preventing Storm Water Pollution: What We Can Do" training video was shown to three Airport staff.

Date: 12/22/2008 ***Responsible Party: T Sury, Environmental Specialist***
Annual Inspections
Annual comprehensive compliance inspections were conducted for each MSGP City facility. The Airport was inspected on 12/09/08, the Landfill was inspected on 12/10/08, and the Service Center was inspected on 12/12/08 and 12/22/08.

Date: 2/17/2009 ***Responsible Party: Jimmie Kidd, Fleet Supervisor***
Equipment Services BMP Training
Jimmie Kidd spoke with 14 Equipment Services staff members about housekeeping measures for the maintenance facility such as 1) not overfilling barrels of used lubricants, 2) informing the supervisor of when the lubricant barrels are full, 3) keeping a clean work area, 4) properly cleaning up vehicle fluids, and 5) keeping the dumpster shut.

Date: 5/29/2009 ***Responsible Party: T Sury, Environmental Specialist***
SWPPP Updates and Review
The City updates and reviews the SWPPPs for the Landfill, Airport, and Service Center annually or as needed. The following revisions were made during year 2:

Landfill - Changes to SWPPP Attachment A, Site map in May 2009.
Airport - Changes to SWPPP Attachment A, Site Map in April 2009; Changes to Section 2.0: the pollution prevention team was expanded to include the Airport Maintenance worker.
Service Center - Changes to SWPPP Attachment A, Site Map in January 2009 and again in May 2009.

Date: 7/20/2009 Responsible Party: Environmental Quality Division
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 10/15/08, 1/5/09, 4/17/09, and 7/20/09. The Service Center was monitored on 9/6/08, 10/15/08, 1/7/09, 4/17/09, and 7/27/09. The Landfill was monitored on 8/20/08, 11/11/08, 1/6/09, 4/17/09, and 7/31/09.

Date: 7/20/2009 Responsible Party: Environmental Quality Division
BMP Posters
Educational posters describing stormwater BMPs were distributed and displayed at the City's Landfill, Equipment Services and Streets facility. Posters included "Fleet Maintenance," "Material Storage and Spill Clean Up," "Streets and Drainage Maintenance," "Land Disturbances," and "Solid Waste Operations" (posters were distributed at applicable facilities). These posters were created by the EPA and TCEQ.

Date: 7/20/2009 Responsible Party: T Sury, Environmental Specialist
Airport Training Video 2
Six individuals from the Airport staff viewed the "Preventing Storm Water Pollution: What We Can Do - Fleet Maintenance and Materials Handling" video.

Date: 7/30/2009 Responsible Party: Solid Waste Division
Landfill Training Video
Thirty-three (33) Landfill staff members viewed the "Preventing Stormwater Pollution: What We Can Do -Fleet Maintenance and Materials Handling" video.

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 2. Respond to 100% of citizen complaints	Public Works Department, Streets Division	Years 1 – 5 Years 1 – 5

		3. Track storm sewer and drainage maintenance		

All activities for this BMP are complete for year 2.

BMP 6.3 Activities Completed

Date: 8/12/2009 ***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.

Date: 8/12/2009 ***Responsible Party: Public Works Department***
Tracking Maintenance
Storm sewer and drainage maintenance was tracked for year 2. Maintenance included 24 different type of activities conducted as a result of citizen complaints, field observations, and regular City storm sewer maintenance.

Date: 8/12/2009 ***Responsible Party: Public Works Department***
Complaint Response
The Public Works Department responded to 100% of citizens' complaints in year 2. Response included cleaning, clearing, seeding, and overall maintenance of the storm sewer systems. 926 response actions were taken in year 2 as a result of 144 issues, including response from 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

All activities for this BMP are complete for year 2.

BMP 6.4 Activities Completed

Date: 5/5/2009 ***Responsible Party: Environmental Quality Division***
MS4 Waste Disposal SOP
A Standard Operating Procedure was developed for the disposal of waste removed from the MS4. The SOP defines the responsibilities of Streets Division personnel for clearing and disposing of waste collected from the MS4.

Date: 5/21/2009 ***Responsible Party: Public Works Department***

SOP Training
Thirty-two (32) Public Works Department staff members were trained on the proper standard operating procedures for the disposal of waste removed from the MS4.

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

The City exceeded the goals for this year 2 BMP.

<u>BMP 6.5 Activities Completed</u>

Date: 8/17/2008 ***Responsible Party: T Sury, Environmental Specialist***
SWPPP Reviews
BMPs were reviewed from the City of Dallas Landfill SWPPP and BMP manual developed by the North Central Council of Governments. Both of which were drawn upon the manuals developed by the EPA and TCEQ.

Date: 2/12/2009 ***Responsible Party: Environmental Quality Division***
Target Audience and Activities
Twenty-eight (28) City facilities not covered by a specific TPDES permit were selected to undergo inspections by an Environmental Specialist to determine BMPs needed, if any, for that site. During each inspection, the Environmental Specialist also noted if pollution prevention training was needed. If it was determined that training was needed, training was provided at a future date. Sites chosen consisted of 9 fire stations, 1 police department, 8 parks (including Lone Star Park and Air Hogs Ball Park), 1 maintenance facility, 2 golf courses, the

Ruthe Jackson Center, the Charles England Training Center, 3 libraries, the Auto Pound, and 1 fueling service center.

Date: 7/20/2009 ***Responsible Party: Environmental Quality Division***

BMP Posters

Educational posters describing stormwater BMPs were distributed and displayed at the Environmental Quality Division's field office ("Material Storage and Spill Clean Up"), the City's golf courses and the City's Parks maintenance facilities ("Parks and Grounds Maintenance"), and the Water Utilities facility ("Land Disturbances"). These posters were created by the EPA and TCEQ.

Date: 8/12/2009 ***Responsible Party: Environmental Quality Division***

Preventing Stormwater Pollution Training

During 28 City facility inspections, it was determined that due to the nature of the work performed by the Fire Department, pollution prevention training was needed at the Fire Department facilities. The "Preventing Stormwater Pollution: Fleet Maintenance and Material Handling" video was viewed by 130 Fire Department staff in year 2.

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

BMP 6.6 Activities Completed

Date: 4/6/2009 ***Responsible Party: Environmental Quality Division***

Native Vegetation Promotion

Two areas were chosen for the promotion of native vegetation: the Kirby Creek Nature Center and the City's Equipment Services Center.

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 2.

BMP 6.7 Activities Completed

Date: 8/13/2008 ***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: 8/13/2008 ***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 through fares 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 2.

BMP 6.8 Activities Completed

Date: 8/13/2008 ***Responsible Party: Solid Waste Division***

Street Sweeping

The City has a contract with Flagship Sweeping Services, Inc. (formerly Midwest Services) 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.

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

The City exceeded the required BMP activities for year 2.

BMP 6.9 Activities Completed

Date: 2/12/2009 ***Responsible Party: T Sury, Environmental Specialist***

City Facility Inspections

A City facility inspection form was created and used to inspect 100% of the 28 City facilities selected for this new program. A facility was selected for the program if it was determined that the facility may have an effect on stormwater quality, but does not have a specific TPDES permit. Facilities were inspected for stormwater issues and to determine BMPs needed, if any. Sites chosen consisted of 9 fire stations, 1 police department, 8 parks (including Lone Star Park and Air Hogs Ball Park), 1 maintenance facility, 2 golf courses, the Ruthe Jackson Center, the Charles England Training Center, 3 libraries, the Auto Pound, and 1 fueling service center.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*
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 2.

BMP 6.10 Activities Completed

Date: 5/6/2009 ***Responsible Party: Dallas County Flood Control District #1***

Complaints, Reviews, and Repairs

No written complaints were filed in year 2. The annual maintenance review was conducted in October 2008 and December 2008, and the report was prepared in April 2009. A field meeting took place on May 6, 2009 with Dallas County to discuss stabilization and protection at Rock Island Road.

BMP	*BMP Description*	*Measurable Goals*	*Responsibility*	*Target Date*

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

All activities for this BMP are complete for year 2.

BMP 6.101Activities Completed

Date: 8/10/2009 ***Responsible Party: Dallas County Flood Control District #1***

DCFCD #1 SOP for Waste Disposal

The DCFCD #1 developed a standard operating procedure (SOP) for waste removed from the storm water system. The SOP includes an introduction, purpose, district general response capabilities, and procedures for clearing and collecting debris from the MS4.

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

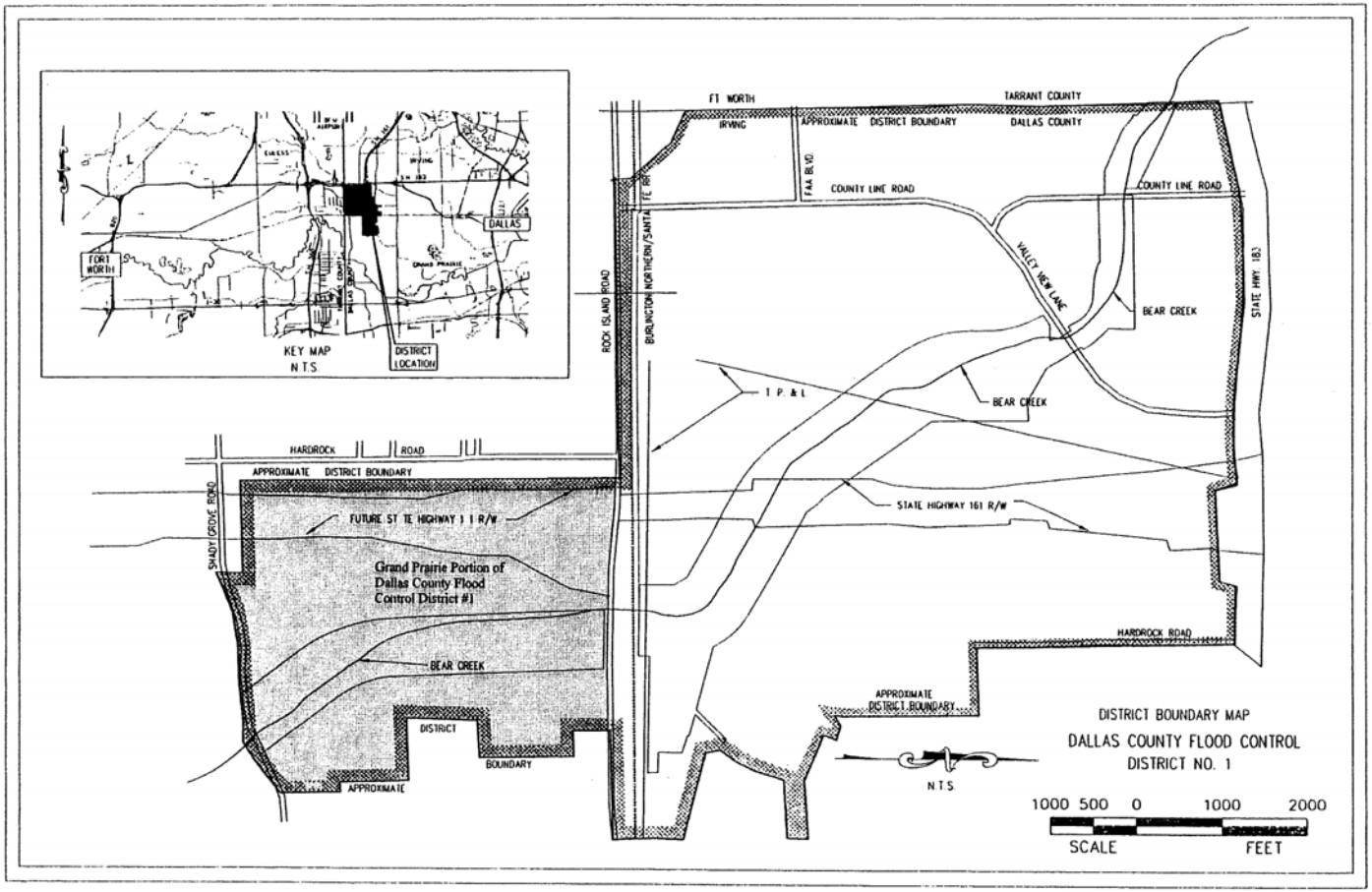
NOW, THEREFORE, FOR AND IN CONSIDERATION OF THE MUTUAL COVENANTS SET OUT HEREIN, the City of Grand Prairie and the Dallas County Flood Control District #1 agree as follows:

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

ATTACHMENT 1



ATTACHMENT 2

MCM 6. Pollution Prevention/Good Housekeeping for Municipal Operations

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

Selected BMPs for Pollution Prevention/Good Housekeeping for Municipal Operations

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

6.3 Storm Sewer and Drainage Maintenance Program	Conduct maintenance along the inlets, ditches, pipes, and channels for structural improvements when noted through citizen complaints and through field observations. Use permanent vegetation to stabilize disturbed soil.	1. Hire a crew of 3 to maintain storm sewer and drainage	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		
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

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

APPENDIX B: TCEQ Correspondence #1

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: 'SWGP@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).

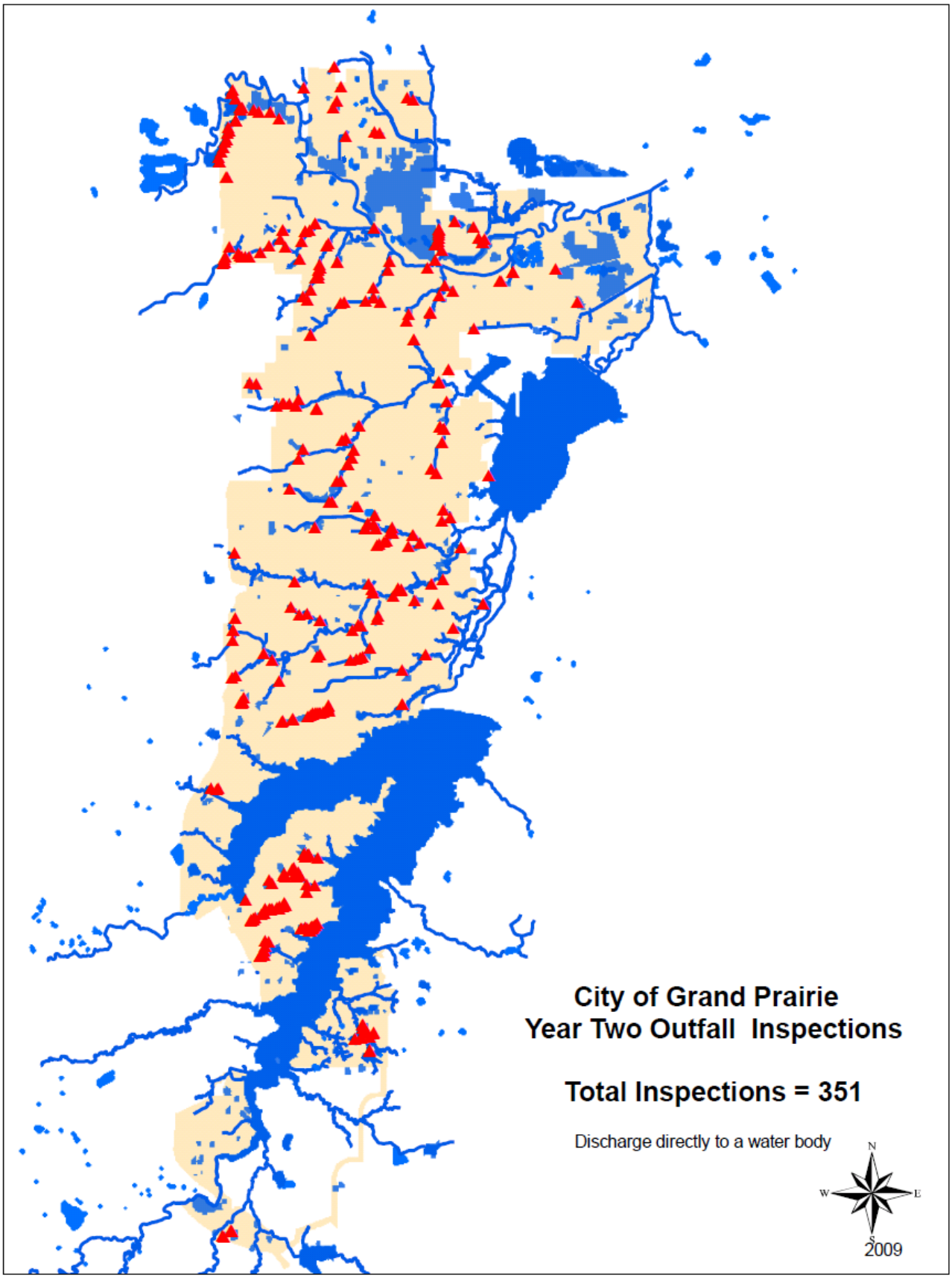
We have also reviewed the Notice of Application you provided. In the first sentence, where the application states "City of Grand Prairie, 201 **North West** 2nd Street…", it should say "City of Grand Prairie, 201 **Northwest** 2nd Street…" Other than that one minor change, no other revisions are needed.

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: Field Verification Outfall Map


City of Grand Prairie
Year Two Outfall Inspections
Total Inspections = 351
Discharge directly to a water body
N
W
E
S
2009

APPENDIX D: Monthly Stream Summary

Monthly Results *August 2008*

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
21	8/19/2008	9:25	GP08SW-307	22	23.3	6.43	13.4	9.13	0.13	9600	15300
9	8/19/2008	1:55	GP08SW-294B	27	25	7.14	320	7.33	0	29200	32500
20	8/19/2008	9:55	GP08SW-306		25	7.24	18	6.48	0.37	2800	9300
17	8/19/2008	11:15	GP08SW-303	26.6	25.5	7.02	38	6.39	0.11	70	4100
15	8/19/2008	11:00	GP08SW-300	26	24.5	6.71	50	3.18	0.11	7900	35500
13	8/19/2008		GP08SW-298								
14	8/19/2008	11:51	GP08SW-299	24	24.7	7.02	35	8.88	0.06	4200	56500
12	8/19/2008	12:15	GP08SW-297	26	24.1	6.9	15	5.33	0.09	5600	39500
16	8/19/2008	9:40	GP08SW-301	24	29.2	6.48	78	6.5	0.11	30	17000
10	8/19/2008		GP08SW-295								
1	8/19/2008	9:40	GP08SW-286	24	23.9	7.14	45	8.1	0	1200	1300
9	8/19/2008	13:55	GP08SW-294	27	25	7.14	320	7.33	0	30100	27000
22	8/19/2008	2:10	GP08SW-308		27	7.33	19	6.99	0.41	1045	7100
3	8/20/2008	9:10	GP08SW-288	24	23.6	6.98	36	7.69	0.23	1100	3300
4	8/20/2008		GP08SW-289								
7	8/20/2008		GP08SW-292								
11	8/20/2008	11:25	GP08SW-296	27	25	7.15		6.44	0.22	4600	12727
18	8/20/2008	1:20	GP08SW-304		27.2	7.76	120	8.03	0	1700	1
2	8/20/2008	10:30	GP08SW-287	27	25.4	7.5	16	10.41	0.16	2200	34000
8	8/20/2008	13:00	GP08SW-293	28	27.4	6.98	6.1	5.53	0.15	8500	4100
19	8/20/2008	1:35	GP08SW-305	28	27.2	7.31	45	7.12	45	700	57000
8	8/20/2008	12:55	GP08SW-293B	28	27.4	6.98	6.1	5.53	0.15	760	150
6	8/20/2008	10:05	GP08SW-291	24	25.5	7.09	60	6.96	0.76	6400	26000
5	8/20/2008	11:00	GP08SW-290	27	24.4	7.17	19	5.86	0.15	600	5272

Monthly Results *September 2008*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
9	9/23/2008	12:40	GP08SW-325A	29	25.5	7.33	7.36	7.69	0.19	120	80
12	9/23/2008	12:20	GP08SW-328	29	23.7	7.27	8.06		0.37	510	673
13	9/23/2008	11:14	GP08SW-329	28	24.6	6.66	0		0.25	330	120
15	9/23/2008	10:40	GP08SW-331	27	22.5	6.82	41.5		0.28	470	320
16	9/23/2008	10:00	GP08SW-332	24	26	7.11	41.6		0.23	80	10
9	9/23/2008	12:40	GP08SW-325	27	25.5	7.33	7.36		0.19	50	170
14	9/23/2008	11:40	GP08SW-330	28	23.2	7.14	1.38	7.33	0.26	680	70
20	9/23/2008	10:00	GP08SW-336	26	23.2	7.44	1.41	4.4	0.39	380	60
21	9/23/2008	9:05	GP08SW-337	23	22.1	6.39	17.2	7.17	0.29	270	340
22	9/23/2008	1:20	GP08SW-338	29	25.1	7.42	21.6	7.72	0.17	370	7300
17	9/23/2008	10:25	GP08SW-333	25	25	6.59	16.8	7.51	0.19	50	10
1	9/24/2008	9:15	GP08SW-317	25	24.2	7.15	34.5	6.97	0.18	250	180
18	9/24/2008	12:25	GP08SW-334	30	25.1	7.18	107.5	7.2	0.11	60	6700
3	9/24/2008	8:35	GP08SW-319	23	23.8	7.14	12.9	6.83	0.22	390	230
6	9/24/2008	9:30	GP08SW-322	24	26.2	7.26	17.9	6.74	0.34	640	210
19	9/24/2008	12:50	GP08SW-335	31	24.2	7.09	30.5	7.48	0.19	100	10
8	9/24/2008	12:05	GP08SW-324	30	26.8	6.78	0	6.08	0.23	170	230
5	9/24/2008	12:22	GP08SW-321A	27	24.2	6.95	20.2		0.27	380	280
11	9/24/2008	11:00	GP08SW-327	28	25.8	7.01	48.8	6.98	0.26	1209	2000
7	9/24/2008	10:40	GP08SW-323	28	25.8	7.28	753	7.16	0	7600	27500
5	9/24/2008	10:15	GP08SW-321	27	24.2	6.95	20.2		0.27	390	190
2	9/24/2008	9:50	GP08SW-318	26	24.1	7.31	0	11.9	0.21	250	945

Monthly Results *October 2008*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
9	10/21/2008	11:25	GP09SW-012	23	19.8	7.64	12.2	5.46	0.2	330	1718
16	10/21/2008	9:20	GP09SW-019A	17	19.4	7.06	57	7.58	0.19	20	70
20	10/21/2008	9:40	GP09SW-023	18	17.9	7.77	11.5	3.12	0.45	260	60
17	10/21/2008	10:00	GP09SW-020	21	20.5	6.51	22.3	6.52	0.11	110	20
16	10/21/2008	9:20	GP09SW-019B	17	19.4	7.06	57	7.58	0.19	10	70
21	10/21/2008	8:50	GP09SW-024	17	17.3	6.72	12.6	4.62	0.12	220	390
15	10/21/2008	10:20	GP09SW-018	22	20.5	7.55	27	4.19	0.25	910	4500
14	10/21/2008	10:55	GP09SW-017	23	18.9	6.74	2.3	4.91	0.13	490	3800
13	10/21/2008	10:45	GP09SW-016	22	20	6.61	1.5	3.78	0.12	2500	220
12	10/21/2008	11:10	GP09SW-015	23	18.7	6.9	69	3.78	0.2	210	12100
22	10/21/2008	12:00	GP09SW-025	18	20.9	7.21	7.61	6.72	0.39	3900	8800
11	10/21/2008	1:00	GP09SW-014	28	20.7	6.73	14.8	4.8	0.07	4100	5900
3	10/22/2008	6:20	GP09SW-006A	20.7	20.7	6.9	8	6.99	0.06	450	1909
2	10/22/2008	8:05	GP09SW-005	18	19.2	6.67	2	6.06	0.1	70	150
18	10/22/2008	8:45	GP09SW-021	19	19.7	6.68	70	8.94	0.03	90	2145
1	10/22/2008	6:35	GP09SW-004	18	19.4	6.81	25	4.97	0.04	410	5400
3	10/22/2008	6:20	GP09SW-006B	18	20.7	6.9	8	6.99	0.06	410	2100
4	10/22/2008	7:10	GP09SW-007								
5	10/22/2008	7:30	GP08SW-008	18	19.6	6.89	23	6.52	0.05	840	2000
6	10/22/2008	6:55	GP09SW-009	18	22	6.73	23	7.05	0.11	710	1200
7	10/22/2008		GP09SW-010								
8	10/22/2008	8:35	GP09SW-011	19	21.4	6.56	2.1	6.12	0.07	2700	13100
19	10/22/2008	9:05	GP09SW-022	21	18.7	6.89	45	7.21	0.07	170	1154

Monthly Results *November 2008*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
22	11/18/2008	12:55	GP09SW-049	14	13.7	7.72	4	7	0.02	330	1127
13	11/18/2008	10:45	GP09SW-040	13	11.9	7.41	5.49	6.09	0.06	91	80
14	11/18/2008	11:05	GP09SW-041	13	11.9	7.55	493	5.55	0.08	191	370
15	11/18/2008	10:25	GP09SW-042	13	13.3	7.51	21.3	1.61	0.12	300	654
17	11/18/2008	10:00	GP09SW-044	12	13.1	7.59	15.7	5.29	0.03	420	60
20	11/18/2008	9:15	GP09SW-047A	11	11.7	7	19.7	3.89	0.08	170	30
21	11/18/2008	8:35	GP09SW-048	11	11.6	6.55	17.1	4.13	0.21	150	440
9	11/18/2008	12:15	GP09SW-036	14	14.6	7.67	4.76	5.48	0.06	145	80
20	11/18/2008	9:15	GP09SW-047B	11	11.7	7	19.7	3.89	0.08	160	90
1	11/19/2008	8:35	GP09SW-028	9	12.4	7.68	12.1	8.84	0.1	2000	882
18	11/19/2008	12:35	GP09SW-045	23	16	8.13	42.5	8.33	0.05	30	620
3	11/19/2008	8:10	GP09SW-030B	8	11.4	7.93	10.32	9.22	0.14	2100	490
6	11/19/2008	9:05	GP09SW-033	11	15.3	7.65	20	8.54	0.18	880	480
2	11/19/2008	9:20	GP09SW-029	12	12.5	7.64	13.4	10.83	0.31	110	145
7	11/19/2008	10:00	GP09SW-034	15	13.1	7.87	30.4	9.83	0.19	5700	3700
11	11/19/2008	10:25	GP09SW-038	15	13.7	7.96	18.3	7.41	0.17	2400	1136
8	11/19/2008	10:45	GP09SW-035	16	16.8	7.64	7.31	7.33	0.1	220	80
19	11/19/2008	13:00	GP09SW-046	23	16.5	7.75	47.2	7.06	0.07	310	1200
3	11/19/2008	8:10	GP09SW-030A	8	11.4	7.93	10.32	9.22	0.14	1636	310

Monthly Results *December 2008*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
21	12/17/2008		GP09SW-070		6.6	6.92	826	8.96	0.09		
14	12/17/2008	14:45	GP09SW-063								
9	12/17/2008	15:25	GP09SW-058	7	6.5	6.56	7.8	5.98	0.1		
11	12/17/2008	15:45	GP-09SW-060								
12	12/17/2008	14:40	GP-09SW-061								
15	12/17/2008	14:15	GP09SW-064								
17	12/17/2008	14:00	GP09SW-066								
18	12/17/2008	16:15	GP09SW-067								
22	12/17/2008	15:20	GP09SW-071	7	6.9	7.04	3.7	10.32	0.08		
18	12/18/2008	13:00	GP09SW-089	7	6.5	6.95	26	12.24	0	10	10
8	12/18/2008	15:45	GP09SW-057	16	15.5	6.82	11	8.78	0.24		
9	12/18/2008	10:05	GP09SW-080							3100	540
8	12/18/2008	12:50	GP09SW-079							260	200
19	12/18/2008	14:50	GP09SW-068	17	11	6.91	29	11.83	0.05		
5	12/18/2008	14:20	GP09SW-054	17	9.1	7.39	37	12.5	0.04	310	290
15	12/18/2008	9:15	GP09SW-086	7	8.2	7.48	29	7.19	0.1	340	110
11	12/18/2008	12:35	GP09SW-082	7	6.9	7.05	10	10.41	0.11	600	110
6	12/18/2008	13:35	GP09SW055	15	14.8	7.12	38	9.32	0.27	2700	600
3	12/18/2008	12:50	GP09SW-052	13	9.5	7.11	8.5	11.98	0.22	440	40
1	12/18/2008	13:10	GP09SW-050	13	8.8	7.24	8	12.48	0.1	170	160
2	12/18/2008	13:30	GP09SW-051	16	12.7	7.2	5	12.14	0.09	10	10
14	12/18/2008	9:30	GP09SW-085	7	6.9	7.64	8.9	9.78	0.12	250	240
12	12/18/2008	9:45	GP09SW-083	7	7.4	7.04	2.9	5.65	0.14	8300	6900
22	12/18/2008	10:25	GP09SW-093							73500	245000

Monthly Results *December 2008*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
17	12/18/2008	8:50	GP09SW-088	6.5	7.5	6.81	12	10.29	0.03	120	10
19	12/18/2008	13:10	GP09SW-090							50	60
20	12/18/2008	8:30	GP09SW-091							20	10
21	12/18/2008	8:05	GP09SW-092							150	20
20	12/19/2008	10:15	GP09SW-069	9.5	8.7	7.28	25	11.38	0.18		

Monthly Results *January 2009*

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform
17	1/13/2009	10:40	GP09SW-102	3	8.1	8.13	16	6.37	0.01	100	10
22	1/13/2009	12:30	GP09SW-106	5	7.3	7.8	11	6.86	0.01	520	400
15	1/13/2009	11:00	GP09SW-101	2	8.5	7.73	27	4.4	0.2	200	130
12	1/13/2009	11:50	GP09SW-100	4	6.8	7.42	12	2.92	0.16	38200	21800
29	1/13/2009	10:15	GP09SW-113	2	5.6	7.8	6.1	8.21	0.06	40	10
20	1/13/2009	9:50	GP09SW-105A	1	7.2	7.94	35	6.95	0.13	80	10
20	1/13/2009	9:50	GP09SW-105B	1	7.2	7.94	35	6.95	0.13	80	10
30	1/13/2009	9:30	GP09SW-114	1	6	7.22	29	8.58	0.41	20	60
23	1/13/2009	12:50	GP09SW-107	6	6.3	8	4.4	8.06	0.02	30	10
25	1/14/2009	10:30	GP09SW-109	8	6.5	7.94	8.2	6.83	0.06	60	10
8	1/14/2009	12:20	GP09SW-098	13	12.2	7.9	4.3	5.5	0.35	10	10
26	1/14/2009	10:15	GP09SW-110	7	5.4	8.03	7.7	8.3	0.01	50	40
24	1/14/2009	10:55	GP09SW-108	8	6.6	7.81	9.4	6.97	0.29	60	30
5	1/14/2009	9:00	GP09SW-095	3	5.7	7.79	11	8.33	0.08	170	10
6	1/14/2009	8:45	GP09SW-096	20	10.9	7.61	15	6.29	0.14	630	2300
3	1/14/2009	8:20	GP09SW-094A	1	4.9	6.83	4.7	6.75	0.02	290	100
19	1/14/2009	12:50	GP09SW-104	14	4.6	7.83	26	7.62	0.07	10	20
18	1/14/2009	12:40	GP09SW-103	13	9.3	7.95	45	6.98	0.05	10	10
9	1/14/2009	12:10	GP09SW-099	4	9.7	7.74	4.5	6.91	0.03	290	10
28	1/14/2009	8:50	GP09SW-112	-1	5.4	7.39	11	9.05	0.29	140	20
27	1/14/2009	8:30	GP09SW-111	-1	8.3	6.83	0.35	10.43	0.09	60	10
3	1/14/2009	8:20	GP09SW-094B	1	4.9	6.83	4.7	6.75	0.02	380	80

Monthly Results *February 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
23	2/17/2009	1:45	GP09SW-129	16	14.1	7.74	14	9.37	0.02	140	140
30	2/17/2009	9:55	GP09SW-136A	12	12.1	6.85	13	9.47	12	190	30
30	2/17/2009	9:55	GP09SW-136B	12	12.1	6.85	13	9.47	0.02	50	20
20	2/17/2009	10:25	GP09SW-127	13	12.3	7.55	35	9.66	0.02	150	4100
29	2/17/2009	10:55	GP09SW-135	13	12	7.55	8.4	8.64	0.01	30	20
17	2/17/2009	11:20	GP09SW-124	14	13.1	7.91	23	7.9	0.02	40	20
15	2/17/2009	11:40	GP09SW-123	14	13.3	7.63	38	6.06	0.01	310	390
9	2/17/2009	1:00	GP09SW-120	16	13.2	7.59	21	8.85	0.02	1073	220
22	2/17/2009	1:25	GP09SW-128	15	13.2	7.63	8	8.43	0.13	2100	9600
27	2/17/2009	8:30	GP09SW-133	11	12.5	6.44	5.5	8.57	0.09	200	70
12	2/17/2009	12:35	GP09SW-122	15	13.6	7.35	5.2	7.01	0.01	630	280
28	2/17/2009	9:05	GP09SW-134	12	12.5	6.59	5	7.57	0.12	280	30
3	2/18/2009	8:30	GP09SW-118B	13	12.8	6.33	13	5.26	0.06	120	80
19	2/18/2009	12:50	GP09SW-126	22	17.4	7.79	50	9.72	0.13	70	380
6	2/18/2009	9:05	GPSW09-117	16	15.5	7.47	23	8.05	0.08	820	290
3	2/18/2009	8:30	GP09SW-118A	13	12.8	6.33	13	5.26	0.06	150	40
25	2/18/2009	10:30	GP09SW-131	20	14.9	7.77	4.8	9.17	0.01	120	30
26	2/18/2009	10:55	GP09SW-132	21	14.6	7.86	3.4	9.6	0	220	160
11	2/18/2009	11:55	GP09SW-121	22	20.1	7.88	14	6.86	0.07	700	664
8	2/18/2009	12:15	GP09SW-119	22	16.9	7.76	11	8.36	0.36	110	2800
18	2/18/2009	12:40	GP09SW-	22	17.7	7.76	50	9.4	0.11	10	30
24	2/18/2009	10:00	GP09SW-130	18	14.4	7.7	20	8.28	0.2	370	30
5	2/18/2009	9:25	GP09SW-116	17	13.8	7.63	28	7.55	0.02	350	270

Monthly Results *March 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
29	3/17/2009	9:55	GP09SW-170	18	14.6	7.79	41.4	8.51	0.09	180	150
28	3/17/2009	8:45	GP09SW-169	14	13.4	7.36	8.58	8.08	0.03	500	20
23	3/17/2009	12:15	GP09SW-164	24	15.4	7.74	27	7.64	0	230	60
22	3/17/2009	11:35	GP09SW-163	22	15	7.61	12	5.88	0.06	500	70
20	3/17/2009	9:35	GP09SW-162	17	14.1	7.8	42.4	7.16	0.24	110	340
30	3/17/2009	9:15	GP09SW-171	16	14.4	7.8	5.1	8.61	0.01	350	510
27	3/17/2009	8:30	GP09SW-168	14	12.8	7.16	4.22	7.82	0.1	320	50
12	3/17/2009	10:50	GP09SW-157	20	15.5	7.49	28	5.85	0.01	1118	727
9	3/17/2009	11:05	GP09SW-155B	21	15.4	7.68	50	5.88	0.1	380	570
9	3/17/2009	11:05	GP09SW-155A	21	15.4	7.68	50	5.88	0.1	500	664
15	3/17/2009	10:35	GP09SW-158	20	12	7.54	30.1	6.97	0.12	430	500
17	3/17/2009	10:35	GP09SW-159	19	15.1	7.96	39.6	7.85	0.03	480	250
8	3/18/2009	10:50	GP09SW-154	20	15.9	7.59	27	9.1	0.1	160	20
3	3/18/2009	8:30	GP09SW-150B	14	16.3	6.99	11	8.83	0.01	260	60
6	3/18/2009	8:50	GP09SW-152	14	17.5	7.25	26	8.5	0.04	270	220
5	3/18/2009	9:05	GP09SW-151	16	16.4	8.04	35	8.48	0.01	510	180
24	3/18/2009	9:20	GP09SW-165	16	15.3	7.37	21	7.88	0.1	400	1500
25	3/18/2009	9:45	GP09SW-166	17	15.9	7.63	3.9	8.48	0.03	90	10
19	3/18/2009	11:20	GP09SW-161	22	16.9	7.66	40	8.47	0.01	300	682
11	3/18/2009	10:35	GPO9SW-156	19	15.7	7.73	21	7.34	0.04	1200	320
18	3/18/2009	11:05	GP09SW-160	22	18.3	7.9	45	9.91	0	80	10
3	3/18/2009	8:30	GP09SW-150A	14	16.3	6.99	11	8.83	0.01	230	60
26	3/18/2009	9:55	GP09SW-167	18	15.7	7.72	3.5	9.73	0.04	380	120

Monthly Results *April 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
27	4/14/2009	8:25	GP09SW-197	11	14.5	6.81	6.8	7.48	0.17	1136	809
9	4/14/2009	11:20	GP09SW-184	17	16.7	7.67	45	6.62	0.22	90	10
12	4/14/2009	11:00	GP09SW-186	17	14.7	7.41	16	5.96	0.04	3400	1073
17	4/14/2009	10:25	GP09SW-188	16	16.2	7.94	33	6.83	0.12	350	160
29	4/14/2009	9:35	GP09SW-199A	13	14.6	7.93	30	7.39	0.12	120	130
29	4/14/2009	9:35	GP09SW-199B	13	14.6	7.93	30	7.39	0.12	100	80
22	4/14/2009	11:40	GP09SW-192	19	14.8	7.69	23	7.27	0.14	1773	982
28	4/14/2009	8:40	GP09SW-198	12	13.2	7.55	8.6	7.19	0.22	1336	400
15	4/14/2009	10:35	GP09SW-187	17	16.2	7.85	50	8.85	0.17	1736	3000
30	4/14/2009	9:10	GP09SW-200	13	15.2	7.75	55	6.87	0.1	560	655
11	4/14/2009	12:30	GP09SW-185	21	15.7	7.86	15	6.98	0.23	2300	900
8	4/14/2009	12:45	GP09SW-183	20	18	7.67	3.4	7.94	0.29	50	10
18	4/14/2009	1:00	GP09SW-189	22	17.2	7.98	35	9.41	0	110	180
19	4/14/2009	1:15	GP09SW-190	21	17.2	8.01	32	8.23	0.03	90	190
20	4/14/2009	9:55	GP09SW-191	14	12.8	7.78	24	8.82	0.01	330	210
7	4/14/2009										
24	4/15/2009	10:35	GP09SW-194	18	17	7.5	14	9.15	0.26	380	140
26	4/15/2009	11:15	GP09SW-196	20	20	7.72	12	8.94	0	470	170
25	4/15/2009	11:00	GP09SW-195	19	16.8	7.53	4.5	6.96	0.03	60	50
23	4/15/2009	9:25	GP09SW-193	17	15.1	6.87	31	7.19	0.13	720	190
6	4/15/2009	10:00	GP09SW-181	18	18	7.52	36	7.31	0.04	310	973
5	4/15/2009	10:20	GP09SW-180	18	19.7	7.66	34	6.06	0.1	790	827
3	4/15/2009	9:45	GP09SW-179B	17	16	7.59	20	7.23	0.03	280	290
3	4/15/2009	9:45	GP09SW-179A	17	16	7.59	20	7.23	0.03	180	240

Monthly Results *April 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
5	4/20/2009	9:50	GP09SW-202	23	22.8	7.84	31	12.26	0		

Monthly Results *May 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
27	5/19/2009	8:45	GP09SW-219	18	18.7	6.44	4.7	9.43	0.03	280	160
23	5/19/2009	2:10	GP09SW-215A	25	24.5	7.59	32	12.76	0.03	420	664
23	5/19/2009	2:20	GP09SW-223	E.B.							
9	5/19/2009	1:00	GP09SW-206	24	22.9	7.7	38	11.44	0.03	200	636
12	5/19/2009	12:30	GP09SW-208	24	22.3	7.6	16	11.01	0.24	270	590
15	5/19/2009	11:45	GP09SW-209	23	23	7.73	26	11.35	0.01	110	430
23	5/19/2009	2:10	GP09SW-215B	25	24.5	7.59	32	12.76	0.03		
17	5/19/2009	11:30	GP09SW-210	23	23	7.8	50	9.47	0.18	60	50
23	5/19/2009	2:20	GP09SW-223	E.B.							
29	5/19/2009	10:55	GP09SW-221	22	19.6	7.39	19	11.06	0.02	80	40
20	5/19/2009	10:25	GP09SW-213	22	20.7	7.59	29	5.3	0.3	660	70
30	5/19/2009	10:05	GP09SW-222	22	21.6	7.55	80	9.05	0.23	120	170
28	5/19/2009	9:20	GP09SW-220	20	20	7.41	5	10.23	0.14	460	250
3	5/20/2009	9:00	GP09SW-201	21	20.6	7.65	21	11.54	0.04	270	591
11	5/20/2009	11:45	GP09SW-207	25	22.2	7.75	20	9.32	0.27	790	791
5	5/20/2009	9:50	GP09SW-202	23	22.8	7.84	31	12.26	0	200	540
18	5/20/2009	12:45	GP09SW-211	26	25.4	7.71	38	14.58	0.22	20	20
25	5/20/2009	10:40	GP09SW-217	23	21.8	7.66	6.4	13.2	0.19	30	190
22	5/20/2009	8:25	GP09SW-214	19	16.3	8	16	8.01	0.08	1091	882
19	5/20/2009	1:05	GP09SW-212	27	25.7	7.79	27	16.07	0.02	20	140
19	5/20/2009	7:15	GP09SW-224	T.B.							
8	5/20/2009	12:10	GP09SW-205B	26	23.6	7.64	7.6	11.41	0.4	20	20
8	5/20/2009	12:10	GP09SW-205A	26	23.6	7.64	7.6	11.41	0.4	40	20
26	5/20/2009	11:20	GP09SW-218	24	21.1	7.89	8.1	14.3	0.28	380	230

Monthly Results *May 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
24	5/20/2009	10:15	GP09SW-216	23	21.7	7.52	13	9.04	0.29	80	60
6	5/20/2009	9:25	GP09SW-203	22	22.7	7.56	24	12.56	0.15	590	300
3	5/20/2009	9:00	GP09SW-201	21	20.6	7.65	21	11.54	0.04		
19	5/20/2009	1:20	GP09SW-225	E.B.							

Monthly Results *June 2009*

Stream Site Number	Date	Time	Sample ID #	Air Temperature	Water Temperature	pH	Turbidity	Dissolved Oxygen	Ammonia	Fecal Strep	Fecal Coliform	
17	6/23/2009	10:35	GP09SW-238	33	28.9		33	6.9	0.23	540	10	
28	6/23/2009	8:45	GP09SW-248	30	26	7.09	14	5.75	0.61	350	1100	
30	6/23/2009	9:20	GP09SW-250	31	27.9	6.91	50	4.04	0.34	500	864	
29	6/23/2009	10:15	GP09SW-249	32	26.2	7.12	32	4.78	0.53	2000	9	
27	6/23/2009	8:25	GP09SW-247	28	24.6	6.4	21	7.29	0.35	7000	2100	
22	6/23/2009	12:35	GP09SW-242	37	27.5	7.66	7.7	5.83	0.25	480	7100	
18	6/23/2009	1:45	GP09SW-239	38	34.4	7.23	29	7		10	9	
12	6/23/2009	11:05	GP09SW-236A	34	24.1	7.65	13	6.93	0.23			
12	6/23/2009	11:05	GP09SW-236	34	27.1	7.65	13	6.93	0.23	1100	845	
8	6/23/2009	13:10	GP09SW-233	37	29.7	7.69	4.6	6.69	0.32	560	570	
20	6/23/2009	9:45	GP09SW-241	32	26.7	6.27	7.6	4.35	0.39	580	45	
24	6/24/2009	12:30	GP09SW-244	37	29.4	6.77	5.2	6.96	0.5	145	118	
11	6/24/2009	10:15	GP09SW-235	33	29.4	6.98	27	4.9	0.31	420	154	
26	6/24/2009	11:05	GP09SW-246	36	29	6.94	7.7	8.18	0.29	410	230	
25	6/24/2009	10:50	GP09SW-245	36	29.6	6.6	21	9.94	0.34	18	27	
3	6/24/2009	8:35	GP09SW-229	29	30	7.01	24	4.8	0.26	290	154	
5	6/24/2009	9:05	GP09SW-230	32	29.6	6.76	17	6.16	0.31	191	45	
9	6/24/2009	10:30	GP09SW-234	34	28.3	6.95	310	6.27	0.07	3000	430	
7	6/24/2009	9:30	GP09SW-232	32	27.9	7.05	50	8.27	0.7	680	380	
6	6/24/2009	8:45	GP09SW-231	31	29.4	7.18	24	4.41	0.39			
5	6/24/2009	9:05	G0P09SW-230A		32	29.6	6.76	17	6.16	0.31	260	164
19	6/24/2009	1:15	GP09SW-240	36	32	6.92	23	10.57		18	9	
23	6/24/2009	12:55	GP09SW-243	36	32.3	7.16	20	7.44	0.37	480	709	

Monthly Results *July 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
15	7/21/2009	10:08	GP09SW-272	27	26.1	6.76	130	3.2	0.15	6800	
30	7/21/2009	8:50	GP09SW-285	25	24	7.46	38	5.06	0.42	1273	1300
29	7/21/2009	9:31	GP09SW-284	25	24.6	6.94	18	5.21	0.3	1191	300
28	7/21/2009	8:15	GP09SW-283	25	25.8	6.8	30	5.76	0.31	3300	18300
27	7/21/2009	7:55	GP09SW-282	24	24.9	6.76	85	5.79	0.37	9500	300
22	7/21/2009	11:16	GP09SW-277	30	26.5	6.81	55	6.16	0.44		
20	7/21/2009	9:05	GP09SW-276	25	26.2	6.98	31	5.04	0.29	1164	782
19	7/21/2009	12:20	GP09SW-275	31	27.5	7.76	45	6.36	0.34	230	1609
17	7/21/2009	9:55	GP09SW-273	26	25.8	7.02	38	6.65	0.68	100	600
12	7/21/2009	10:22	GP09SW-271	28	25.5	6.91	70	6.18	0.39		
11	7/21/2009	11:30	GP09SW-270	29	26.7	6.93	120	6	0.43	11900	
9	7/21/2009	10:37	GP09SW-269B	27	25.6	6.82	190	6.61	0.08	10700	
9	7/21/2009	10:37	GP09SW-269A	27	25.6	6.82	190	6.61	0.08	11500	
8	7/21/2009	11:46	GP09SW-268	30	26.9	7.39	15	5.8	0.27	2500	13600
18	7/21/2009	12:00	GP09SW-274	31	27.9	7.71	70	6.89	0.23	410	800
26	7/22/2009	9:14	GP09SW-281	26	24	7.49	15	6.71	0.23	900	11500
25	7/22/2009	9:03	GP09SW-280B	27	25.4	7.51	14	3.27	0.33	1218	
24	7/22/2009	8:40	GP09SW-279	25	24.9	7.75	13	4.09	0.44	2000	11000
6	7/22/2009	7:57	GP09SW-266	24	26.2	7.66	45	5.3	0.37	2300	9100
23	7/22/2009	7:27	GP09SW-278	23	24.9	6.93	55	4.74	0.28	2100	109
25	7/22/2009	9:03	GP09SW-280A	27	25.4	7.51	14	3.27	0.33	1591	
3	7/22/2009	7:46	GP09SW-264	23	24.3	7.61	26	4.82	0.21	910	20000
5	7/22/2009	8:22	GP09SW-265	25	24.3	7.62	19	3.36	0.26	1209	6300

Monthly Results *August 2009*

Stream Site Number	*Date*	*Time*	*Sample ID #*	*Air Temperature*	*Water Temperature*	*pH*	*Turbidity*	*Dissolved Oxygen*	*Ammonia*	*Fecal Strep*	*Fecal Coliform*
23	8/18/2009	12:45	GP09SW-304A	32	28.1	7.97	11	5.16	0.07		
27	8/18/2009	7:45	GP09SW-308	27	24.4	6.69	8.1	3.64	0.23		
28	8/18/2009	8:10	GP09SW-310	28	25.7	7.31	7.7	4.37	0.17		
20	8/18/2009	9:05	GP09SW-312	28	25.9	7.81	20	4.09	0.17		
17	8/18/2009	10:00	GP09SW-299	28	27	7.68	35	5.25	0		
12	8/18/2009	10:30	GP09SW-297	28	25.1	7.64	7.5	4.57	0.14		
9	8/18/2009	10:55	GP09SW-295	29	27.3	7.98	9.3	6.29	0.08		
22	8/18/2009	11:50	GP09SW-302	32	27.1	7.87	6.8	4.26	0.05		
23	8/18/2009	12:45	GP09SW-304B	32	28.1	7.97	11	5.16	0.07		
18	8/19/2009	11:20	GP09SW-300	32	28	7.92	65	5.24	0		
26	8/19/2009	9:15	GP09SW-307	28	24.1	7.83	7	6.28	0.03		
19	8/19/2009	1:00	GP09SW-301	33	29.2	8.16	22	6.91	0.03		
24	8/19/2009	8:50	GP09SW-305	27	26.8	7.64	9.2	8.53	0.13		
3	8/19/2009	7:45	GP09SW-290	26	28.8	7.02	20	4.14	0.07		
11	8/19/2009	9:30	GP09SW-296	28	26.1	8.1	16	6.43	0.22		
8	8/19/2009	11:00	GP09SW-294B	32	27.4	7.92	7.6	4.31	0.09		
8	8/19/2009	11:00	GP09SW-294A	32	27.4	7.92	7.6	4.31	0.09		
6	8/19/2009	8:10	GP09SW-292	27	28.4	7.87	23	5.23	0.1		
5	8/19/2009	8:25	GP09SW-291	27	27.6	7.99	21	4.79	0.04		
25	8/19/2009	10:15	GP09SW-306	29	28.9	7.82	7	4.58	0.06		

APPENDIX E: Stormwater Ordinance

ARTICLE XXIII. STORMWATER DISCHARGES

Section 13-600. Statement of Purpose.

This ordinance sets forth uniform requirements for discharges to the Municipal Separate Storm Sewer System (MS4) and enables the City of Grand Prairie (City) to comply with all applicable federal and state laws, including, but not limited to, the Clean Water Act, the Storm Water Phase II Final Rule, Chapter 26 of the Texas Water Code, Title 30 of the Texas Administrative Code, and the City's Phase II MS4 Texas Pollution Discharge Elimination System General Permit. The objectives of this ordinance are:

(a) To regulate the contribution of pollutants to the Municipal Separate Storm Sewer System by stormwater discharges by any user;

(b) To prevent the introduction of pollutants into the Municipal Separate Storm Sewer System and to prohibit illicit connections and discharges to the Municipal Separate Storm Sewer System to the maximum extent practicable;

(c) To enable the City to comply with its Texas Pollutant Discharge Elimination System permit conditions;

(d) To establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with this ordinance;

(e) To provide for the equitable distribution of cost of monitoring and enforcement resulting from the program established herein;

(f) To provide enforcement remedies for non-compliance with this article.

Section 13-601. Scope of Article.

This ordinance shall apply to all persons who will or who are reasonably expected to discharge to the Municipal Separate Storm Sewer System (MS4), including but not limited to all areas discharging to Grand Prairie, the extra territorial jurisdiction, and at any location within one thousand (1,000) feet of the City.

Section 13-602. Abbreviations.

The following abbreviations, when used in this ordinance, shall have the designated meanings:

BMP	-	Best Management Practices
CFR	-	Code of Federal Regulations
CSN	-	Construction Site Notice
MS4	-	Municipal Separate Storm Sewer System
NEC	-	No Exposure Certification
NOI	-	Notice of Intent
NOT	-	Notice of Termination
NPDES	-	National Pollutant Discharge Elimination System
PST	-	Petroleum Storage Tank

RCRA	-	Resource Conservation and Recovery Act
SWP3	-	Storm Water Pollution Prevention Plan
TPDES	-	Texas Pollution Discharge Elimination System
U.S.C.	-	United States Code
USEPA	-	U.S. Environmental Protection Agency

Section 13-603. Definitions.

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this ordinance, shall have the meanings hereinafter designated.

Approved Erosion Control Plan: An erosion control plan prepared in compliance with City requirements, as specified in the Drainage Design Manual as currently amended and the current Erosion Control Plans for Developments and Erosion Control Plans for Single Residential Lot Developments lists, and approved by the City Engineer or designee.

Best management practices (BMP): Schedules of activities, prohibitions of practices, installation of erosion control devices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act: The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments and amendments thereof. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

Commencement of construction: The disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

Commercial: Pertaining to any business, trade, industry, or other activity engaged in for profit.

Construction activity: A human-made activity, including without limitation, clearing, grading, excavation, construction, and paving, that results in an earth change or disturbance in the existing cover or topography of land, including any modification or alteration of a site or the “footprint” of a building that results in an earth change or disturbance in the existing cover or topography of land.

Director: The director of the department designated by the city manager to enforce and administer this article or the director’s designated representative.

Discharge: Any addition or introduction of any pollutant, stormwater, or any other substance whatsoever into the municipal separate storm sewer system and/or into any body of water by depositing, conducting, draining, emitting, throwing, running, allowing to seep, or otherwise releasing or disposing of, or allowing, permitting, or suffering any of these acts or omissions.

Erosion Control Plan: A drawing which clearly and legibly defines existing property lines, features and utilities, defines limits of proposed work, shows proposed construction improvements and features, shows existing drainage patterns and facilities and specifies BMPs to be used including location, extent, type and construction details.

Facility: Any building, structure, installation, process, or activity from which there is or may be a discharge of a pollutant.

Final Stabilization: When all soil disturbing activities have been completed and a uniform (e.g. evenly distributed, without large, bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

Industrial waste: Any waterborne liquid or solid substance that results from any process of industry, manufacturing, mining, production, trade, or business.

Large Construction Projects: Construction projects including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction projects also include the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction projects do not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

Municipal separate storm sewer system (MS4): The system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned and operated by the City and designed or used for collecting or conveying stormwater, and which is not used for collecting or conveying sewage.

National Pollutant Discharge Elimination System (NPDES): The permit program of the United State's Environmental Protection Agency, and/or the permit program of the state agency delegated to act on USEPA's behalf with an approved storm water program.

NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (or Industrial General Permit): The Industrial General Permit issued by USEPA and any subsequent modifications or amendments thereto.

NPDES General Permit for Storm Water Discharges from Construction Sites: The Construction General Permit issued by USEPA on August 27, 1992 and any subsequent modifications or amendments thereto.

NPDES permit: A permit issued by USEPA or by the State that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Nuisance: Any act or unlawful use of property which results in material annoyance, inconvenience, discomfort, or damage to another person or to the public.

Oil: Any kind of oil in any form, including, but not limited to, petroleum, fuel oil, crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure, sludge, oil refuse, and oil mixed with waste.

Operator: The person or persons who, either individually or taken together, meet the following two criteria:

(1) they have operational control over the facility specifications (including the ability to make modifications in specifications); and

(2) they have the day-to-day operational control over those activities at the facility necessary to ensure compliance with pollution prevention requirements and any permit conditions.

Owner: The person who owns a facility or part of a facility.

Person: Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity, or their legal representatives, agents, or assigns. This definition includes all federal, state, and local governmental entities.

Pollutant: Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. The term "pollutant" does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated range land, pasture land, and farm land.

Qualified Personnel: A person who possesses the appropriate competence, skills, and ability (as demonstrated by sufficient education, training, experience, and when applicable, required certification and licensing) to perform a specific activity in a timely and complete manner consistent with the applicable regulatory requirements and generally-accepted industry standards for such activity.

Regulated Materials: Any material, including waste, regulated by the state and/or federal regulatory agencies including, but not limited to, oils, petroleum products, and vehicle fluids.

Regulatory Authority: Any municipal officer or department of the city appointed by the City Manager to administer this article.

Release: Any intentional or unintentional spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the municipal separate storm sewer system (MS4) or the waters of the United States, or where, unless the oil, hazardous substances, waste, or other substances are controlled or removed, the substance may drain, seep, run, or otherwise enter into the MS4 or waters of the United States.

Site: The land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

Small Construction Projects: Construction projects including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction projects also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres of land. Small construction projects do not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities).

State Regulatory Authority: The state's agencies that have the authority to adopt and enforce any environmental rules necessary to carry out its powers and duties under the laws of Texas

Stormwater: Stormwater runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Pollution Prevention Plan (SWP3): A plan required by either the Construction General Permit or the Industrial General Permit or any other permit and which describes and ensures the implementation of practices that are to be used to reduce the pollutants in stormwater discharges associated with construction or other industrial activity at the facility.

Texas Pollutant Discharge Elimination System (TPDES): The permit program of the State of Texas.

User: Any owner, operator, contractor, renter, squatter or any other person who has control of property that has or may threaten to discharge liquids to the Municipal Separate Storm Sewer System.

Waste: Rejected, unutilized, or superfluous substances in liquid, gaseous or solid form resulting from domestic, agricultural or industrial activities.

Wastewater: Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings and/or operations, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are required to discharge to the publicly owned treatment works.

Water: Any groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the State, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the State or inside the jurisdiction of the State.

Watercourse: Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water which are delineated by the City of Grand Prairie.

Water quality standard: The designation of a body or segment of surface water in the State for desirable uses and the narrative and numerical criteria deemed by the State to be necessary to protect those uses.

Waters of the United States: 1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; 2. All interstate waters including interstate wetlands; 3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purposes by industries in interstate commerce; 4. All impoundments of waters otherwise defined as waters of the United States under this definition; 5. Tributaries of waters identified in paragraphs (s)(1) through (4) of this Section; 6. The territorial sea; 7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this Section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds) which also meet the criteria of this definition) are not waters of the United States.

Section 13-604. Allowable Discharges.

(a) No person shall introduce or cause to be introduced into the MS4 any discharge that is not composed entirely of stormwater, with the exception of those activities listed in 1 through 13 of Section 13-604 (a), unless said activities are determined to be a nuisance.

(1) Discharge authorized by, and in full compliance with, an NPDES/TPDES construction or multi-sector industrial permits;

(2) Discharge or flow resulting from fire fighting activities by the Fire Department;

(3) A discharge or flow of fire protection water that does not contain oil or hazardous substances;

(4) Unpolluted agricultural stormwater runoff;

(5) A discharge or flow from potable water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely impact aquatic life);

(6) Uncontaminated runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources that does not create a nuisance;

(7) Discharges from unpolluted pumped groundwater or rising groundwater;

(8) Unpolluted groundwater infiltration;

(9) Unpolluted discharge or flow from a foundation drain, crawl space pump, footing drain, or sump pump;

(10) Discharges from air conditioning condensation free of oils;

(11) Discharges from individual residential vehicle washing;

(12) Discharges from a riparian habitat or wetland; and/or

(13) Stormwater runoff from a roof that is not contaminated by any runoff or discharge from an emissions scrubber or filter or any other source of pollutant.

(b) Persons wishing to discharge water other than that listed under subsection (a) of this Section and not listed as a specific prohibition under Section 13-605, must file a written request to the Director five (5) days prior to the date of discharge that details the source of the discharge and the volume of the discharge. Written authorization must be obtained from the Director prior to discharge.

Section 13-605. Specific Prohibitions and Requirements.

(a) No user of the MS4 shall introduce or cause to be introduced into the MS4 any discharge that would result in or contribute to a violation of a water quality standard, the TPDES permit issued to the City, or any state-issued discharge permit for discharges from its MS4.

(b) No person shall discharge any substance to the MS4 that is prohibited by the Clean Water Act, the Texas Water Code, or the Texas Administrative Code.

(c) No person shall release any materials or otherwise introduce, cause, allow, or permit to be introduced any of the following substances into or that may reach the MS4:

(1) Any used motor oil, antifreeze, or any other motor vehicle fluid;

(2) Any regulated or industrial waste;

(3) Any hazardous waste, including household hazardous waste;

(4) Any domestic sewage or septic tank waste (from holding tanks such as vessels, chemical toilets, campers, or trailers), grease trap waste, or grit trap waste;

(5) Any wastewater from a commercial carwash facility;

(6) Any vehicle or equipment wash water from a commercial or industrial facility;

(7) Any wastewater from the washing, cleaning, de-icing, or other maintenance of aircraft;

(8) Any use of power washing at a commercial facility that generates wastewater containing any soap, detergent, degreaser, solvent, emulsifier, dispersant, or any other cleaning substance, or any oils, grime, grit, dirt or substances resulting from the cleaning;

(9) Wastewater from the wash-down or other cleaning of any pavement where release of regulated material has occurred;

(10) Any effluent from a cooling tower, condenser, compressor, emissions scrubber, emissions filter, or the blow-down from a boiler;

(11) Any runoff or wash-down water from any animal pen, kennel, or fowl or livestock containment area that exceeds the water quality standard or causes the MS4 to exceed 200 cfu/100 mL fecal coliform, the water quality standard defined in 30 TAC Section 307.7;

(12) Any discharge from water line disinfection by superchlorination;

(13) Any substance or material that will damage, block, or clog the MS4;

(14) Any release from a petroleum storage tank (PST), or any leachate or runoff from soil contaminated by a leaking PST, or any discharge of pumped, confined, or treated wastewater from the remediation of any such PST release;

(15) Any wastewater from commercial floor, rug, or carpet treatment;

(16) Any discharge of solids or waste from soil boring, core drilling, or any other site investigative technique;

(17) Any discharge from gas well drilling, derrick washing, fracturing, or other activities relating to gas pipelines, compression stations, or gas well padsites;

(18) Any paint or paint-related materials;

(19) Any polluted or unpolluted liquid not covered by Section 13-605.

(d) No person shall connect to the MS4 a line conveying domestic, commercial, or industrial sanitary sewage or wastewater.

(e) No person shall introduce or cause to be introduced into the MS4 any sediment, silt, earth, soil, or other material associated with clearing, grading, excavation, filling, hauling, soil boring, core drilling, or other construction activities.

(f) No person shall introduce or cause to be introduced to the MS4 any sediment, unused ready mix concrete, mortar, asphalt, or other unused construction materials or wash water associated with these materials.

(g) No person shall introduce or cause to be introduced to the MS4 any sediment, dust, or other solid material from any activity not intended for outside disposal or accumulation.

(h) No person shall use or store any solid waste, regulated waste, or hazardous waste or regulated waste in a manner that the material could enter the MS4.

(i) No person shall cause or allow leaves, grass clippings, or other yard debris to enter into the MS4.

(j) No person may discharge or cause to be discharged water containing fertilizers, pesticides or herbicides to the MS4.

(k) No person shall introduce or allow to be introduced into or upon any public or private property that drains or may drain to the MS4 any solid or semi-solid material, such as floatables, or discarded or abandoned objects, articles, and accumulations, on property whether or not it was generated, placed, stored, or located by the user of such materials in such a manner that causes the material to be transported by the wind, rain, or other atmospheric conditions into the MS4.

(l) No person shall introduce non-native solids or liquids to the MS4 or to the Waters of the United States with the exception of those activities listed in Section 13-604 of this article.

Section 13-606. Construction Activity Prohibitions and Requirements.

(a) No person shall discharge stormwater associated with a construction activity without first having obtained a TPDES permit to do so, when applicable.

(b) No person shall discharge stormwater associated with a construction activity without first having submitted a copy of the Notice of Intent (NOI) and/or a Construction Site Notice (CSN) to the City, when applicable.

(c) All persons must submit a copy of the Notice of Termination (NOT) to the City at the same time the person submits the NOT to the State Regulatory Agency (TCEQ).

(d) Any person or operator of construction sites shall use best management practices (BMPs) to control and reduce discharge to the City of sediment, silt, earth, soil, and other material associated with clearing, grading, excavation, filling, hauling and other construction activities to the maximum extent practicable. Any person or operator shall install BMPs in compliance with the SWP3 and the approved erosion control plan. Any person or operator must maintain BMPs in effective working order in compliance with City Construction Detail Standards and BMP standards supported by the Regional Council of Governments.

(e) Any BMPs capable of installation and/or implementation shall be installed and/or implemented prior to the commencement of construction at the site or in compliance with a schedule for installation and/or implementation in an applicable Storm Water Pollution Prevention Plan (SWP3) and approved erosion control plan. Such BMPs must include, but are not limited to, the measures listed in 1 through 7 of Section 13-606 (e).

(1) Ensure that existing vegetation is preserved where feasible and disturbed areas of the site are stabilized as soon as practicable where construction activities have temporary or permanently ceased. Stabilization measures may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and other appropriate measures.

(2) Prevention of the discharge of building materials, including cement, lime, concrete, and mortar, to the MS4 or waters of the United States.

(3) Minimization of the tracking of sediments off-site by vehicles, the generation of dust, and the escape of other windblown waste from the site.

(4) Providing housekeeping measures to prevent and contain releases of paints, solvents, fuels, septic waste, and other hazardous chemicals and pollutants associated with construction activities, and to assure proper cleanup and disposal of any such releases in compliance with state, federal, and local requirements.

(5) Implementation of proper waste disposal and waste management techniques, minimizing ground contact with hazardous chemicals and trash.

(6) Proper placement and maintenance of vegetation, erosion and sediment control measures and other best management practices to ensure good and effective working condition.

(7) Installation of structural BMPs must be completed prior to completion of the construction process to control pollutants in stormwater discharges that will occur after construction operations have been finalized. Structural measures should be placed on upland soils to the degree attainable. Such installed structural measures may include, but are not limited to, the following: stormwater detention structures (including wet ponds), stormwater retention structures, flow attenuation by use of open vegetative swales and natural depressions, other velocity dissipation devises, infiltration of runoff on site, and sequential systems which combine several practices.

(f) Qualified personnel (provided by the operator of the construction site) shall inspect all disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials and staging of construction that are exposed to precipitation, discharge locations, locations where vehicles enter or exit the construction site, and structural controls for evidence of, or potential for, pollutants entering the MS4. All erosion and sediment control measures and other identified BMPs shall be inspected regularly for proper installation according to the SWP3 and erosion control plan.

(g) Inspections must be conducted by qualified personnel at least every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater or once every 7 days regardless of storm events. These inspections are to be conducted as outlined in the SWP3. Inspection reports must be kept with the SWP3.

(h) Any owner of a site of construction activity, whether or not he/she is an operator, is jointly and severally responsible for compliance with the requirements in this article.

(i) Any contractor or subcontractor on a site of construction activity, who is not an owner or operator, but who is responsible under his/her contract or subcontract for implementing BMP control measures, is jointly and severally responsible for any willful or negligent failure on his/her part to adequately implement that control measure.

(j) All persons must comply with the requirements of the TPDES permit or approved erosion control plan issued to such person.

(k) Any person or operator engaging in any land disturbing activity or any construction activities shall prepare an Erosion Control Plan in accordance with the City Drainage Design Manual as currently amended and submit that Plan to the City for approval. This shall apply regardless of whether a person or operator is required to obtain a permit from the City or State Regulatory Agency in order to conduct such land disturbing or construction activity.

The person or operator shall also be held liable for violations of this article committed by third parties engaging in activities related to the site.

(l) Any person or operator of sites of construction activity, including clearing, grading, excavation, filling and hauling activities, that result in the disturbance of one (1) or more acres of total land area, or that are a part of a larger common plan of development or sale, where one (1) or more acres of total land area are disturbed, or those who are required to obtain a TPDES permit for stormwater discharges associated with construction activities, shall comply with the measures listed in 1 through 8 of Section 13-606 (l).

(1) Any person or operator who intends to obtain coverage for stormwater discharges for a large construction project under the TPDES general permit for stormwater discharges shall submit a signed copy of the NOI and CSN to the City at least two (2) days prior to the commencement of construction activities.

(2) A site-specific SWP3, prepared by the person or operator with appropriate notices issued as required by the state TPDES general permit, shall be kept on the construction site at all times during the construction and updated as needed to address changing conditions. The SWP3 shall include the City approved erosion control plan as part thereof.

(3) The City may require submission of the SWP3 as currently amended at any time during the course of the construction and the person or operator shall submit the SWP3 to the City within twenty-four (24) hours of the request. The City may notify the person or operator at any time the SWP3 does not meet the requirements of the Construction General Permit for stormwater discharge from the construction site, or any additional requirements imposed by or under this article, which are not being met by the SWP3. The person or operator shall make the required changes to the SWP3 within seven (7) calendar days of notification and submit to the City that the changes have been made and implemented.

(4) Operators of a small construction site must submit a copy of the CSN to the City prior to beginning earth disturbing activities.

(5) The CSNs and NOI shall be posted and readily available for viewing by the general public, local, state, and federal authorities.

(6) Stabilization measures must be initiated as soon as practicable in portions of the construction site where land disturbing activities have *temporarily* ceased. Stabilization measures that provide protective cover must be initiated as soon as practicable where land disturbing activities have *permanently* ceased. These measures must be initiated no more than fourteen (14) days after construction activities have temporarily or permanently ceased (as described in the TPDES Permit).

(7) Final stabilization must be achieved and all temporary BMPs removed prior to filing the NOT with the State Regulatory Agency. The City may withhold occupancy or use permit for any premises constructed on site until such time the City has determined the site has met the final stabilization criteria described in this Article.

(8) Upon final stabilization of a large construction project, the person or operator (or duly authorized representative thereof) shall submit a NOT to the State Regulatory Agency and submit a copy of the NOT to the City.

Section 13-607. Post-Construction Requirements.

(a) The person or operator must ensure all temporary control measures for erosion control or other BMPs are removed once final stabilization has been achieved.

(b) The person or operator must ensure all long-term operation and maintenance of post-construction stormwater runoff control mechanisms, such as detention and retention basins, dry wells, and other measures as described in federal

regulations.

Section 13-608. Regulated Activities Associated with Facilities.

(a) A user of the MS4 conducting industrial activity that has stormwater discharges associated with industrial activity commits an offense if the user discharges, or causes to be discharged, stormwater associated with industrial activity without having first obtained an NPDES or TPDES permit to do so.

(b) A person shall obtain coverage and submit to the city a copy of either a NOI to obtain coverage under the TPDES general or individual permit for industrial stormwater, a NEC, or any other stormwater permit.

(c) A copy of the NOI or the No Exposure Certification (NEC) application form shall be submitted to the city no later than 14 calendar days after filing the NOI or a NEC a form with the State for such coverage.

(d) A copy of the individual TPDES permit shall be submitted to the city no later than 14 calendar days after the State signs the permit.

(e) A person commits an offense if the user is out of compliance with the facilities NOI, NEC, or SWPPP.

(f) A person commits an offense if the user is out of compliance with the requirements of the NPDES or TPDES issued to such person.

Section 13-609. Watercourse Protection.

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function or physical integrity of the watercourse.

Section 13-610. Releases.

(a) Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging anywhere outside the building and/or into the MS4, said person shall take all necessary steps to ensure the discovery, containment, and cleanup/remediation of such release immediately or within 15 minutes of the release.

(b) In the event of such a release of regulated materials said person shall immediately or within 15 minutes of the release notify the local, state, and federal regulatory authority of the occurrence via emergency dispatch services. Said person will make notification in conjunction with any state or federal environmental permit requirements.

(c) If the discharge of prohibited materials emanates from a commercial or industrial establishment, the facility shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Section 13-611. Right of Entry.

The city's representative(s) shall have the right to enter the premises of any person to determine whether that person is compliance with all requirements of this article. Persons shall allow inspecting or monitoring personnel ready access to all parts of the premises for the purposes of inspection, monitoring, records examination and copying, and the performance of any additional duties. Any information concerning a requirement under this article, including, but not limited to water testing data, construction records, state registrations, environmental and closure records, shall be made readily available upon request.

(a) Where security measures are in force which requires proper identification and clearance before entry into the premises, that person shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the city's representative will be permitted to enter without delay for the purposes of performing specific responsibilities.

(b) The city's representatives shall have the right to set up on any person's property such devices as are necessary to conduct monitoring of any person's operations.

(c) Unreasonable delays in allowing inspecting or monitoring personnel access to any person's premises shall be a violation of this article.

Section 13-612. Punishment - For violations; other remedies.

(a) Any person, firm, or corporation who violates any provision of this article or any permit issued under this article is guilty of a misdemeanor and upon conviction is punishable by a fine as provided in Section 1-8 of the Code of Ordinances of the City of Grand Prairie, or any amendment thereto or renumbering thereof, for violations of public health for each act of violation and for each day of violation.

(b) Any person, firm, or corporation who obstructs, impedes, or interferes with a representative of the City, with a representative of a City department, with surveillance equipment, or with a person who has been ordered to abate a situation pursuant to this article and who is lawfully engaged in such abatement is guilty of a misdemeanor and upon conviction is punishable by a fine as provided in Section 1-8 of the Code of Ordinances of the City of Grand Prairie, or any amendment thereto or renumbering thereof, for violations of public health for each act of violation and for each day of violation.

(c) In addition to proceeding under authority of subsections (a) and (b) of this Section, the City is entitled to pursue all criminal and civil remedies to which it is entitled under authority of statutes or other ordinances against a person, firm, or corporation that remains in violation of this article.

(d) The City may disconnect the water service for violation of this article.

(e) The City may issue a stop work order for violation of this article.

Section 13-613. Remedies Nonexclusive.

The remedies provided for in this ordinance are not exclusive. The Regulatory Authority may take any, all, or any combination of the actions described in this article against a noncompliant user.

Section 13-614. Right of Revision.

The Regulatory Authority reserves the right to establish, by ordinance more stringent standards or requirements on discharges to the MS4 and by RCRA.

Section 13-615. Search Warrants.

If the Regulatory Authority has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the city designed to verify compliance with this ordinance or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the Regulatory Authority may seek issuance of a search warrant from the appropriate court.

Section 13-616. Responsibility for cleanup costs, damages.

(a) Any person responsible for the depositing or discarding of any material prohibited by this article upon any sidewalk, alley, street, bridge, public passageway, drain, gutter, waterbody, MS4, or other public or private property shall be

responsible for any costs associated with the cleaning up or removal and disposal of such materials. Such person shall also be responsible for reimbursing the City for any costs/damages incurred by the City. These costs/damages may include, but are not limited to, manpower, equipment, supplies, analytical costs, disposal costs, consultants, private contractors, street/utility repairs, and repairs to components of the MS4. The city manager is hereby authorized to direct the City attorney to file such claims, lawsuits, and/or liens as necessary to collect such costs/damages.

(b) The city or its agents shall have the right to enter any property and take immediate action to abate any threats to human health or the environment. Anytime the city or its agents abates a nuisance or violation of this article, the owner of such premise shall be responsible for any costs associated with said activities. Such person shall also be responsible for reimbursing the City for any costs/damages incurred by the City.

(c) In the event that an owner shall have an emergency condition, the fire chief, the environmental services director, or their designees, may enter upon such premises and may do such work as necessary, or cause the same to be done, to abate the condition in order that the premises may comply with the requirements of this article. For the purposes of this Section, "emergency condition" shall be defined as any condition or conditions which are or reasonably could be an immediate threat to the health, safety or welfare of the citizens of the city or to the environment. A statement of the cost incurred by the City to abate such condition shall be mailed to the owner of the premises and such statement shall be paid within thirty (30) days of the date of the mailing of the statement of costs.

Section 13-617. Administrative Liability.

(a) No officer, agent, or employee of the City shall be personally liable for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of such person's duties under this article.

(b) Any suit brought against any officer, agent, or employee of the City as a result of any act required or permitted in this discharge of such duties under this article shall be defended by the City Attorney until the final determination of the proceedings therein.

Section 13-618. Stormwater Charges and Fees.

The City may adopt reasonable fees for reimbursement of costs of setting up and operating the City's Storm Water Program, which may include:

(a) Monitoring fees for sampling and analysis shall cover the cost to the city and shall include, but not be limited to the cost of labor, equipment, supplies, laboratory charges, and administrative fees.

(b) Fees incurred from an upset, bypass, or unauthorized discharge.

(c) Other fees as the City deems necessary to carry out the requirements contained herein. These fees relate solely to the matters covered by this ordinance and are separate from all other fees, fines, and penalties chargeable by the City.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF GRAND PRAIRIE, TEXAS, THIS THE 7TH OF JULY, 2009.

APPENDIX F: Floatables Project Design

Gross Pollutants Project Design

Objectives

The City of Grand Prairie has a long history of being proactive in their efforts towards decreasing the amount of gross pollutants or floatables found throughout the city. The Environmental Services Department promotes responsible best management practices (BMPs) through education, oversight, and enforcement. Brochures and public service announcements describing the importance of disposing of waste properly are made available to commercial and industrial facilities, construction site operators, and residents. Environmental Specialists inspect food establishments for floatables; these establishments are penalized for having litter on their property and are informed that this infraction can result from litter that did not originate from their facility. Specialists also look for floatables during industrial inspections and educate managers on their responsibilities for keeping their property free of litter and debris. In addition to these routine inspections, the Environmental Quality Division responds to litter complaints on an as needed basis.

Additionally, Code Enforcement officers have sought out and remediated illegal dumping sites since 1997 and an Illegal Dumping hotline is available for individuals to report illegal dumping activities. Keep Grand Prairie Beautiful (KGPB), established in 1965, has a number of programs designed to reduce gross pollutants, including: Adopt-a-Stream, Adopt-a-Street, Clean and Beautiful Neighborhoods, Clean Company, Community Art, Great American Cleanup, Youth for Environmental Action!, and Green and Clean Campus Programs. The City maintains a litter hotline where individuals may report litter issues, and a contractor is employed to collect litter along major thoroughfares five days a week and on an on-call basis. Median receptacles have also been placed throughout the city to encourage motorists to properly dispose of trash as opposed to throwing it out of their vehicles.

Despite the aforementioned efforts, floatables continue to rank high on the list of pollutants of concern for Grand Prairie's waterbodies. Greater emphasis needs to be placed on determining the contributing sources of floatables.

The main objectives of this study are to 1) determine the major contributing sources of floatables throughout Grand Prairie and 2) refocus education and enforcement efforts using the information obtained through this assessment.

Methods

Site Selection
Two KGPB cleanup events will be strategically selected based on the amount of gross pollutants known to be present in a waterbody and the human population density of the subwatershed, with preference for the most severe and greatest densities, respectively.

Field Procedures
Five randomly chosen volunteers will be given one 13 gallon trash bag and a card (Appendix A) detailing Environmental Quality's appreciation, the need and purpose of this study, and instructions. A survey sheet will also be provided (Appendix B). Volunteers will be asked to fill the 13 gallon trash bags before filling the bags provided by KGPB. Once the 13 gallon bags are filled to the maximum capacity, the volunteers will complete the survey sheet provided. The survey will evaluate the contents of the bag as follows:

1. % Recyclable/% Non-recyclable/% Unknown
2. % Fast Food/grocery store
    a. Specify chain
    b. Specify cups, bags, or other
3. % Residential
4. % Commercial
5. % Industrial
6. % Construction

Before and after pictures will be taken of the cleanup site.

Data Evaluation and Response

For each collection site, maps will be developed to illustrate corresponding subwatersheds, land use, demographics, and construction of the waterway (i.e. natural or manmade). The data collected will be evaluated on a watershed basis. Facilities determined to be a major contributing source of floatables, as determined through the collection events, will receive 1) a letter describing the study, the results, and suggestions for improving BMPs (e.g. providing well placed refuse containers, sweeping sidewalks instead of hosing, daily litter collection around facility, etc.) (Appendix C) and 2) educational materials developed specifically for the reduction of gross pollutants (Appendix D). The City will also place closed refuse containers where needed as determined by this study. Focus areas for the refuse containers will include but are not limited to parks, fast food restaurants, retail and commercial facilities, construction sites, and schools.

To determine the effectiveness of these efforts, each study site will receive a follow-up survey (Appendix E) 18 months succeeding the complete implementation of the educational and BMP measures. For this follow-up survey, a Specialist will conduct an observational assessment of the study site. If the measures implemented through this study are determined effective, similar projects will be replicated for additional stream segments. However, if the follow-up survey determines the implemented educational and BMP measures had little or no effect on the amount of floatables found at the study site, the project design described herein will be reevaluated and revised using information gained through this study as a guide.

APPENDIX A

Dear Volunteer,

Thank you for going the extra mile to protect Grand Prairie's natural resources! By participating in this study, you are contributing to an area of research that is greatly needed. The information you collect today will be used to determine where the City needs to focus additional educational and oversight efforts.

To complete this project, please follow these two simple steps:

1. *Fill up the 13 gallon bag provided. Please do* ***not*** *be selective; collect the litter as if you were collecting for the bags provided by KGPB.*
2. *Once the bag is filled to the maximum capacity, inspect the contents and fill out the survey sheet provided.*

Our rivers and streams are a highly valuable resource. The protection of these waterbodies is vital to human and environmental health as they provide drinking water, recreational opportunities, and habitat for wildlife.

Your environmental stewardship is greatly appreciated!

Respectfully,

Echo Rexroad
Senior Environmental Specialist
Environmental Quality Division
City of Grand Prairie
972.237.8082

APPENDIX B

Stream Cleanup Survey

Date
Organization Name
Stream Name
Watershed Name
Cleanup Address
Number of Participants
Miles Cleaned
Cleanup time (hrs)

Litter Information		
% Recyclable _____	% Not Recyclable _____	% Unknown _____
% Fast Food/Grocery Store _____	Specify Chains _____ _____ _____ _____ _____ _____	Specify Type (e.g. cups, bottles, etc.) _____ _____ _____ _____ _____ _____
% Residential _____		
% Commercial _____		
% Industrial _____		
% Construction _____		
Other observations:		

APPENDIX C

Dear [Facility Name],

On [DATE], the City of Grand Prairie conducted an assessment of the floatables found in our streams. Floatables are water-borne litter and debris that originate mainly from street litter and end up in the City's storm drains, which drain directly into our rivers and streams untreated. Once in our waterways, floatables can degrade our drinking water quality, cause flooding, trap and choke wildlife, impede recreational opportunities such as swimming, fishing, and boating, and reduce the aesthetic value of our neighborhoods and waterways.

Our assessment has determined that your facility is greatly contributing to the number of pollutants found in [STREAM NAME]. The Environmental Services Department would appreciate your cooperation in preserving our natural resources. We have enclosed removable decals for your use. Please place these decals on the entrances/exits to your facility.

In addition, please ensure your dumpster is closed unless when in use and make refuse containers easily assessable to your patrons, both inside and outside of your facility. Always sweep sidewalks and other impervious surfaces; never hose down these areas. Containers must be maintained on an as needed basis; they should never be overflowing or uncovered. Finally, walk around your facility on a daily basis to pick up litter that has originated from your facility or from another source.

As part of this assessment, the City will conduct a second evaluation of [STREAM NAME] and will make periodic visits to your restaurant to follow your facility's progress. We appreciate your participation and look forward to seeing the positive effects your efforts will have on Grand Prairie!

Respectfully,

Echo Rexroad
Senior Environmental Specialist
Environmental Quality Division
City of Grand Prairie
972.237.8082

APPENDIX D

Restaurant Decal:

Clean It Right Brochure:

APPENDIX E

Stream Follow-up Survey

Date
Date of Last Cleanup
Specialist Name
Stream Name
Watershed Name
Cleanup Address

Litter Information		
% Recyclable _____	% Not Recyclable _____	% Unknown _____
% Fast Food/Grocery Store _____	Specify Chains _____ _____ _____ _____ _____ _____	Specify Type (e.g. cups, bottles, etc.) _____ _____ _____ _____ _____ _____
% Residential _____		
% Commercial _____		
% Industrial _____		
% Construction _____		
Other observations:		

APPENDIX G: TCEQ Correspondence #2

E-mail from TCEQ approving August 18, 2009 Site Plan Review Procedures adoption date

From: Gordon Cooper [GCooper@tceq.state.tx.us]
Sent: Thursday, August 13, 2009 9:15 AM
To: Echo Rexroad
Cc: Zyman-Ponebshek, Jaya
Subject: Re: SWMP deadline
Ms. Rexroad,

It will not be necessary to submit an NOC for this issue unless the City Council will take substantially longer than the five (5) days that are anticipated to approve these procedures. If all goes according to plan, then be sure to indicate and provide some detailed information about the approval process and the 5 day time period for final approval as an attached section in the SWMP. If all does not go according to plan and the City Council can not get this passed and the five day period turns into 15, 30, 60, 90, etc. days, then an NOC will need to be filed and a change made to the development and implementations date(s) as affected.

I hope that this information was helpful to you.

Thank you very much,

Gordon Cooper
Environmental Permit Specialist
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

Please consider whether it is necessary to print this e-mail

>>> "Echo Rexroad" <erexroad@GPTX.org> 7/28/2009 10:19 AM >>>
Hello Mr. Cooper,

I was just reviewing our SWMP BMP goals for year 2 with our Planning and Development staff. In our SWMP, we say we are going to revise and adopt our site development plan review procedures in year 2. These procedures have been revised; however, based on the current Planning & Zoning and City Council meeting schedules, the soonest they can get these approved are August 3rd for Planning & Zoning and then August 18th for City Council. As a result, they will be approved by Planning & Development before August 13, but approved by City Council 5 days later.

Could you please tell me if we need to submit an NOC for this BMP?

Thank you for your time.

Best regards,

Echo Rexroad
Senior Environmental Specialist
Environmental Quality Division
201 NW 2nd St, Ste 100
Grand Prairie TX 75050
Phone: 972.237.8082
Fax: 972.237.8228