



Stormwater Management Plan City of Denton, Texas

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Stormwater Management Program Elements

This document is the City of Denton Stormwater Management Plan (SWMP). It is intended to outline and direct the City's stormwater and watershed-related priorities for the years 2014 through 2019 is being submitted as the second Phase II Municipal Separate Storm Sewer System (MS4) permit. This SWMP has the possibility of evolving over time as Best Management Practices (BMPs) are monitored and adapted to accommodate more effective practices. The minimum control measures listed below are required under Phase II regulations for TXR040000:

- 1) Public Education, Outreach and Public Involvement and Participation
- 2) Illicit Discharge Detection and Elimination
- 3) Construction Site Runoff Controls
- 4) Post Construction Stormwater Management Controls
- 5) Pollution Prevention and Good Housekeeping for Municipal Operations
- 6) Industrial Stormwater Sources

Each control measure has associated goals, or Best Management Practices (BMPs), that will be implemented during the course of the permit term. In addition to identifying specific goals that will be implemented for each of the minimum control measures, information about the City's government, population, departments (where appropriate), and watershed protection program are also submitted with this plan.

The City of Denton also developed a Watershed Protection Program Plan (WP3) that has been operational since January 2001. The WP3 is designed to reduce overall pollutant loadings within the surface water resources of the City of Denton. Pollutants of concern for this program include pesticides metals, sediments, nutrients, and bacteriological contamination. Routine parameters such as dissolved oxygen, conductivity, pH, temperature, total dissolved solids, and turbidity are also monitored to ensure water quality. As the program has evolved stream ecology and hydrologic morphology have also been included as part of areas of concern of the WP3. The overall goals of the program include assessing the status of Denton's surface water resources, determining the spatial and temporal dynamics of contaminants, safeguarding the public water supply, evaluating aquatic ecosystem health, monitoring stream depths, and providing information needed to support compliance with regulations at both the state and federal level. Because there is a common goal between the Watershed Protection Program Plan and the Stormwater Management Plan (SWMP), the two programs are combined in some instances. This combination was the most efficient way for the City of Denton to make use of an existing program to support some of the activities associated with the TCEQ Phase II Stormwater Regulations. Details concerning the original Watershed Protection Program are outlined in the Watershed Protection Program Plan (WP3), which is included in Appendix A of this SWMP. The original Quality Assurance Program Plan (QAPP) for the WP3 is included in Appendix B. As part of the new Stormwater Management Plan these two documents are in the process of being evaluated and updated.

City of Denton Texas General Information

Government:

Type: The City of Denton is a Council-Manager form of government

Responsible elected official: Mayor Chris Watts
Contact info: 215 E. McKinney
Denton, TX 76201
Phone: 940-349-7717
Voice Mail: 940-349-8555 ext. 2
Fax: 940-349-8596
email: chris.watts@cityofdenton.com

City Manager: George C. Campbell
City Hall
215 E. McKinney
Denton, TX 76201

Voice Mail: (940) 349-8306
Fax: (940) 349-8596 -fax
Email: George.campbell@cityofdenton.com

Demographics:

Population: Approximately 122,000 based on year 2010 census data

Land area: Approximately 95 square miles in City jurisdiction

Extraterritorial Jurisdiction
extraterritorial jurisdiction. Approximately 31 square miles encompass the City's

Significant Local Waters: There are five watersheds that drain the majority of the city. The Cooper Creek watershed is a highly developed commercial and residential area of the city, comprised of mixed rangelands (2401 acres) urban development (1661 acres) and cropland / pasture (1349 acres). The Pecan Creek watershed is somewhat larger and more diverse than Cooper Creek, with the main land use divided among urban (4500 acres), mixed range land (3336 acres), and cropland / pasture (2916 acres). Hickory Creek is a large and predominantly agricultural watershed, although some areas

of the watershed, particularly near the I-35 corridor, are experiencing rapid conversions from rural to urban land uses. Cropland / pasture (9565 acres), mixed range lands (9523 acres) and forest (2411 acres) are currently the most predominant land use categories for Hickory Creek. Clear Creek is a primarily undeveloped watershed covering 236,200 in four counties (Denton, Cooke, Montague, and Wise). Recently the City of Denton has annexed areas in the lower Clear Creek Watershed. Much of Clear Creek's watershed activities are related to flood control coordinated by the Clear Creek Watershed Authority. There are future plans for a City of Denton water reclamation plant in the Clear Creek watershed. The Denton Creek watershed is predominately rangeland being rapidly developed into residential land use

Pecan Creek receives discharge from the City of Denton's Pecan Creek Water Reclamation Facility under TPDES permit number 10027-003. Treated effluent is discharged into an unclassified segment of Pecan Creek and is then conveyed to Lewisville Lake, which is in Segment Number 0823 of the Trinity River Basin.

The City of Denton also owns and operates the Robson Ranch Water Reclamation Plant, which discharges treated effluent into a tributary of Hog Branch Creek. Effluent is then conveyed to Hog Branch Creek, which in turn flows into Denton Creek. Effluent is ultimately conveyed from Denton Creek to Grapevine Lake, which is in segment Number 0826 of the Trinity River Basin. Robson Ranch is regulated under TPDES permit 10027-003. Since this plant discharges less than 1.0 million gallons per day (MGD), the plant is exempt from multi-sector general permit requirements as specified in TCEQ General Permit Number TXR050000, Part V, Section T.

Stormwater Contacts:

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Ordinances and Guidance

City of Denton ordinances and guidelines that may be affected by the Stormwater Management Program are:

- City of Denton Code of Ordinances
- Subdivision Ordinances
- Land Use and Urban Development Ordinances
- Storm Drainage Design Criteria Manual
- Multiple aspects of the Denton Development Code
- Simple Sustainable, A Strategic Plan for Denton's Future
- Denton Plan 2030: Our path to the future

Legal Authority

The City of Denton will manage stormwater issues either through the enactment of new ordinances or the enforcement of existing ordinances. It is expected that current ordinances may need minor revisions to fully address the requirements of the Stormwater Management Program and as the regulatory environment evolves.

Inspection / Enforcement

The City of Denton has a Building Code and conducts building inspections through the Planning and Development Services Department, Building Inspections Division and public works inspections through the Public Works Inspections Division. The Community Improvement Services Department and the Pollution Abatement Control Officer in the Environmental Services and Sustainability Department, Pretreatment Division respond to cases of illegal dumping or illicit discharges. Watershed Protection Division staff also respond to various dumping, discharge and environmental impact calls. An erosion control inspector was added to the Watershed Protection Division, during the final two years of the prior MS4 permit term. Industrial Pretreatment Division staff conduct industrial stormwater inspections in conjunction with pretreatment sampling.

Infrastructure / Municipal Operations

The Utilities Department, Drainage Division handles runoff management and drainage systems maintenance. The City currently manages existing drainage system infrastructure in a GIS (ArcView, ArcInfo) format. The Utilities Department, Water Reclamation Division and Collections Division, maintains the sanitary sewer system. The Environmental Services and Sustainability Department, Watershed Protection Division, handles the stormwater program, surface water quality sampling, and monitoring to ensure compliance. These operations are

housed at the City of Denton Service Center and the City of Denton Pecan Creek Water Reclamation Plant. The City Service Center also houses the fleet maintenance activities for City vehicles and equipment. The City also operates the Denton Enterprise Airport and the Municipal Landfill.

Construction and Development

The Planning and Development Services Department and the City Council regulate development in Denton. A Development Review Committee conducts pre-development reviews of proposed development projects on a 2-4 week basis. Site work permits and building permits are issued by the Planning Department, Building Inspections Division. Watershed Protection Division currently conducts development review and regulatory reviews of any land disturbing activity that would require coverage under the State Stormwater Construction Permit TXR150000 or that would have impacts to the City's stormwater system.

Funding Sources

The City of Denton is committed to providing the best possible water quality within our surface water resources and source water. The City is also dedicated to complying with state and federal regulatory requirements under the Phase II stormwater program. To meet these goals, the City of Denton has enacted a drainage fee that is based on the number of square feet of impervious cover that is owned by every property holder in the city. By levying this fee, the City of Denton is able to ensure the best possible stormwater conveyance systems. Money generated from the drainage fee also provides support for the watershed protection program and the Phase II stormwater program.

Outreach / Training

The City of Denton has a Public Communications Department which provides education to residents on a variety of subjects using numerous methods, including bill stuffers, newspaper ads or articles, information on the Denton Cable Channel, social media, and several special events. The community organization "Keep Denton Beautiful" assists the City with litter control, wildflower plantings, and other community-oriented programs.

The Utilities Department, Safety and Training Division, provides training in safety and regulatory compliance-related topics for all utility divisions. This division coordinates and conducts meetings and serves as a resource and support for safety, training and citywide programs.

The City of Denton maintains a website that contains information on various outreach programs such as stormwater, water resources and environmental issues in general. There is also an internal web access (Microsoft sharepoint) portal that allows internal recordkeeping, correspondence and documentation of outreach, training and development activities.

Current Status Evaluation

Question	Information	Contact/Phone
SETTING:		
What is the Municipality's population?	Approximately 121,123 individuals, based on year 2010 census data	NA
Describe local topography, hydrology, climate, rainfall, etc.	The climate of the area is humid sub-tropical, with hot summers and relatively mild winters. Annual precipitation averages about 86 cm. per year, with May characteristically the wettest month and January the driest. The vegetation regions of the area transition from the Cross Timbers to the Blackland Prairies	NA
Are there existing runoff management programs/policies?	There are several policies in place within the Denton Code of Ordinances and the Denton Development Code regarding runoff management	Watershed Protection and Industrial Pretreatment 940-349-7123 Pollution Prevention Supervisor 940-349-8619
Does the Municipality have zoning, land use planning?	Yes	Planning and Development 940-349-8378
ORGANIZATION/STRUCTURE:		
What is the Municipality's management structure?	Council-Manager	NA
Is there a Municipal Attorney?	Yes	City Attorney 940-349-8333 Utilities Attorney 940-349-8158
INSPECTION/ENFORCEMENT:		
What is the Municipality's legal authority to regulate runoff issues?	Fines or stop work restrictions based on violation of the Denton Development Code or Denton Code of Ordinances	
Do existing ordinances address runoff issues or illicit discharges?	Yes	
Are there wastewater or discharge inspectors?	Yes	Wastewater / Industrial Pretreatment. 940-349-8610
Are there building inspectors?	Yes	Building Inspections 940-349-8233
Is there a Code enforcement group?	Yes	Community Improvement Services 940-349-8738
INFRASTRUCTURE/MUNICIPAL OPERATIONS		
How is street maintenance handled?	Streets Department	Streets and Drainage

	Drainage Department	Superintendent Streets and Drainage Superintendent 940-349-7144
Is the existing drainage system mapped?	Outfalls of the system are mapped and the map is being continually updated and revised.	Tech Services - GIS 940-349-8933
Is there a need to expand mapping to other utilities?	This has been done and is continually being evaluated and updated	Tech Services - GIS 940-349-8933
Is there a need to integrate other data into the mapped/GIS system for other administrative uses?	Yes. This is ongoing.	Manager, Watershed Protection and Industrial Pretreatment 940-349-7123
Is there an interest to combine/establish program along with other storm or drainage program?	This is currently being done and is ongoing	Manager, Watershed Protection and Industrial Pretreatment 940-349-7123
OUTREACH/TRAINING		
How is employee training handled?	Utilities – Safety and Training Risk Management Human Resources – Employee Training	Utility Safety and Training superintendent 940-3497138 Risk Manger 940-349-7836 HR Training and Development Administrator 940-349-7766
What methods are currently being used to provide information and involve the public in Municipality programs?	Several outreach programs, tours, public cable spots, flyers, web page, newspaper and numerous training and involvement opportunities	Public Communications Office 940-349-8171
PROGRAM FUNDING		
What are the Municipality’s funding sources?	General funds/Ad Valorem Taxes User Fees Drainage Fee	Utilities Finance Administration
PROGRAM AREAS How is the Municipality currently organized to address polluted urban runoff in the following areas:		
Public education	Public Communications Office Solid Waste Department Sustainability Program	Public Communications Office 940-349-8171 Recycling Programs Specialist 940-349-8064 Sustainability & Special Projects Administrator

		940-4349-8202
Public involvement	Public Communications Office Solid Waste Sustainability Program Keep Denton Beautiful	Public Communications 940-349-8171 Recycling Programs Specialist 940-349-8064 Sustainability and Special Projects Administrator 940-4349-8202 Keep Denton Beautiful Program Manager 940-349-8739
Construction	Engineering Inspection Drainage Building Inspection Development Review Engineer	Public Works Inspections Drainage Manager 940-349-7116 Building Inspections 940-3.49-8539 Engineering and Development Review Manager 940-349-8353
How is the Municipality currently organized to address polluted urban runoff in the following areas:		
New development/redevelopment	Watershed Protection Division Inspections / Drainage	Environmental Compliance Coordinator 940-349-7162 Drainage Manager 940-349-7116
Illegal dumping/discharges	Denton Police Department Pollution Prevention Supervisor Community Improvement Division	940-349-8181 Pollution Prevention Supervisor 940-349-8619 Community Improvement Division Manager 940-349-8738
Municipal operations	Pecan Creek Water Reclamation Plant Mayhill Road Landfill	WWTP Superintendent 940-349-8601 Landfill Regulatory Compliance Officer 940-349-8050 Landfill Manager

	Enterprise Airport	940-349-8001
	City Service Center	Airport Manager 940-349-7744 Sustainability and Special Projects Administrator 940-349-8202

Executive Summary

Intent and Use of Plan

1. With over 61 miles of larger order streams draining almost 80,640 acres (City jurisdiction and extra-territorial jurisdiction) into Lake Lewisville, water quality is a high priority within the City of Denton. This comprehensive Stormwater Management Plan has been developed in conjunction with a strategic Watershed Protection Program Plan. Both plans are designed to assess, prioritize, and attempt to improve the quality of surface water resources within the City of Denton and its receiving waters.
2. This Stormwater Management Plan (SWMP) and the Watershed Protection Program Plan (WP3) will be used to identify areas within the City of Denton where improved management of surface water resources is most needed. Information within these two plans will aid the City of Denton in developing capital plans, public education, structural and non-structural controls, and other water quality improvement efforts.
3. Information collected by efforts outlined in the SWMP and related documents will provide a better understanding of the complicated relationships between urban land use and water quality. In addition, information generated by these programs will provide valuable information for future land use planning and regulatory requirements.
4. It is anticipated that this SWMP will fulfill the requirements of the USEPA-NPDES Phase II Stormwater Program and the Texas Commission on Environmental Quality's (TCEQ) Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR040000 for discharges from small municipal separate storm sewer systems (MS4s) into the surface waters of the state.

General Assumptions and Brief Methodology

1. A total of four major watersheds and 81 individual sub-basins have been delineated within the City of Denton. Each of the sub-basins is sampled on a monthly basis for water quality. Prioritization of watersheds is accomplished through the use of an algorithm designed to evaluate the deviation of water quality measurements from either established standards or water quality goals. Further prioritization will be accomplished to incorporate the extent and type of impervious cover within the sub-basins and the proximity of the sub-basins to Lake Lewisville, the City's drinking water source.
2. Permanent monitoring stations have been established at the ends of the Cooper, Hickory, Pecan, and Clear Creek watersheds, near where the creeks draining these watersheds enter Lake Lewisville. These areas were chosen to represent the integrated effects of the respective watersheds. An additional monitoring station, located in Pecan Creek below Mayhill Road, will allow analysts to monitor differences in water quality of Pecan Creek both up-flow and down-flow of the wastewater treatment plant outfall. The location of each monitoring station encompasses a reach of approximately 100 meters and is representative of the creek conditions near the end of each respective watershed. Although additional sampling locations may be considered, the establishment of a permanent sampling station within the various watersheds meets the TCEQ requirement of a single monitoring site being representative of no more than 25 miles in freshwater streams (TNRCC, 1999).
3. Storm-water samples are collected by deploying Automated Water Sampling Devices at the permanent monitoring stations outlined above. These automated sampling devices collect a series of samples based on a programmed sampling schedule. With these samples we will be able to determine the first flush as well as analyze a composite sample of the storm event. For the purposes of the stormwater program, the first flush of the storm event is defined as the time when the water level within the respective sampling stations first begins to rise. Stormwater samples are collected at these sites on a quarterly basis.

Permit Coverage

In accordance with the USEPA's National Pollution Discharge Elimination System General Permit for Discharges from Small Municipal Separate Storm Sewer Systems, the following non-stormwater discharges are authorized provided they do not contribute to a violation of water quality standards or contribute significant amounts of pollutants to the MS4:

- water line flushing
- landscape irrigation
- diverted stream flows
- rising ground waters
- uncontaminated ground water infiltration (as defined in 40 CFR 35.2005(20))
- uncontaminated pumped ground water
- discharges from potable water sources
- foundation drains

air conditioning condensate
irrigation water
springs
water from crawl space pumps
footing drains
lawn watering runoff
water from individual residential car washing
flows from riparian habitats and wetlands
DECHLORINATED swimming pool discharges
residual street wash water
discharges or flows from fire fighting activities

Since discharges on the above list are not reasonably expected to be significant sources of pollution to the MS4, they are classified as occasional incidental non-stormwater discharges. Incidental non-stormwater discharges will not be considered illicit unless they are determined to be contributing significant amounts of pollutants to the MS4. If any discharge type listed above is determined to be contributing significant amounts of pollutants to the MS4, the discharge in question will be considered “illicit” and will be subjected to the appropriate ordinance or other regulatory mechanisms.

Introduction

To accomplish the goal of source water protection, the City of Denton developed the Watershed Protection Program (WPP). This program was initiated in January 2001 as a part of a plan to reduce the overall pollutant loadings within the surface waters of Denton and to provide data that could be used to support activities associated with the National Pollution Discharge Elimination System (NPDES) Stormwater Phase II rule. Although the mandatory permit coverage date for Phase II is August 8, 2007, the City of Denton has taken a proactive approach for designing the City's stormwater program and establishing baseline conditions. Although the WPP provides a large amount of data that are very useful for the Phase II Stormwater Program, the two programs are separate in both scope and regulatory requirements. Thus, changes that may occur within the scope of the Watershed Protection Program Plan (WP3) are not expected to change the scope of this Stormwater Management Plan or the commitment of the City of Denton to comply with Phase II requirements.

One of the advantages of WP3 is the incorporation of the infrastructure established by the United States Environmental Protection Agency (USEPA) Environmental Monitoring for Public Access and Tracking (EMPACT) grant that was awarded to the City of Denton and the University of North Texas in 1998. Monitoring results from the EMPACT system and additional watershed monitoring were used during the first year of the Watershed Protection Program to establish preliminary baseline conditions for the physical, chemical, and biological components of the City's surface water resources. Results from this monitoring program are continually used to support the requirements of the Phase II stormwater program, assess water quality for the purposes of source water protection, and to establish baseline conditions that are utilized to evaluate any future changes in water quality.

Cooper Creek, Hickory Creek, and Pecan Creek are the three main watersheds that convey water through the City of Denton with parts of Clear Creek and Denton Creek being added recently as a part of annexations. Preliminary watershed assessments were conducted by compiling multiple sources of data into a single Geographical Information System (GIS). Using topographical information and professional judgment, approximately 81 sub-basins were delineated within the City of Denton. Sampling stations were established within these 81 sub-basins at locations that would likely represent the water quality of the sub-basins. Monitoring of 73 sub-basins during base-flow conditions was initiated in January 2001 and additional eight sub-basins have been added due to annexations and development. Monitoring stations (referred to as permanent monitoring stations) were established near the ends of the three major watersheds prior to the confluence of the watersheds with Lewisville Lake. More extensive monitoring is conducted at these stations to provide a more comprehensive assessment of the aggregated effects of sub-basin water quality just prior to entering one of the City of Denton's main drinking water sources, Lake Lewisville.

To describe the nature and extent of environmental problems within our surface water resources requires a commitment to long-term monitoring efforts. For many problems, data are needed to establish clearer cause and effect relationships, describe likely trends, or to simply describe the nature and extent of the problem. While some problems may be beyond the scope of the WPP, information on these problems is important in the decision-making process for water resource

managers, stakeholders, and citizens. Because of these issues, the current position of the City of Denton is to continue monitoring activities at the present level of effort.

This Stormwater Management Plan summarizes the Best Management Practices (BMPs) deemed appropriate to aid the City of Denton in meeting the regulatory requirements of the TCEQ TPDES Phase II regulations. Selected BMPs represent an attempt to improve both base flow and stormwater quality by eliminating pollution at the source. However, the development of the City of Denton's program stemmed from the realization that successful strategies for the management of surface water resources within the City must take into account the immense range of variability that exists within the natural environment. Any attempt to reduce non-point source pollution in large geographical settings should begin by characterizing the spatial and temporal distributions of the pollutants of concern. Such characterization is particularly important for understanding contaminant distributions within highly variable, diverse urban systems. Using information describing the temporal and spatial distributions of contaminants can allow managers to allocate best management practices to receiving waters that consistently fail to reach management goals. Thus, by focusing on areas of greatest potential impairment, water resource managers can more cost-effectively manage water quality and increase environmental benefits in receiving waters. It is because of these realizations that the data derived from activities associated with the WPP are used to support and develop the provisions of the SWMP whenever feasible.

Purpose and Need Statement

Due to the great complexity of stormwater issues, a clear and concise Stormwater Management Plan is imperative. To ensure that the Stormwater Management Plan is consistent with the goals set forth by the City of Denton, a Purpose and Need Statement was developed. This statement is intended to establish the mission of the SWMP and to provide guidelines for project development. The following Purpose and Need Statement has been adopted by the City of Denton for the initial establishment of the SWMP. It is expected that this statement may change in response to public input from the City's ongoing Public Education and Outreach BMPs.

Purpose:

The Watershed Protection Program and the Stormwater Management Plan are committed to meeting or exceeding stormwater regulatory requirements by implementing and maintaining a watershed-based approach for protecting the water resources of the City of Denton. By conducting extensive water quality monitoring, research, public education, and public outreach, these programs address non-point source pollution, preserve stream quality, and enable citizens, businesses, and government to actively participate in the protection of one of our most important natural resources.

Need:

Currently, stormwater runoff poses a potential threat to public health, the environment, and the economy of the community. This potential threat may be considered in two parts:

1. Stormwater Quantity – The amount of impervious cover associated with most community land uses can result in erosion, flooding, road closures, stream degradation, and decreased storage capacity for Lake Lewisville.
2. Stormwater Quality – Sampling conducted by the Watershed Protection Program has demonstrated some unacceptable levels of contamination from various constituents. Some contamination issues are short-lived and episodic, often associated with storm events. Other contamination issues appear more long-lived and chronic, and may appear during times of normal flow. Many contaminants appear to be related to certain land use activities.

Scope of Plan

This plan outlines procedures that will be followed to assure that the amounts of pollutants introduced into the municipal separate storm sewer systems of the City of Denton are minimized. This Phase II NPDES management plan consists of six minimum control measures. Each control measure has associated goals, or best management practices (BMPs) that will be implemented during the permit term. BMPs include schedules of activities, prohibition of practices, education efforts, management procedures, and other management practices designed to prevent or reduce the amount of pollutants in surface water resources. It is through the

implementation and evaluation of these BMPs that the City of Denton will ensure that the objectives of the Phase II NPDES program are met. Section 6.0 details each minimum control measure and the associated BMPs that have been deemed most appropriate for the City of Denton.

The BMPs chosen for this Stormwater Management Program were selected based on their appropriateness for the City of Denton. Because of citizen guidance, staff objectives, and public safety concerns, the City of Denton has a long history of proactive environmental protection for surface water resources. As a result, there are numerous programs currently in place that are designed to positively influence the quality and quantity of Denton's stormwater. Wherever possible, the best management practices associated with programs currently in place have been incorporated into the SWMP. By adopting this approach, the City of Denton's SWMP accomplishes the goal of efficiently allocating limited resources while ensuring environmental protection and regulatory compliance.

This document is intended to be a working document, and will likely undergo revisions during the permitting term. Contact information will be updated on at least an annual basis, and best management practices will be evaluated to determine effectiveness. It is anticipated that some of the best management practices outlined in this document will be modified or replaced during the permit term. It is also anticipated that additional best management practices will be added as the City of Denton expands programs or if specific needs are identified. All changes to this Stormwater Management Program will be documented in the annual report and submitted to the Texas Commission on Environmental Quality.

Recordkeeping

The following procedures will be followed to ensure adequate recordkeeping for the SWMP:

Timeframe for data warehousing

The City of Denton will retain all records, a copy of the TPDES general permit, and records of all data used to complete the NOI for the general permit for a period of at least three years, or for the term of the permit, whichever is longer.

Relinquishing Records

The City of Denton shall relinquish all records pertaining to the TPDES general permit if requested by the Executive Director. The SWMP required by the general permit will be retained at a location that is accessible to the permitting authority.

Public Communications Requests

The City of Denton will make all records, including the NOI and the SWMP, available to the public if requested in writing. The SWMP will be made available within two working days following the request. Other records will be provided within 10 working days, unless the request requires an unusual amount of time or effort to assemble. If an unreasonable amount of time or effort is associated with a request, Texas law regarding the Public Communications Act will be followed. Reasonable charges, in accordance with Texas law, may be levied by the City of Denton to accommodate expenditures associated with researching and preparing any requested materials.

Record Retention for Administrative of Judicial Action

If required, the period in which records are kept shall automatically be extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the City of Denton.

Reporting

The following general reporting requirements will be followed:

Noncompliance Notification

The City of Denton will comply with the requirements of 30TAC Chapter 305.125(9), which states that any non-compliance which may endanger human health or safety, or the environment, must be reported to the TCEQ regional office either orally or by electronic facsimile transmission (FAX) within 24 hours of the incident. A written report will be provided to the TCEQ regional office and the TCEQ Enforcement Division within five working days of becoming aware of the noncompliance. The written report will contain:

- a description of the noncompliance and its cause;
- the potential danger to human health or safety, or the environment;
- the period of noncompliance, including dates and times;
- if noncompliance has not been corrected, the anticipated time it is expected to continue; and
- steps taken or planned to reduce, eliminate, and prevent recurrence of the non-compliance, and to mitigate the adverse effects of the noncompliance.

Other information

If the City of Denton becomes aware that it either submitted incorrect information or failed to submit any relevant facts in an NOI, NOT, or NOC, or any other pertinent report, the facts or information will be submitted to the Executive Director of the TCEQ.

Annual Report

The City of Denton will submit a concise annual report to the Executive Director of the TCEQ by March 15th (of the following year) for each year of the permit term. The City of Denton will also maintain a copy of the annual report for review by authorized TCEQ personnel upon request. The annual report will include at minimum:

- a. The status of compliance with the permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the reduction of discharge of pollutants to the maximum extent practicable, the status of the measurable goals for each of the minimum control measures, and an evaluation of the success of the implementation of the measurable goals;
- b. The status of any additional control measures implemented by the City of Denton (if applicable);
- c. A summary of the results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable;
- d. A summary of the stormwater activities that the City of Denton plans to undertake during the next reporting cycle (including an implementation schedule);
- e. Any proposed changes to the BMPs or other program elements;
- f. The number of non-municipal construction activities that occurred within the jurisdiction of the City of Denton, as noticed to the City of Denton by the construction operators;
- g. The number of municipal construction activities that occurred within the jurisdiction of the City of Denton;
- h. The annual report will be submitted to the following address:

Texas Commission on Environmental Quality
Stormwater and General Permits Team; MC-148

P.O. Box 13087
Austin, Texas 78711-3088

Minimum Control Measures and Associated BMPs

Public Education, Outreach and Involvement as a part of stormwater program development

Regulatory Requirement

40 CFR 122.34 (b)(1) – Implement a public education program to distribute educational materials to the community of contact, equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

40 CFR 122.34 (b) (2) -At a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program. *EPA recommends that the public be included in developing, implementing, and reviewing your stormwater management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups.*

TXR040000, Part III, Section B, 1

All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the maximum extent practicable (MEP. New elements must be fully implemented by the end of this permit term

To fulfill this minimum measure, the MS4 owner may use stormwater educational materials provided by the state; tribe; EPA; environmental, public interest, or trade organizations; or other MS4s. The public education program should inform citizens about the steps they can take to reduce stormwater pollution, such as ensuring proper septic system maintenance, ensuring the

proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil and household hazardous wastes. EPA recommends that the program provide information on how groups may become involved in local stream restoration activities, as well as activities that are coordinated by youth services, conservation corps, or other citizen groups. EPA recommends that the public education program be tailored to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling and watershed cleanups. In addition, EPA recommends that some of the materials or outreach programs be directed toward groups of commercial, industrial, and institutional entities that are likely to have significant stormwater impacts. The outreach program should address the viewpoints and concerns of all members of the community, particularly minority and disadvantaged groups and any special concerns relating to children.

For this minimum measure, EPA recommends that the public be included in developing, implementing, and reviewing the stormwater management program. The public participation process should make efforts to reach out and engage all interested economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local stormwater management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts.

All permittees shall develop, implement, and maintain a comprehensive stormwater education, outreach and involvement program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater. Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term.

Current Programs for Public Involvement

Currently, Keep Denton Beautiful, Inc. (KDB), in conjunction with the City of Denton, sponsors City-wide cleanup activities several times during the year. These clean ups are administered by the PCO with other City Departments and KDB; and usually have a fair amount of effort directed towards streams and drainage ditches cleanup. The Solid Waste Department also sponsors a Household Hazardous Waste Collection Program. The Recycling Division's Home Chemical Collection Program provides for the proper disposal of Household Hazardous Waste (HHW). The items collected are reused, recycled, or disposed of properly. Many common household products are toxic, corrosive, flammable, or caustic and can be dangerous to both people and the

environment when discarded incorrectly. The City of Denton Recycling Division collects these products separately from other trash. Reusable products are stocked in the City of Denton ReUse Store which is free to Denton residents.

The City of Denton provides general public education to residents on a variety of subjects through the Public Communications Office, a municipal cable channel and a website. This information has included potential sources of non-point source pollution and methods to reduce such pollution through individual actions. During the prior permit cycle the Watershed Protection Division has also identified many titles related to issues with Water Resource Protection and made them available to area residents and educators. In addition, the Public Communications Office has provided specific outreach information about pesticides and swimming pool discharges.

Selected BMPs for Public Involvement

The public should be included in developing, implementing, and reviewing the stormwater management program.

Comply with State and Local Public Notice Requirements

The Municipality will comply with state and local public notice requirements when implementing a public involvement/participation program. Local requirements consist of notification in the Denton Record Chronicle, and providing a posting of the meeting agenda on the City of Denton web page, the Denton Record Chronicle, the DTV cable. These activities must provide at 72 hours prior notice. Since state public notice requirements will vary depending on the nature of the activity, requirement specifics are not included in this permit. However, all public notice efforts will be documented in the annual report of the permit.

Measurable Goals

The measurable goal for implementation of this BMP is to provide state and local required public notice in the process of implementing a public involvement/ participation program (specify requirement). Implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and	Comply with State and Local Public	1. Evaluate compliance with State and Local requirements	Year 1

Involvement	Notice Requirements	2. Make changes where necessary	Year 1-5
		3. Implementation Complete Meets Measurable Goal	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment or the Watershed Protection Coordinator has responsibility for implementing the BMPs associated with this Measurable Goal.

Selected BMPs for Public Education and Outreach

Non-Point Source Pollution, Reducing Pesticides and Water Conservation Brochures and educational material

The City of Denton currently has a number of brochures, pamphlets, handouts and posters designed to educate the public with regards to Non-Point Source Pollution and Water Conservation. Examples of the current brochures are provided in Appendix C. These brochures will be revised as necessary with updated non-point source information as well as updated contact information. The brochures will then be distributed through utility bills, at local events, at City Hall, and placed in information packets distributed during public talks regarding water quality issues. These products and related information will also be made available in an electronic format on the City’s website.

Measurable Goals

The measurable goal for the implementation of this BMP is to evaluate the existing brochure, update if necessary, and distribute them to each household and business address receiving City service. Distribution will occur every other year of the permit (years 1, 3 and 5 of the permit). Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
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Public Education, Outreach and Involvement	Non-Point Source Brochure	1. Evaluate, develop and print brochure	Year 1-5
		2. Distribute	Year 1-5
		3. Implementation Complete Meets Measurable Goal	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of BMP to meet this Measurable Goal. The Watershed Protection Division will work with the Public Communications Office to implement this BMP. The PCO will oversee staff working on project developing copy and accepting input on this measure. The PCO will track the number of brochures distributed, types and number of events attended where brochure is distributed, as well as the number of brochures printed. The PCO will provide a summary of this information to the Manager, Watershed Protection and Industrial Pretreatment on an annual basis.

Stormwater Videos and related media

The City of Denton will develop, update or acquire (through North Central Texas Council of Governments) a video that focuses on stormwater impacts. This video at a minimum will describe water quality issues surrounding stormwater runoff, actions individuals can take to minimize their negative impacts on stormwater, elements of our local hydrologic cycle here in Denton and contact information for those seeking additional information. This video will be made available for classes in DISD, home-schooled kids, and will run on the municipal cable channel. Copies of the video will also be made available through Denton libraries.

Measurable Goals

The measurable goals for implementation of the Stormwater Video will be to run the video a minimum of 12 times during the year on the municipal cable channel. The number of videos distributed for classroom viewing will be documented; if the video is presented as part of a public outreach/education visit to a classroom this will also be documented. Development and implementation will be according to the schedule below. The videos and associated materials will also be promoted during various events around the City and will be measured according to borrowing either directly from Watershed Division staff or from the Denton Libraries

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Storm water Video	1. Evaluate, develop and distribute videos	Year 1-5
		2. Distribute to libraries and teachers and run on municipal cable channel	Year 1-5
		3. Implementation Complete Meets Measurable Goal	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of Stormwater Video to meet this Measurable Goal. The Manager, Watershed Protection and Industrial Pretreatment will work with the Public Communications Office (PCO) to develop this measure. The PCO will assist in distributing the video and document the number of videos distributed to teachers and libraries. The PCO will also document the number of times the video runs on the City’s cable Channel (DTV) and at any public events or educational visits to schools. If possible, the Manager, Watershed Protection and Industrial Pretreatment will request the libraries to indicate how many times the video was checked out during the year.

Watershed Protection / Stormwater Web Site and Facebook Page

The City of Denton will develop, maintain and update a website that will focus on providing public education about watersheds and watershed protection. This website will contain information about local watersheds, results of monitoring activities, volunteer opportunities, construction site regulations, environmentally sensitive areas as well as general information about watersheds, stormwater, pollution prevention and answers to frequently asked questions. Watershed Protection facebook page provides current information and involvement opportunities.

Measurable Goals

The measurable goals for implementation of the Watershed Protection/Stormwater website will be to document the number of “hits” the site receives after the development and posting of the web site. It may also be possible to document the number of emails received related to the site; whether they be questions about information on the site, comments either positive or negative, or requests for additional information to be posted on the site. Development and implementation will be according to the schedule below. Number of “likes” on facebook page is tracked.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Watershed/ Stormwater Web Site	1.Continue Develop web site	Year 1-5
		2. Update and maintain web site; respond to questions generated by website, document number of “hits”	Year 1-5
		3. Implementation Complete Meets Measurable Goal	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of the Watershed/Stormwater website to meet Measurable Goal. The Manager, Watershed Protection and Industrial Pretreatment will work with the City’s Web Master in updating the web site. The City of Denton’s Web Master will provide the Manager, Watershed Protection and Industrial Pretreatment with an annual summary documenting the number of hits the site received, as well as the number of emails received regarding the site during the year.

Water Quality Classes, Presentations, and Workshops

The City of Denton will develop and instruct a series of classes / workshops that cover various aspects of water quality and / or watershed protection. These classes / workshops will be presented to interested groups such as the Denton County Master Naturalists, citizen groups, and /or as guest lecturers for students from the Denton Independent School District, the University of North Texas, Texas Women’s University, or other appropriate educational forum. The City of Denton staff also anticipates that there will be opportunities to present research results at professional conferences during the course of this permit. The classes, workshops, or presentations will be given a minimum of three times per year.

Measurable Goals

The measurable goals for implementation will be the development of classes, presentations, or workshops that are devoted to various aspects of water quality or water quantity. As part of the measurable goals, the number of classes, presentation, or workshops given will be documented.

The number of people attending these events will be a component of the documentation process. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Water Quality Classes, presentations, and workshops	1. Develop curriculum and begin implementation	Year 1-5
		2. Conduct at least 3 educational activities per year.	Year 1-5
		3. Implementation Complete Meets Measurable Goal	Year 1-5

Responsible Persons

The Stormwater Specialist has responsibility for implementation of activities needed to meet Measurable Goal.

Use of Storm Sewer Manhole Covers with stormwater related Message

The City of Denton will begin use of manhole covers with stormwater related message and picture of a fish to replace storm sewer manhole covers. The goal will not be to upgrade existing covers, but rather to replace covers as necessary with the new stormwater related covers. Over time it may be possible to require new developments to use the same type of cover since the price is fairly similar.

Measurable Goals

The measurable goals for implementation will be to replace all worn or otherwise unusable storm sewer manhole covers with the stormwater related covers. As part of the measurable goals the number of stormwater related storm sewer manhole covers installed will be documented as well as the locations of the new covers. Development and implementation will be according to the schedule below. The standard details and engineering specifications for the manhole covers will be updated as part of the City of Denton Engineering information.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Manhole covers with Stormwater related Message	1. Order covers with Stormwater related message and update Engineering specifications.	Year 1-2
		2. Use covers to replace worn or unusable covers	Year 2-5
		3. Meets Measurable Goal	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment have responsibility for implementation of the activities needed to meet this measurable goal. The Manager, Watershed Protection and Industrial Pretreatment will work with the Drainage and Streets Superintendent, Drainage Manager and Engineering Department to implement this measure. The Drainage and Streets Superintendent will be responsible for approving and ordering the covers. The Drainage Manager will determine which manhole covers will be replaced, on what schedule and will track the location of installed covers. The Streets and Drainage Superintendent and Drainage Manager will provide an annual summary on the number of new covers ordered, the number of covers replaced, and the location of the replacements on an annual basis to the Manager, Watershed Protection and Industrial Pretreatment.

Benthic Macro-Invertebrate Training

Currently, the Watershed Protection Program conducts training on the role, water quality implications, identification and collection techniques for benthic macro-invertebrates to participants in the Denton County Master Naturalists program and other interested local residents. Attendees will receive a 1-3 hr introductory lecture on benthic macro-invertebrates. Afterwards, interested Naturalists can then receive additional hours of training in the identification, sorting and collection of benthic macro-invertebrates. This training qualifies as advanced training for the Naturalists who are required to obtain a certain amount of advanced training to complete the program. Those who complete the training can then participate in the sorting and identification of organisms collected by the Watershed Protection Program.

Measurable Goals

The measurable goal for implementation of this BMP will be to provide opportunities for training in the collection, identification and sorting of benthic macro-invertebrates. The program will document the number of participants in the program during both the introductory training and the advanced training. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Benthic Macro-Invertebrate Training	1. Continue Training	Year 1-5
		2. Document quantifiable aspects of program	Year 1-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementing this BMP. The Manager of the Division of Environmental Quality and / or the Manager, Watershed Protection and Industrial Pretreatment will work with Texas AgriLife Extension Agent (Denton County) and a Denton County Master Naturalist Project Coordinator to implement this measure. Representatives of Texas AgriLife Extension or the Master Naturalists will provide the Manager, Watershed Protection and Industrial Pretreatment with copies of attendance for each training section.

Integrate Watershed/Stormwater Protection Message with WRP/Water Plant Tours

Currently, the City of Denton conducts Water Plant and Water Reclamation Plant tours. These tours offer opportunities for attendees to learn about water treatment, wastewater treatment, and watershed research as it pertains to source water protection. A partnership with the University of North Texas and other interested groups offers the potential to make these tours an outstanding educational forum. The Watershed Protection Team at the City of Denton will use this forum to provide public education on a wide variety of water resources issues.

Measurable Goals

The measurable goal for implementation of this BMP will be to provide at least one water / wastewater treatment plant or watershed tour opportunity per year. These tours may be available

for students or for the general public. The number of participants in the program will be documented as a part of the measurable goals for this BMP. However, it is possible that public safety issues or issues of Homeland Security may prevent tours from occurring. If the tour is canceled because of one of these issues, the Watershed Protection Team will fully document the reason for cancellation. Otherwise, development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Tours of Water and Wastewater Treatment Plants and / or watersheds	1. Continue Tour program	Year 1-5
		2. Document quantifiable aspects of program (number of tours/attendees, tour demographics, etc)	Year 1-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementing this BMP. Manager of the Division of Environmental Quality the Manager, Watershed Protection and Industrial Pretreatment will work with contacts from the University of North Texas, Texas Woman’s University, DISD or other public groups and document the number in attendance in each tour.

Public Education on Illegal Discharges and Improper Disposal

The City of Denton will develop a public education effort to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Measurable Goals

The City of Denton will develop or acquire public education materials in Year 1 of the permit period and determine an effective means of distribution in year 2 (with prioritization). The

materials will be distributed to all appropriate City of Denton employees in Year 3 of the permit period. During Year 4, the materials will be distributed to half of the businesses that represent industrial activities that require permit coverage under a Multi-Sector General Permit. These industries will be identified through the industries primary SIC code, or equivalent. During Year 5, materials will be mailed to the remaining industries. If possible, the distribution of the public education materials outlined in this section will coincide with the implementation of the illicit discharge ordinance outlined in this permit.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Public Education on Illegal Discharges and Improper Disposal	1. Develop or acquire public education materials.	Year 1
		2. Determine an effective means of distribution.	Year 2-5
		3. Distribute materials to appropriate City of Denton employees.	Year 2-5
		4. Distribute materials to 50% of identified businesses.	Year 2-5
		5. Distribute materials to remaining 50% of identified businesses.	Year 2-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for distribution of public education materials on illegal discharges and improper disposal. The Manager, Watershed Protection and Industrial Pretreatment will work the Public Communications Office (PCO), Household Hazardous Waste, Recycling, the Industrial Pretreatment Program, Landfill, and the Municipal Airport to implement this measure. The PCO will assist in preparing and distributing the public education materials to the public and businesses. The Industrial Pretreatment Program and Household Hazardous waste will assist in targeting specific industries if necessary and providing information relevant to content to assist industries in addressing illicit discharges and improper disposal practices.

Watershed Signage Program

The City of Denton has developed and installed watershed signs within the major watersheds of the City. Signs have been installed in areas that are likely to receive the most public notice and will provide information concerning which watersheds commuters are entering or leaving, as well as the watershed web page address once the web page is developed. These signs (and the associated information available at the web page address) will address the requirement of providing public education efforts for visitors to the City of Denton. At least 12 signs have been installed during the course of the prior permit cycle. These signs will be maintained and updated. Additional opportunities for signs addressing water quality projects will be sought out during the permit cycle.

Measurable Goals

The City of Denton will continue the signage through Years 1 through 5 of the permit period and determine the needs for any possible additional signs. Signs will be begin to be placed during years 1-5 of the permit.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Watershed Signage	1. Continue existing watershed signage design.	Year 1-5
		2. Determine appropriate areas for installation – begin installation of 3 signs.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for coordinating the development and distribution of watershed signage. The Manager, Watershed Protection and Industrial Pretreatment will work the Public Communications Office (PCO) to

implement this measure. The PCO will assist in preparing the signage to ensure that it meets the standards of Denton’s Public Communications Program.

Stormwater / Watershed Citizen Stakeholder meetings

The City of Denton will establish Stormwater / Watershed meetings as part of the Stormwater Management / Watershed Protection Program. These meetings will represent affected and interested persons from throughout Denton. The meetings will provide a forum for feedback on the existing program, strategies for improvement and input as to whether the program is addressing the issues they feel are most important to citizens of Denton. The meetings will receive regular updates as to program implementation and any results of the program. The frequency, timing and location of meetings will be determined by the watershed staff with input from members of the stakeholder group. All public notice information regarding such meetings will be done in accordance with State and Local requirements. Meetings will occur at least once per year and give residents and other stakeholders an opportunity to review information and give input on operations within the watershed/stormwater management program.

Measurable Goals

The measurable goal for implementation of this BMP is to initiate the Stormwater Management / Watershed Protection Program Stakeholder meetings, document the number of participants, the number of recommended actions, and the number of meetings held. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Stormwater Management/ Watershed Protection Program Advisory Committee	1. Set up initial Stakeholder meetings	Year 1
		2. Continue meetings, receive feedback from stakeholder group	Year 2-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementing this BMP. The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment will work with Utilities Special Projects Coordinator and the Public Communications Office to implement this measure.

Storm Drain Labeling

In years past the City of Denton has periodically installed storm drain markers through the Drainage Division. Currently the City has approximately 400 markers in inventory. Through the implementation of this BMP the labeling program will be re-started with an emphasis on citizen labeling. Groups such as boy scouts and girl scouts and neighborhood association groups, entities participating in the Adopt-A-Stream program, and interested individuals will be included.

Measurable Goals

The measurable goal for implementation of this BMP will be the purchase, distribution and installation of storm drain markers. The program will document the number of participants in the program; document the number of markers installed and their approximate locations. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Storm Drain Markers	1. Purchase adhesive and distribute extant markers to participants	Year 2
		2. Purchase additional materials as needed	Year 3-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP to meet Measurable Goal. The Manager, Watershed Protection and

Industrial Pretreatment will work with Drainage Manager, Drainage Manager, the Public Communications Office (PCO), and Keep Denton Beautiful (KDB) to implement this measure. The Drainage Manager will assist in locating priority areas and KDB and the PCO will assist in locating and matching volunteers to priority areas.

Annual Clean Up Events

Currently, the City of Denton partially funds and encourages public participation and involvement in two major cleanup activities during the year. The cleanup activities are organized to correspond with other large scale cleanup projects, typically the Annual Stream Clean and the Great American Clean Up. These activities focus on cleaning up areas that surround our downstream drinking water source Lake Lewisville, as well as various streams, creeks and drainage ditches around the City.

Measurable Goals

The measurable goal for implementation of this BMP will be for the City of Denton to provide partial funding for these two events each year. The program will document the number of participants at the events, the quantity of waste collected, the length of stream cleaned and before/after photos of some of the areas cleaned. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Annual Clean up events	1. Continue partial funding and promotion of annual clean up events	Year 1-5
		2. Document participation, amount of waste collected and before/after photos	Year 1-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of the Annual Clean up Events to meet Measurable Goal. The Director of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment will work with the Public Communications Office (PCO) and Keep Denton Beautiful (KDB) to implement this measure. KDB and the PCO will document the number of participants at each event, the amount of trash removed, the location of clean ups, and any before/after pictures. This information will be provided the Manager, Watershed Protection and Industrial Pretreatment on an annual basis.

Hotline for Receipt and Consideration of information from the Public Regarding Illicit Discharges

The City of Denton will maintain a hotline to allow the public to submit information relevant to illicit discharges. The hotline will have a voice mail message recorder to allow concerns to be expressed 24 hours a day. Public concerns will be tracked to document the City’s response to such concerns. Confidentiality will be maintained if requested.

Measurable Goals

The measurable goals for implementation of this BMP will be to set up and publicize the hotline number and to document the number of calls received and the number of responses. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Public Education, Outreach and Involvement	Hotline	1. Publicize Hotline number	Year 1
		2. Track concerns to resolution	Year 2-5
		3. Document number of calls received and responded to	Year 2-5
		3. Implementation Complete (meets Measurable Goal 7.3.7.1)	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment, has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with the Drainage Department, Community Improvement Services and other appropriate City of Denton departments to implement this measure. Administrative assistants with the Water/Waste Water Department may take calls associated with the hotline. Response reports will be forwarded to the Manager, Watershed Protection and Industrial Pretreatment as calls are received and responses occur.

Fats, Oils, and Grease (FOG) Program

In an effort to prevent the introduction of fats, oils, and grease into the City’s sanitary sewer system and prevent sewer system blockages that can result in Sanitary Sewer System (SSO) overflows and sewage spills, the City has developed a FOG program. The FOG program is intended to increase the awareness of operators of local food service establishments, and their employees, about measures that they can take to limit or prevent the introduction of fats, oils and grease into the drain and the sanitary sewer system.

All local food service establishments are required to comply with these regulations which include applying for annual permits, undergoing annual inspections of their facilities, ensuring that cooking equipment is maintained, ensuring proper maintenance of any existing grease collection equipment, and implementation of best management practices.

Measurable Goals

The FOG program is operated out of the Industrial Pretreatment Program. Currently there are approximately 660 establishments that require regulation under the City’s ordinance. Division goals are an inspection of one third or approximately 200 inspections per year. The Division will also respond to any reports of discharges or violations.

The measurable goals for this program will be to document and report all inspections, reports and violations along with any required follow up information. Plan reviews will be required of new facilities or additions as well as any required infrastructure upgrades that result from inspections.

The FOG program has also developed an extensive outreach program. Measureable goal will be to document any products developed (brochures, websites, campaigns) and the numbers of distribution or interactions with regulated entities, stakeholders or the public in general.

Schedule

Program	BMP	Activity	Date Due
Public Education,	Fat, Oils and Grease	1. Administration of the program	Year 1-2

Outreach and Involvement	Program	1. Continue development and administration of the program	Year 2-5
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Responsible Persons

The Pretreatment Program Manager has the responsibility for developing and implementing the FOG Program. The Manager, Watershed Protection and Industrial Pretreatment will work with the Pretreatment Program Manager to get reporting data for the program.

Illicit Discharge Detection and Elimination

Regulatory Requirement

40 CFR 122.34 (b) (3) -Develop, implement, and enforce a program to detect and eliminate illicit discharges into your small MS4. Develop a storm sewer system map, showing the location of all outfalls and the names and locations of all water of the U.S. that receive discharges from those outfalls. To the extent allowable under state, tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions. Develop and implement a plan to detect and address non-stormwater discharges including illegal dumping to your system. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Address categories listed in 122.34(b) (3) (D) (iii) if you determine they are significant contributors of pollutants to MS4.

Current Programs

Currently, the City of Denton's Watershed Protection Program collects water quality information on the majority of drainage basins throughout the City. The data collected can point to many, but not all possible, illicit discharges. These illegal dumping activities often occur in the creeks and ditches of the City of Denton. The City of Denton currently has a GIS that depicts much, but not all of the existing storm sewer system including all outfalls. The City provides a household hazardous waste collection program. The Recycling Division's Home Chemical Collection Program provides citizens with the means to properly disposal of household hazardous waste (HHW). The items collected are reused, recycled, or disposed of properly. Many common household products are toxic, corrosive, flammable, or caustic and can be dangerous to both people and the environment when discarded incorrectly. The City of Denton Recycling Division collects these products separately from other trash.

Selected BMPs for Illicit Discharge Detection and Elimination

Storm Sewer Map

The City of Denton will continue development of a storm sewer system map, showing the location of all outfalls and the names and / or locations of all water of the U.S. that receive discharges from those outfalls. Additionally, the stormwater map will work to include new construction of stormwater assets including pipes, channels, inlets and outfalls. Currently, the City has a GIS with outfalls, pipes, channels and inlets but is only comprehensive for the

outfalls. Stormwater basins and areas of implementation of Low Impact Development will be included in the map over time. Areas identified as permitted or having a potential impact on the stormwater system will also be mapped. Information will be used to identify hot spots and other areas where existing resources can be focused. The existing GIS will be completed and continually updated as new development occurs.

Measurable Goals

The measurable goal for implementation is to map the drainage system by the fifth year of the permit. Mapping will continue as development progresses, so the storm sewer maps should remain relatively current. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Map Storm Sewer System	1. Continued mapping new stormwater outfalls	Year 1-5
		2. Identify and map Industrial Permittees and related businesses	Year 2-5
		3. Identify and map stormwater basins in City	Year 2-5
		4. Identify and map hotspots and areas of concern in the stormwater system	Year 2-5
		5. Map LID and GI throughout City	Year 2-5
		6. Implementation complete (Meets measurable goal of 8.3.1.1)	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with Water Engineering and Technology Services/Geographic Information Systems (GIS) to continue the implementation of this measure. As required by the TCEQ, the following information concerning the maps is provided as part of the SWMP:

- a. The source of information used to develop the map

The current City of Denton Storm Sewer Map was compiled from historical information from as built plans and Denton County stream coverages along with on-ground GPS verification.

- b. A statement concerning how outfalls were verified

The outfalls in the current City of Denton Storm Sewer Map were either verified through surveying as conveyances were built, or verified later by a site visit by City of Denton employees. It is expected that a substantial portion of the outfalls will need to be verified using GPS as the storm sewer maps are finalized.

- c. A statement on how the map will be updated, and how regularly.

The City of Denton Storm Sewer Map will be updated regularly as projects develop. New additions to the system will be incorporated as they occur. The system will also continually be evaluated to verify quality of the data.

Illicit Discharge Ordinance

Section 26-189 of the current City of Denton Code of Ordinances concerns discharges to natural outlets. The code states that “it shall be unlawful for any person to discharge polluted water to any storm sewer or natural outlet within the area served by the city, except where suitable treatment has been provided in accordance with the provisions of this article and except where a Federal National Pollutant Discharge Elimination Systems (NPDES) permit has been duly issued and is currently valid for such discharge. A valid copy of such a permit and any modification thereof must be filed with the Assistant City Manager – Utilities. (Ord. No. 93-112, § I, 6-15-93; Ord. No. 2001-200, § 1, 5-15-01). If needed, the City of Denton will modify this ordinance (or produce another regulatory mechanism) to effectively prohibit non-stormwater discharges into the storm sewer system and to implement appropriate enforcement procedures and actions.

Measurable Goals

The measurable goal for implementation of this BMP is to review the existing ordinance and update if needed relative to any changes in regulation or conditions at the City of Denton.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Ordinance to address Illicit Discharge Detection and Elimination	1. Review and develop a draft ordinance, if needed	Year 1
		2. Finalize ordinance	Year 2
		3. Implement ordinance	Year 3-5

Responsible Persons

The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment has the responsibility for developing and implementing the illicit discharge ordinance. The Director of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment will work with the Utilities Attorney (ext. 8158) to develop the actual ordinance. If the current ordinances of the City of Denton are deemed inadequate, it is very likely that existing ordinances from other North Texas cities will be the basis for the final Denton ordinance.

Program to Detect and Address Illicit Discharges

The City of Denton currently uses a Dry Weather Screening program to evaluate water quality leaving most of the City’s drainage sub-basins. As part of this program, a wide variety of water quality parameters are analyzed, some of which may be used to detect certain types of illicit discharges. The City’s Watershed Protection Program is responsible for these screening activities. The current screening activities will be evaluated and any gaps in the coverage of the screening or the parameters currently used for screening will be rectified.

Measurable Goals

The measurable goal for implementation of this BMP is to evaluate the existing program and identify and address any gaps in coverage or problems with existing water quality parameters. The Watershed Protection Program staff will evaluate any gaps in coverage or problems with current water quality parameters on an annual basis. The Watershed Protection Program staff

will also document number of illicit discharges found, the number of illicit discharges that are corrected and / or repaired, and number of inspections performed. The number of inspections is established within the City of Denton’s Watershed Protection Program Plan, which currently outlines inspections for approximately 82 stations on a monthly basis. The number of inspections for future monitoring activities will be comparable to those currently established.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Program to Detect and Address Illicit Discharges	1. Evaluate existing program and identify gaps in coverage or parameters.	Year 1-2
		2. Document the number of inspections, the number of illicit discharges detected, and the number corrected	Year 1-5
		3. Address gaps in coverage or parameters	Year 3
		4. Implement program	Year 3

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for development and implementation of the illicit discharge detection program.

Public Education on Illegal Discharges and Improper Disposal

The City of Denton will continue to develop a public education effort to inform 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.)

Measurable Goals

The City of Denton will develop or acquire public education materials in Year 1 of the permit period and determine an effective means of distribution in year 2 (with prioritization). The materials will be distributed to all appropriate City of Denton employees in Year 3 of the permit period. During Year 4, the materials will be distributed to half of the businesses that represent industrial activities that require permit coverage under a Multi-Sector General Permit. These industries will be identified through the industries primary SIC code, or equivalent. During Year 5, materials will be mailed to the remaining industries. If possible, the distribution of the public education materials outlined in this section will coincide with the implementation of the illicit discharge ordinance.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Public Education on Illegal Discharges and Improper Disposal	1. Develop or acquire public education materials.	Year 1-5
		2. Determine an effective means of distribution.	Year 1-5
		3. Distribute materials to appropriate City of Denton employees.	Year 1-5
		4. Distribute materials to 50% of identified businesses.	Year 1-5
		5. Distribute materials to remaining 50% of identified businesses.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for distribution of public education materials on illegal discharges and improper disposal. The Manager, Watershed Protection and Industrial Pretreatment will work the Public Communications Office (PCO) and the Industrial Pretreatment Program to implement this measure. The PCO will assist in preparing and distributing the public education materials to the public and businesses. The Industrial Pretreatment Program will assist in targeting specific

industries if necessary and providing information relevant to content to assist industries in addressing illicit discharges and improper disposal practices.

Hotline for Receipt and Consideration of information from the Public Regarding Illicit Discharges

The City of Denton will continue to operate a hotline to allow the public to submit information relevant to illicit discharges. The hotline will have a voice mail message recorder to allow concerns to be expressed 24 hours a day. Public concerns will be tracked to document the City’s response to such concerns.

Measurable Goals

The measurable goals for implementation of this BMP will be to set up and publicize the hotline number and to document the number of calls received and the number of responses. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Hotline	1. Continue to publicize hotline number	Year 1-5
		2. Document number of calls received and responded to	Year 1-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with the Drainage Department and other appropriate City of Denton departments to implement this measure. Administrative assistants with the Water/Waste Water Department may take calls associated with the hot line. Reports will be forwarded to the Manager, Watershed Protection and Industrial Pretreatment as calls are received and responses occur. Calls are recorded in a database including investigation results and enforcement actions.

Program to address environmental crimes, dumping and illicit discharges

The City of Denton currently has a Community Improvement Services Program (Formerly Code Enforcement). For the City of Denton, “environmental crimes” typically involve illegal dumping, which often occurs in the creeks and ditches of the city. The number of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced will be documented during the course of this permit

Measurable Goals

The measurable goal for implementation of this BMP is to document the number of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Community Improvement Services Department and Pollution Prevention Supervisor	Document number of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Community Improvement Services, the Pollution Prevention Supervisor, The Fire Marshall and Fire Department and Police Department for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment gather information on the amount of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced on an annual basis.

Household Hazardous Waste Collection Program

The City of Denton’s Recycling Division operates a Home Chemical Collection Program provides for the proper disposal of household hazardous waste (HHW). The items collected are reused, recycled, or disposed of properly. Many common household products are toxic,

corrosive, flammable, or caustic and can be dangerous to both people and the environment when discarded incorrectly. The City of Denton Recycling Division collects these products separately from other trash.

Measurable Goals

The measurable goal for implementation of this BMP is to document the volume and/or number of items recovered and recycled on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Household Hazardous Waste Collection Program	Document the volume of materials recovered and recycled on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Recycling Coordinator and the Home Chemical Collection Manager for implementation of this BMP. The Recycling Coordinator will provide the Manager, Watershed Protection and Industrial Pretreatment with the amount of Household Hazardous Waste collected on an annual basis.

Sanitary Sewer Overflows (SSOs) Response Program

The City of Denton currently documents each sanitary sewer overflow that occurs within the City’s sanitary sewer system. To address the illicit discharge aspects of SSOs, the number of SSOs that occur and the estimated volume of waste released from each will be documented during the course of this permit. The Water Utilities Department has developed a Sewer Overflow Response Plan (SORP) to address overflows. This information is detailed through a work order system and maintained in a GIS database. This information is given to the Manager, Watershed Protection and Industrial Pretreatment by the Wastewater Collections Division of Water Utilities.

Measurable Goals

The measurable goal for implementation of this BMP is to document the number of SSOs and the volume of waste released on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	SSO Reporting Program	Document the number of SSOs that occur and the volume of waste released on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Wastewater Collection System Manager and the Water Reclamation Plant Superintendent for implementation of this BMP to meet this measurable goal. The Wastewater Collections Systems Manager will provide the Manager, Watershed Protection and Industrial Pretreatment with the number of SSOs that occur and an estimate of the volume of waste released on an annual basis.

Stormwater Asset Management and Watershed Characterization Plan

The City of Denton, Watershed Protection will maintain a database of the stormwater system, structural post construction BMPs to include any Modeling information results, Hot Spot Analysis, GIS information, and assets important to stormwater decision making. This will include any entities or sites with stormwater permit coverage and areas of structural BMP implementation.

Measurable Goals

The Watershed Protection Division will work with the Technology Services Department/Geographic Information Systems Division to continually update the map and work on ways to analyze the information. Documentation of new businesses or permitted entities, areas of increased development or areas where water quality issues show up are examples of how this BMP will be implemented. Measurable goals will be the creation, maintenance and regular update of maps and geographic databases for this plan.

Schedule

Program	BMP	Activity	Date Due
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Illicit Discharge Detection and Elimination	Stormwater Asset Management and Watershed Characterization Plan	1. Continue to issue permits and conduct regular inspections	Year 1-5
		2. Document all compliance issues and resolutions	Year 1-5
		3. Report annual program statistics	Year 1- 5

Responsible Persons

The Watershed Coordinator has the responsibility for the implementation of this plan. The Watershed Coordinator will work with the GIS Manager to maintain system quality and integrity. Data from this plan in the form of maps, graphics or data will be used in submittal to the SWMP annual report.

Spill Reporting and Response Plan

Measurable Goals

The Watershed Protection Division will annually document and report all spills and reports of illicit discharges and dumping. This will include any information from other departments and divisions within the City of Denton and any neighboring MS4s. This plan will be reviewed annually and, if necessary, updated to reflect any organizational, demographic or regulatory changes.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Spill Reporting and Response Plan	1. Continue to monitor for and respond to spills and illicit discharges	Year 1-5
		2. Document spill records and resolution practices.	Year 1-5

		3. Report annual program statistics	Year 1- 5
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Responsible Persons

The Watershed Protection Coordinator will work with the Pollution Prevention Supervisor, Pretreatment Program, for this BMP. Annual reports will be made available to the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Watershed Stormwater Enforcement Response Plans

Upon becoming aware of an illicit discharge, all permittees City staff shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable. City staff shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge. All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed. Identification and Investigation of the Source of the Illicit Discharge – All permittees shall investigate and document the source of illicit discharges where the permittees have jurisdiction to complete such an investigation.

Measurable Goals

The Watershed Protection Division will annually document and report all plan reviews, permits, inspections and violations and penalty that occur with permittees. The Water Utilities Department also maintains a website with educational information for homeowners and other stakeholders. Maintenance, upkeep and hits for this website will be documented in the stormwater annual report.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Watershed Stormwater Enforcement Response Plans	1. Develop Enforcement Response Plans	Year 1
		2. Document all compliance issues and resolutions	Year 2-5

		3. Report annual plan statistics	Year 1- 5
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Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has the responsibility over the Enforcement Response Plans. Annual reports will be made available prior to the submittal of the SWMP annual report.

Fats, Oils, and Grease (FOG) Program

The City of Denton has established a Fats, Oils and Grease program for the protection of the collection system and the mitigation of SSO overflows. The FOG program is intended to increase the awareness of operators of local food service establishments, and their employees, about measures that they can take to limit or prevent the introduction of fats, oils and grease into the drain and the sanitary sewer system.

All local food service establishments are required to comply with these regulations which include applying for annual permits, undergoing annual inspections of their facilities, ensuring that cooking equipment is maintained, ensuring proper maintenance of any existing grease collection equipment, and implementation of best management practices.

Measurable Goals

The FOG program is operated out of the Industrial Pretreatment Program. Currently there are approximately 660 establishments that require regulation under the City’s ordinance. Division goals are inspections of one third or approximately 200 inspections per year. The Division will also respond to any reports of discharges or violations.

The measurable goals for this program will be to document and report all inspections, reports and violations along with any required follow up information. Also, plan reviews will be documented as well as any required infrastructure upgrades that result from any inspections.

The Industrial Pretreatment Division has also developed an extensive outreach program. An additional measurable goal will be to document any products developed (brochures, websites, campaigns) and the numbers of distribution or interactions with regulated entities, stakeholders or the public in general.

Schedule

Program	BMP	Activity	Date Due
Illicit Discharge Detection and Elimination	Fat, Oils and Grease Program	1. Development and administration of the program	Year 1-2
		1. Continue development and administration of the program	Year 2-5

Responsible Persons

The Manager of the Pretreatment Program has the responsibility for developing and implementing the FOG Program. The Manager, Watershed Protection and Industrial Pretreatment will work with the Pretreatment Program Manager to get reporting data for the program.

OSSF Permitting Program

The City of Denton, Industrial Pretreatment Program administers and OSSF permitting and inspection program. State law requires property owners and on-site sewage facility installers to possess an on-site sewage facility permit issued by the City of Denton before an on-site sewage facility is constructed, altered or repaired. Wastewater generated from commercial facilities must comply with the definition of sewage promulgated in State OSSF rules. GIS layer of OSSF facilities has been developed and is updated annually.

Measurable Goals

The Pretreatment Program will annually document and report all plan reviews, permits, inspections and violations and penalty that occur with permittees. The Water Utilities Department also maintains a website with educational information for homeowners and other stakeholders. Maintenance, upkeep and hits for this website will be documented in the stormwater annual report.

Schedule

Program	BMP	Activity	Date Due
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Illicit Discharge Detection and Elimination	OSSF Permitting Program	1. Continue to issue permits and conduct regular inspections	Year 1-5
		2. Document all compliance issues and resolutions	Year 1-5
		3. Report annual program statistics	Year1- 5

Responsible Persons

The Pollution Prevention Supervisor, Pretreatment Program, has the responsibility over the OSSF program. Watershed Protection Coordinator and The Pollution Prevention Supervisor, Pretreatment Program will maintain coordinates and GPS map layer of OSSF locations. Annual reports will be made available to the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Construction Site Stormwater Regulation

Regulatory Requirement

40 CFR 122.34 (b)(4) -Develop, implement and enforce a program to reduce pollutants in any stormwater runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Program must include: the development and implementation of (at a minimum) and ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, requirements for construction site operators to implement appropriated erosion and sediment control BMPs, requirements for construction site operators to control waste at the construction site, procedures for site plan review which incorporate consideration of potential water quality impacts, procedures for receipt and consideration of information submitted by the public.

Current Programs

Currently, the City of Denton has a variety of methods to address stormwater runoff from new developments disturbing greater than an acre of land. In order for developers to engage in clearing and grading activities disturbing more than one acre they must first have their Erosion Control Plan approved (Dev. Code 35.18.2). The criteria for which approval is based require that “grading will not create or contribute to flooding, erosion, or increase turbidity, siltation or other forms of pollution in a watercourse” (Dev. Code 35.18.5a). The Code requires that a “temporary groundcover be established on all graded or disturbed areas not intended to be developed within twenty-one days” (Dev. Code 35.18.5b). In addition, under the drainage part of the Development Code “all developers and any person undertaking any development activity shall make use of erosion and sediment control devices” (Dev. Code 35.19.4f). This part of the code also addresses post construction runoff in that “the erosion and sediment control devices shall be installed and thereafter maintained until sufficient vegetation cover has been provided or been replaced to control erosion and sediment as directed by the Director of Engineering. Failure to abide by these principles shall result in fines as specified in the erosion control manual and ordinance” (Dev. Code 35.19.4f). Finally, from the Drainage Criteria Manual, “Periodic maintenance as determined by the City Engineer, shall be performed to remove accumulated sediment that would otherwise inhibit the proper functioning of the erosion control devices ... the developer or homebuilder is responsible for maintenance of site erosion control devices until a sufficient vegetation cover has been provided or replaced as determined by the City Engineer” (Dev. Code 35.19.4f).

Currently, the City of Denton, Watershed Protection Division inspects construction sites for stormwater runoff control through the Building Inspections Department permitting process, and construction plans must have information relevant to erosion control. Specifically “the location, size and character of all temporary and permanent erosion and sediment control facilities with specifications detailing all on-site erosion control measures which will be established and maintained during all periods of development and construction” (City Ordinance, Sec. 34-21). The City also has an ordinance requiring that mud from construction activities not be tracked onto city streets (City Ordinance, Sec. 25-8). Noncompliance can cause the city to stop inspections, thereby halting construction until the situation is remedied. Fines and re-inspection fees may also be levied to encourage compliance. Additionally, the Development Code has a section dedicated to protection of Environmentally Sensitive Areas (ESAs), which also provides for a measure of water quality protection during construction. The Code provides an undisturbed 50 to 100ft buffer around streams based on the size of their drainage basins (Dev. Code 35.17).

Through the current City of Denton Watershed Protection Program, the majority of the City’s sub-basins are monitored for the presence of uncharacteristically turbid water. It is expected that this program will be used to help identify areas where adequate construction stormwater runoff controls are not being implemented and to direct inspectors to areas with excessive turbidity.

Selected BMPs for Construction Site Stormwater Controls

Evaluate and Update Development Code and Criteria Manuals

The City of Denton will evaluate and update the current Development Code and various Criteria Manuals to ensure that the documents and associated ordinances reflect the requirements of Post Construction Stormwater Management under Phase II.

Current City of Denton Development Code requires all development occurring to comply with State Permit TXR150000. All City of Denton plan review, permit review and processing and inspection activities ensure full implementation of all stormwater BMPs required by the permit or specified in the Project Stormwater pollution prevention plan.

Since there are several aspects of the current code that are relevant to construction site runoff control, it is expected that few, if any, modifications will be necessary. However, all aspects of the current code pertaining to construction site stormwater controls, including enforcement options, will be outlined and evaluated during years one and two of the permit. If needed, an erosion control site inspection sheet similar to the ones listed in Appendix D will be developed and incorporated into the existing site inspection process. At minimum, ordinances will require for construction site operators to:

1. Implement erosion and sediment control best management practices

2. Control waste such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

and

3. Fully comply with all requirements of TXR150000 (The Texas Construction General Stormwater Permit)

The City of Denton will evaluate existing ordinances to ensure that procedures are in place to:

1. Require a site plan review which considers the potential for water quality impacts.

2. Allow for the receipt and consideration of information submitted by the public

and

3. Perform site inspections and enforce control measures if needed.

Measurable Goals

The measurable goal for implementation is to evaluate and determine necessary updates to the Development Code and criteria manuals and associates ordinances the first permit year and enact any necessary changes by the third permit year. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Construction Site Stormwater Regulation	Evaluate and Update Development Code and Criteria Manuals	1. Evaluate and determine any necessary updates	Year 1-2
		2. Enact necessary changes (if needed)	Year 3
		3. Implement changes to ordinance (if needed)	Year 3-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment along with the Drainage Manager and the Senior Drainage Engineer has responsibility for implementing this BMP.

Public Education on Construction Site Stormwater Control Requirements

The City of Denton will develop a public education effort to inform the public and construction site operators of the requirements for construction site stormwater controls. (This BMP also addresses minimum control measures for public education.)

Measurable Goals

The Municipality will continue to develop or acquire public education materials during Years 1-5 of the permit period. The materials will likely be either a short pamphlet (flyer) and / or a video. The materials will be continually distributed to construction site operators in Year 1-5 of the permit period.

Schedule

Program	BMP	Activity	Date Due
Construction Site Stormwater Regulation	Public Education on Construction Site Stormwater Controls	1. Continue to develop or acquire public education materials.	Year 1-2
		2. Distribute materials to permit applicants.	Year 1-5
		3. Document number of documents distributed	Year 1 –5
		Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementing this BMP. The Manager, Watershed Protection and Industrial Pretreatment and Watershed Protection Coordinator have responsibility for coordinating the distribution of public

education materials on construction site stormwater controls. The coordination effort will likely involve significant interaction with the Public Communications Office.

Hotline for Receipt and Consideration of information from the Public Regarding Construction-Related Stormwater Concerns

The City of Denton will maintain a hotline to allow the public to submit information relevant to stormwater controls during construction activities. The hotline will have a voice mail message recorder to allow concerns to be expressed 24 hours a day. The number of calls received and the City’s response to each call will continue to be tracked and documented.

Measurable Goals

The measurable goals for implementation of this BMP will be to set up and publicize the hotline number and to document the number of calls received and the number of responses. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Construction Site Stormwater Regulation	Hotline	1. Continue to maintain and publicize Hotline number	Year 1-5
		3. Document number of calls received and responded to	Year 1-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with the Drainage Department and other appropriate City of Denton departments to implement this measure. Secretaries with the Water/Wastewater Department may take calls associated with the hot line. Reports will be forwarded to the Manager, Watershed Protection and Industrial Pretreatment as calls are received and responses occur.

Prioritization of Areas to be inspected for Construction Site Stormwater Controls

The Watershed Protection Division at the City of Denton currently monitors the majority of drainage sub-basins on a monthly schedule during normal stream flow. The Watershed Protection Division monitors a variety of parameters including turbidity, which describes the cloudiness of the water sampled. The City of Denton will use results from this monitoring and the current construction site database to direct construction inspectors to areas that have consistently high turbidity readings or an unusual change in turbidity compared to historical trends. Since turbidity is in part dependant on the amount of suspended sediments within water, excessive turbidity may indicate a lack of adequate controls during construction in specific sub-basins.

Information on land disturbing activities and permitted construction sites along with, plan review, inspection and enforcement will be maintained in an electronic database.

Measurable Goals

The measurable goals for implementation of this BMP will be to document the areas that have consistently high turbidity readings or unusual increases in turbidity, document the number of inspections performed in such areas, and then document the changes in turbidity readings in successive sampling periods. However, it is expected that the elimination of sediment sources within areas of high turbidity may not necessarily result in changes in readings, at least in a short timeframe. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Construction Site Stormwater Regulation	Prioritization of Construction Site Inspections	1. Continue existing program	Year 1
		2. Document areas with high readings, number of inspections performed in such areas, and changes in readings following inspections	Year 1-5
		3. Implementation Complete.	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP to meet this Measurable Goal. The Manager, Watershed Protection and Industrial Pretreatment will work with the Watershed Protection Team to document areas of consistently high turbidity readings or unusual turbidity changes. The City Building Inspection division, City Drainage Department, or other appropriate City Inspection entity will inspect sites within these areas to evaluate compliance with construction site runoff requirements. The number of inspection reports, copies of report results, and the status of required or suggested changes will be maintained in the City’s stormwater database. Inspection information will include the sub-basin ID numbers for where construction sites are inspected.

Watershed Stormwater Enforcement Response Plans

The City of Denton will create and implement an enforcement response plan and revise as necessary. The ERP will describe the City of Denton’s potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance. The City will track instances of noncompliance either in hard copy or in an electronic format. The City will summarize inspection results by violators and include incentives, disincentives, or an increased inspection frequency at operator sites.

Measurable Goals

The Watershed Protection Division will maintain a database of violations or situations of non compliance and document case histories and resolutions along with any record of stop work orders, citations or judgment.

Schedule

Program	BMP	Activity	Date Due
Construction Site Stormwater Regulation	Enforcement Response Plan	1. Draft and develop formal enforcement response plan	Year 1-2
		2. Implement ERP. Document case information and related responses	Year 2-5
		3. Report annual program statistics	Year 2- 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment and Watershed Protection Coordinator have responsibility for implementation of this BMP.

Post Construction Stormwater Management for New Development/Redevelopment

Regulatory Requirement

40 CFR 122.34 (b)(5) –Develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects that are less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for your community. Use an ordinance or other regulatory mechanism to address post-construction runoff. Ensure adequate long-term operation and maintenance of BMPs.

Current Programs

Currently, the City of Denton has a variety of methods to address stormwater runoff from new developments disturbing greater than an acre of land. In order for developers to engage in clearing and grading activities disturbing more than 1 acre they must first have their Erosion Control Plan approved (Dev. Code 35.18.2). The criteria for which approval is based requires that “grading will not create or contribute to flooding, erosion, or increase turbidity, siltation or other forms of pollution in a watercourse” (Dev. Code 35.18.5a). The Code also requires that “temporary groundcover be established on all graded or disturbed areas not intended to be developed within twenty-one days” (Dev. Code 35.18.5b). In addition, under the drainage part of the Development Code “all developers and any person undertaking any development activity shall make use of erosion and sediment control devices” (Dev. Code 35.19.4f). This part of the code also addresses post construction runoff in that “the erosion and sediment control devices shall be installed and thereafter maintained until sufficient vegetation cover has been provided or been replaced to control erosion and sediment as directed by the Director of Engineering. Failure to abide by these principles shall result in fines as specified in the erosion control manual and ordinance” (Dev. Code 35.19.4f). In addition, the Drainage Criteria Manual states that “Periodic maintenance as determined by the City Engineer shall be performed to remove accumulated sediment that would otherwise inhibit the proper functioning of the erosion control devices. The developer or homebuilder is responsible for maintenance of site erosion control devices until a sufficient vegetation cover has been provided or replaced as determined by the City Engineer” (Dev. Code 35.19.4f). Finally, the Development Code has a section dedicated to protection of Environmentally Sensitive Areas (ESAs), which also provides for a measure of water quality protection. The Code protects floodplains from being occupied or filled, provides a 50 to 100ft buffer around streams based on the size of their drainage basins, protects existing riparian habitat, and protects stands of Eastern Cross Timbers Habitat (>10 contiguous acres) from residential development (Dev. Code 35.17).

The City of Denton has also imposed several ordinances or requirements that directly impact post-development stormwater quality. For example, the City currently has ordinances that require developers to maintain site hydrology as close as possible to predevelopment conditions. Hydrology is maintained through the use of BMPs appropriate to the site in question. In addition, parking lot requirements within the City of Denton are designed so that all overage parking is pervious. Since Denton's recently imposed drainage fee is based on the amount of impervious cover owned by the individual or entity charged it is expected that this fee will encourage more pervious surfaces and on-site detention.

Selected BMPs for Post Construction Site Stormwater Controls

Evaluate and Update Development Code and Drainage Criteria Manuals

The City of Denton will evaluate and update the current Development Code and various Criteria Manuals to ensure that the documents and associated ordinances reflect the requirements of Post Construction Stormwater Management under Phase II. The code will specifically be examined to ensure that:

- a. strategies include a combination of both structural and non-structural BMPs;
 - b. ordinances or other regulatory mechanisms are in place to address post-construction runoff from new development and redevelopment projects;
- and
- c. procedures are recommended that ensure the adequate long-term operation and maintenance of BMPs.

Measurable Goals

The measurable goal for implementation is to evaluate and determine necessary updates to the Development Code and criteria manuals and associates ordinances the first permit year and enact any changes, if necessary, by the third permit year. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Post-Construction Controls for New Development/ Redevelopment	Evaluate and Update Development Code and Criteria Manuals	1. Evaluate and determine any necessary updates	Year 1-2
		2. Enact necessary changes	Year 3
		3. Implement changes to ordinance	Year 3-5

ESA Requirement Tracking

The City of Denton currently tracks the amount of riparian buffer area and Eastern Cross-Timbers habitat that is preserved through the Environmentally Sensitive Areas criteria that are currently adopted in the City of Denton’s Development Code.

Measurable Goals

The measurable goal for implementation is to provide an annual summary of the amount of riparian buffer and Cross Timber habitats that are preserved as a result of the ESA criteria of the current Denton Development Code.

Schedule

Program	BMP	Activity	Date Due
Post-Construction Controls for New Development/ Redevelopment	ESA Requirement Tracking	Document the amount of area preserved through the ESA criteria	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with the Environmental Compliance Coordinator to implement this measure.

Public Education on Construction Site Stormwater Control Requirements

The City of Denton has developed a public education effort to inform the public and construction site operators of the requirements for post-construction site stormwater controls. (This BMP also addresses minimum control measures for public education.)

Measurable Goals

The Municipality will continue to develop or acquire public education materials in Year 1-2 of the permit period. The materials will likely be either a pamphlet (flyer) and / or a video. It is expected that this material will supplement the existing requirements in the Denton Development Code, the Drainage Criteria Manual, and other applicable City of Denton documents. The materials will be distributed to construction site operators in Year 1-5 of the permit period.

Schedule

Program	BMP	Activity	Date Due
Post-Construction Controls for New Development/ Redevelopment	Public Education on Construction Site Stormwater Controls	1. Develop or acquire public education materials.	Year 1-2
		2. Distribute materials to permit applicants.	Year 1-5
		3. Document number of documents distributed	Year 1-5
		Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementing this BMP. The Manager, Watershed Protection and Industrial Pretreatment has responsibility for coordinating the distribution of public education materials on construction site stormwater controls. The coordination effort will likely involve significant interaction with the Public Communications Office.

Stormwater Best Management Practice, Green Infrastructure and Low Impact Development Tracking

Green infrastructure (GI) refers to a decentralized network of site-specific stormwater management techniques (see below for examples). GI techniques are implemented to reduce the volume of stormwater runoff entering the sewer system while also restoring the natural hydrologic cycle. As opposed to gray infrastructure - the traditional network of costly large scale conveyance and treatment systems - green infrastructure manages stormwater through a variety of small, cost-effective landscape features located on-site.

A tracking and performance assessment database is being developed for green infrastructure implementation activities. The objective for development of a tracking and performance assessment database is to define, at a minimum, the location, ownership, financial investment, performance, and installation date of the green infrastructure practices.

Measurable Goals

The Watershed Protection Division will work with the Planning and Engineering Departments to document any installed structural Best Management Practices or implementations of Green Infrastructure. The City of Denton, Watershed Protection will maintain a database of the stormwater system structural BMPs, implementations of Green Infrastructures. An Annual report on GI, LID or Structural Stormwater BMP will be produced as part of the Stormwater Management Plan Annual report. Along with this any calculations on pollutant load reduction will be part of the database.

Schedule

Program	BMP	Activity	Date Due
Post-Construction Controls for New Development/ Redevelopment	BMP, GI, LID Tracking	1. Develop Monitoring plan and database	Year 1-2
		2. Complete program and database creation	Year 2-5
		3. Report annual program statistics	Year 3- 5

Responsible Persons

The Watershed Protection Coordinator and the Environmental Compliance Coordinator have the responsibility over this measure. Annual reports will be created by the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Use of Integrated Stormwater Management Methods for Stormwater Construction.

The iSWM™ Program for Construction and Development is a cooperative initiative that assists cities and counties to achieve their goals of water quality protection, streambank protection, and flood mitigation, while also helping communities meet their construction and post-construction obligations under state stormwater permits. The City of Denton will integrate the use of Integrated Stormwater Management (ISWM) into current Development Code and Drainage Criteria and promote its use.

Measurable Goals

The Municipality will integrate ISWM into its local drainage criteria and implement requirements for local development to conform to its requirements.

Schedule

Program	BMP	Activity	Date Due
Post-Construction Controls for New Development/Redevelopment	Integrated Stormwater Management	1. Review ISWM protocols.	Year 1-2
		2. Integrate ISWM with current Drainage Criteria and Development Code	Year 3-5
		Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment, the Environmental Compliance Coordinator and the Engineering Development Review Manager have responsibility for

implementing this BMP. The coordination effort will likely involve significant interaction with the Planning Department.

Post Construction BMP Implementation Plan

City of Denton will develop a Post Construction Best Management Practice (BMP) Implementation Plan that will examine policy implications, short and long-term goals for the City and work with the North Central Texas Council of Government’s ISWM program to develop procedures for regulations

Measurable Goals

The Municipality will develop a BMP implementation plan based on the requirements of the State permit TXR150000, the Hickory Creek Watershed Protection Plan and other relevant information. This plan will also outline the process of maintenance, inspection and regulation of Post Construction BMP within the City of Denton.

Schedule

Program	BMP	Activity	Date Due
Post-Construction Controls for New Development/ Redevelopment	Post Construction BMP Implementation Plan	1.Develop Plan	Year 1-2
		2. Begin implementation of Plan	Years 3-5
		Implementation Complete. Plan will be reviewed and updated as needed	Year 5

Responsible Persons

The Environmental Compliance Coordinator and the Watershed Protection Coordinator have responsibility for implementing this BMP. The Environmental Compliance Coordinator and the Watershed Protection Coordinator along with the Senior Drainage Engineer has responsibility for coordinating the implementation ISWM criteria for construction site stormwater controls. The coordination effort will likely involve significant interaction with the Planning Department.

Pollution Prevention/Good Housekeeping for Municipal Operations

Regulatory Requirement

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.

Current Programs

Currently, the City of Denton uses a street sweeper on local streets. This activity sweeps all of City roads at least twice every year and currently collects approximately 2500 cubic yards of debris in the process. Stormwater Pollution Prevention Plans have been established for the City owned Landfill, WWTP, Airport and Service Center. Each of these plans has requirements for training of facility employees with regard to stormwater. Parks and Recreation has also switched to the least toxic chemicals for pest control and has been using locally produced compost for nutrients instead of chemical fertilizers. Parks and Recreation Departments and Drainage Department use Integrated Pest Management practices.

Selected BMPs for Municipal Operations

Training and highly visible stormwater controls

The City of Denton will develop a training and/or expand the existing program to teach employees about incorporating pollution prevention/good housekeeping techniques into municipal operations. Training materials will be acquired from USEPA, TCEQ, or other appropriate organization. Educational materials may also be produced by the City of Denton. In accordance with TCEQ requirements, the municipal operations that are subject to the operation, maintenance, or training programs developed in this section must be listed.

The City will identify pollutants of concern that can be discharged from any of the various operations and maintenance related facilities and implement pollution prevention (P2) measures to reduce discharge of pollutants. As part of this process regular inspections and documentation will occur to verify P2 measures at all City MS4 facilities. These facilities will be inspected, monitored and or modeled to assess the potential for discharging pollutants into the storm system.

Currently, the following municipally owned or operated facilities are expected to receive training:

- a. Parks maintenance;

- b. Street, road, municipal parking lot, or highway maintenance;
 - c. Fleet maintenance;
 - d. Stormwater system maintenance / drainage;
 - e. municipal construction;
- and
- f. vehicle and equipment maintenance and storage yards.

These training activities are expected to be integrated into the topics of Safety meetings in order to introduce the information the widest possible audience of municipal employees. As part of this program each appropriate facility will keep a highly visible Spill Response Kit in a main thoroughfare with basic response measures for typical spills at the facility printed on the kit. The general permit requires examples or descriptions of training materials that are used for this BMP to be included in the SWMP. During years 1 and 2 of the permit, descriptions and / or examples of training materials will be provided in Appendix G as they are acquired or developed.

At these and other priority locations the City will implement stormwater controls that address:

- Good housekeeping
- De-icing and anti-icing storage
- Fueling operations and vehicle maintenance
- Equipment and vehicle washing

The City will develop and implements an inspection program that includes high priority facilities.

In addition all contractors hired by the city will be required to comply with any operating procedures and the City will develop procedures for tracking and oversight of any contractors hired. This is currently written into the contractual requirements for the City of Denton Purchasing department.

Measurable Goals

The measurable goal for implementation of this BMP will be to document the number of employees trained, the number of educational materials distributed, the number of spill response

kits in place and the number of spills responded to. Development and implementation will be according to the schedule below. Additionally this BMP will document the information on City contractors and verify that they are complying with all required regulations.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Training and highly visible stormwater controls	1. Acquire training materials from EPA, TCEQ, or other sources	Year 1-2
		2. Integrate training into safety program	Year 3-5
		3. Purchase and label spill response kits for each City facility	Year 3-5
		4. Implementation Complete (meets Measurable Goal 11.3.1.1)	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with Utilities Special Projects Coordinator and Safety Manager to implement this measure. The Utilities Special Projects Coordinator will assist in the location and installation of the response kits for each City facility. The Safety Manager will assist by incorporating training relevant to spill response based on the typical type of spill that may be encountered at each facility. Both the Utilities Special Projects Coordinator and the Safety Manager will provide a summary report of their activities regarding this measure to the Manager, Watershed Protection and Industrial Pretreatment on an annual basis.

Stormwater Asset Management and Watershed Characterization Plan

The City of Denton, Watershed Protection will maintain a database of the stormwater system, stormwater system assets, water quality monitoring data, land use changes and development and maintain it in a geographic database. This data will be used to determine locations where problems may be occurring and will allow staff and management to focus resources and possibly areas where cost savings can occur.

This BMP includes modeling information, hot spot analysis, GIS information, and maintaining a database of various strategic assets important to stormwater decision making.

Measurable Goals

Water quality databases will be updated and maintained quarterly. Updated land use data from the Planning and Development Department and geo-referenced water quality data will be utilized to focus resources.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Stormwater Asset Management and Watershed Characterization Plan	1. Assess status of databases and GIS layers and continue updating existing datasets	Year 1
		2. Ascertain and prioritize future needs and continue maintaining existing datasets	Year 2
		3. Develop maps, models and/or graphs for decision making	Year3- 5

Responsible Persons

The Watershed Coordinator has responsibility over this plan. Annual reports, maps and graphics will be made available on a regular basis and prior to the submittal of the SWMP annual report.

Illegal Dumping Control

For the City of Denton, “environmental crimes” typically involve illegal dumping, which often occurs in the creeks and ditches of the city. The number of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced will be documented during the course of this permit

Measurable Goals

The measurable goal for implementation of this BMP is to document the number of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Illegal Dumping Control	Document number of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate the implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will document the amount of environmental crimes reported, the number of illegal dumps cleaned up, and the number of penalties enforced on an annual basis.

Household Hazardous Waste Collection Program

The Recycling Division's Home Chemical Collection Program provides for the proper disposal of household hazardous waste (HHW). The items collected are reused, recycled, or disposed of properly. Many common household products are toxic, corrosive, flammable, or caustic and can be dangerous to both people and the environment when discarded incorrectly. The City of Denton Recycling Division collects these products separately from other trash.

Measurable Goals

The measurable goal for implementation of this BMP is to document the material recycled on an annual basis and any public outreach or education provided.

Schedule

Program	BMP	Activity	Date
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			Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Household Hazardous Waste Collection Program	Document the volume of materials recovered and recycled on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Recycling Coordinator for implementation of this BMP. The Recycling Coordinator will provide the Manager, Watershed Protection and Industrial Pretreatment with the amount or volume of materials collected on an annual basis.

Recycling Program

The City of Denton currently has a curbside recycling program that operates throughout the city. It is the intent of this program to encourage citizens to recycle certain waste materials, which will help to prevent these materials from entering the MS4 or the sanitary landfill. The volume of recycled materials will be documented during the course of this permit

Measurable Goals

The measurable goal for implementation of this BMP is to document the volume of recycled material on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Recycling Program	Document the volume materials that are recycled on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Recycling Coordinator (ext. 8615) for implementation of this BMP. The Recycling Coordinator

will provide the Manager, Watershed Protection and Industrial Pretreatment with the amount of materials recycled an annual basis.

Municipal Composting Operation

The City of Denton currently has an active biosolids composting operation at the Pecan Creek Water Reclamation Plant. This program uses biosolids for compost instead of disposing of this material through land application. The program has the added benefit of controlling the amount of yard waste within Denton. Currently, yard waste materials are picked up curbside and used in the composting operation. Using these materials for composting minimizes the amount of yard wastes entering the MS4 or being disposed of via landfill. 100% of the biosolids produced at the Pecan Creek Water Reclamation Plant are composted. The amount of compost produced will be documented during the course of this permit. The program also has the benefit of preventing yard waste from becoming waste in runoff. This includes everything from grass clippings to leaves.

Measurable Goals

The measurable goal for implementation of this BMP is to document the amount of municipal compost produced on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Municipal Compost Program	Document the amount of compost produced on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Beneficial Reuse Manager for implementation of this BMP. The Beneficial Reuse Manager will provide the Manager, Watershed Protection and Industrial Pretreatment with the amount of compost produced on an annual basis.

Street Sweeping Management Program and Reduction of Pollutants from Roads

The City of Denton currently conducts a very extensive street sweeping program that is designed to collect materials from the streets of the city and from municipal parking lots. One of the major goals of the street sweeping program is to minimize the amount of debris, trash, toxic materials, and sediments that enter the MS4. Once collected, these materials are transported to the sanitary landfill. The amount of cubic yards of collected materials and the number of miles swept will be documented during the course of this permit. As part of this program the City of Denton will monitor street sweeping debris and manage disposal of street sweeping debris.

Measurable Goals

The measurable goal for implementation of this BMP is to document the amount of material collected during street sweeping activities and the number of miles swept on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Street Sweeping Program	Document the amount of material collected and the number of miles swept on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Drainage Manager for implementation of this BMP. The Drainage Manager will provide the Manager, Watershed Protection and Industrial Pretreatment with the amount of miles swept and the amount of material collected by the street sweeping program on an annual basis.

Inspection of Drainage Infrastructure and Operations

The City of Denton currently conducts visual inspections of all major creek crossings, bridges, and other drainage infrastructures after every appreciable storm event. In addition, inlets are routinely checked in the wet winter months. If an unacceptable amount of debris is observed or if repair is needed, a work order is issued. These activities prevent drainage problems, clean debris from the conveyances, repair damaged or malfunctioning infrastructure, and generally promote cleaner stormwater. The number of work orders issued for drainage infrastructure repairs or maintenance will be documented during the course of this permit.

Measurable Goals

The measurable goal for implementation of this BMP is to document the number of work orders issued for drainage infrastructure repairs or maintenance on an annual basis.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Drainage Infrastructure Maintenance Program	Document the number of work orders issued for drainage infrastructure repair or maintenance on an annual basis.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment will coordinate with the Drainage Manager for implementation of this BMP. The Drainage Manager will provide the Manager, Watershed Protection and Industrial Pretreatment with the amount of work orders issued for drainage infrastructure maintenance or repair on an annual basis

Spill Reporting and Response Plan

Measurable Goals

The Watershed Protection Division will develop a Spill response plan that will provide guidance, response and documentation for spills and illicit discharges. This plan will integrate other programs and BMPs to address spills and organizational deficiencies that can contribute to spills.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping	Spill Reporting and Response Plan	1. Develop Plan	Year 1
		2. Document all compliance issues and resolutions	Year 2-5

for Municipal Operations		3. Report annual plan statistics	Year2- 5
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Responsible Persons

The Stormwater Specialist has the responsibility over the Spill Response Plan program. Annual reports will be made available to the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Program Standard Operating Procedures and Quality Assurance Program Plans

The Watershed Protection Division along with a number of other divisions and departments has specific Standard Operating Procedures (SOPs) that ensure consistency and quality with regular operations. The Division will create comprehensive SOP manuals to cover all operations. Any pertinent SOPs from other departments that related to stormwater compliance will also be integrated with the stormwater SOPs. Plans for contractor compliance with SOPs will be developed. In addition there will be a regular review of all manuals, typically on an annual basis.

Each control measure includes SOPs and Best Management Practices (BMPs) necessary for proper storm water management. The BMPs and SOPs include specific tasks to meet the objective of that particular control measure. The BMPs and SOPs included in this SWMP will be implemented and reviewed throughout the permit term. This SWMP is intended to be a living document with BMPs added or deleted as new BMPs arise or BMPs are found to be ineffective. Schedules for implementing the BMPs are provided along with each minimum control measure.

The City Watershed Protection Division as part of their SWMP will develop and adopt written standard operating procedures (SOPs) for all pertinent activities related to Phase II stormwater compliance. In addition the Watershed Division shall work with or get copies of other department or division SOPs that relate to stormwater compliance or water quality.

The City Watershed Protection Division along with other departments, divisions and partner organizations shall develop, utilize, update and maintain Quality Assurance Project Plans for all phases of the program that involve monitoring, analysis and/or modeling.

Measurable Goals

The Watershed Protection Division will create SOPs for new methodologies employed. Existing SOPs will be reviewed annually and updated as needed. SOPS cover a wide range of duties which include plan reviewing, construction site inspections, laboratory analysis, GIS maps,

outfall reconnaissance, illicit discharge detection, flow measurements, sampling protocols and equipment maintenance.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention / Good Housekeeping for Municipal Operations	Program Standard Operating Procedures and Quality Assurance Program Plans	1. Continue to revise and create SOPs	Year 1-5
		2. Document any deficiencies and make revisions	Year 1-5
		3. Report annual program statistics	Year1- 5

Responsible Persons

The Watershed Coordinator has the responsibility over the development of Division SOPs. The Manager, Watershed Protection and Industrial Pretreatment has responsibility on the development of any QAPPs. Documents will be reviewed annually and updated as needed.

Fats, Oils, and Grease (FOG) Program

The City of Denton has established a Fats, Oils and Grease program for the protection of the collection system and the mitigation of SSO overflows. In an effort to prevent the introduction of fats, oils, and grease (FOG) into the City’s sanitary sewer system and prevent sewer system blockages that can result in sewage spills, the City has developed a FOG program. The FOG program is intended to increase the awareness of operators of local food service establishments, and their employees, about measures that they can take to limit or prevent the introduction of fats, oils and grease into the drain and the sanitary sewer system.

All local food service establishments are required to comply with these regulations which include applying for annual permits, undergoing annual inspections of their facilities, ensuring that cooking equipment is maintained, ensuring proper maintenance of any existing grease collection equipment, and implementation of best management practices.

Measurable Goals

The FOG program is operated out of the Industrial Pretreatment Program. Currently there are approximately 660 establishments that require regulation under the City’s ordinance. Division

goal is to inspect one third or approximately 200 inspections per year. The Division will also respond to any reports of discharges or violations.

The measurable goals for this program will be to document and report all inspections, reports and violations along with any required follow up information. Also, plan reviews will be documents as well as any required infrastructure upgrades that result from any inspections.

The site has also developed an extensive outreach program. Measureable goal will be to document any products developed (brochures, websites, and campaigns) and the numbers of distribution or interactions with regulated entities, stakeholders or the public in general.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good	Fat, Oils and Grease Program	1. Development and administration of the program	Year 1-2
Housekeeping for Municipal Operations		1. Continue development and administration of the program	Year 2-5

Responsible Persons

The Pollution Prevention Supervisor has the responsibility for developing and implementing the FOG Program. The Manager, Watershed Protection and Industrial Pretreatment will work with the Pretreatment Program Manager to get reporting data for the program.

OSSF Permitting Program

The City of Denton, Industrial Pretreatment Program administers and OSSF permitting and inspection program. State law requires property owners and on-site sewage facility installers to possess an on-site sewage facility permit issued by the City of Denton before an on-site sewage facility is constructed, altered or repaired. Wastewater generated from commercial facilities must comply with the definition of sewage promulgated in State OSSF rules.

Measurable Goals

The Pretreatment Program will annually document and report all plan reviews, permits, inspections and violations and penalty that occur with permittees. The Water Utilities Department also maintains a website with educational information for homeowners and other stakeholders. Maintenance, upkeep and hits for this website will be documented in the stormwater annual report.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	OSSF Permitting Program	1. Continue to issue permits and conduct regular inspections	Year 1-5
		2. Document all compliance issues and resolutions	Year 1-5
		3. Report annual program statistics	Year1- 5

Responsible Persons

The Pollution Prevention Supervisor, Pretreatment Program, has the responsibility over the OSSF program. Annual reports will be made available to the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Pesticide and Fertilizer Applications Management and Tracking Plan

Measurable Goals

The Watershed Protection Division will work with other departments to track and document where pesticide application occur and minimize impacts on water resources. Programs such as Integrated Pest Management will be examined as possibilities for implementation as part of the overall program.

This plan will also address the following practices to minimize generating pollutants related to landscaping:

- Education for applicators and distributors
- Encouragement of non-chemical solutions for pest management
- Development of schedules that minimizes discharge of pollutants.
- Ensuring collection and proper disposal of unused pesticides, herbicides, and fertilizers.

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping for Municipal Operations	Pesticide Applications Management and Tracking Plan	1. Develop Plan; coordination with other departments. Inventory of all chemicals.	Year 1
		2. Documentation of all application events	Year 2-5
		3. Report annual plan statistics	Year2- 5

Responsible Persons

The Stormwater Specialist has the responsibility over the Pesticide Applications and Management. Annual reports will be made available to the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Industrial Stormwater Sources

Regulatory Requirement

The permit includes a new Industrial Stormwater Sources MCM for small MS4s that serve a population of 100,000 or more within a UA. EPA's MS4 Improvement Guide recommends this MCM be included in Phase II permits, and TCEQ believes that it is appropriate to include it for those Phase II MS4s that have similar populations as the Phase I MS4s.

Industrial Pretreatment Program

The City of Denton has operated an industrial pretreatment program since 1984 and presently works to protect the wastewater collection system and wastewater treatment system from harmful industrial discharges. In doing so the program mitigates impacts to the plant and possible pass through. This protects waters of the state and supports the goals of the Watershed Protection Program.

In 1997, the City of Denton Environmental Services Division and the University of North Texas (UNT) Institute of Applied Sciences conducted an 18 month study to assess the feasibility of integrating the industrial pretreatment program activities with those required under the Phase II Stormwater regulations. Funding was made possible by an EPA 104 (b) (3) grant under the XL (Excellence and Leadership) Program. The City of Denton Pretreatment Program division was one of five programs in the United States selected by EPA to develop an XL Water Industrial Pretreatment Project pilot program designed to achieve greater environmental benefit.

Many of the activities that are conducted by the Industrial Pretreatment program are complimentary to a stormwater management program. Incorporating much of the activities of the Industrial Pretreatment Program will provide valuable data and regulatory coverage to the Watershed Protection Divisions work in stormwater compliance.

Measurable Goals

The Pretreatment program conducts regular inspections as part of regulatory requirements. Currently, inspections have a portion that is related to stormwater.

The measurable goals for this program will be to document and report all inspections, reports and violations along with any required follow up information. Also, plan reviews will be documents as well as any required infrastructure upgrades that result from any inspections.

Schedule

Program	BMP	Activity	Date Due
Industrial Stormwater Sources	Industrial Pretreatment Program	1. Development and administration of the program	Year 1-2
		1. Continue development and administration of the program	Year 2-5

Responsible Persons

The Pretreatment Program Manager has the responsibility for the Industrial Pretreatment Program. The Manager, Watershed Protection and Industrial Pretreatment will work with the Pretreatment Program Manager to get reporting data for the program.

Industrial Permit Audits and Surveys

There are various programs in existence within the City of Denton that are utilized to identify and characterized certain business types and practices. The Watershed Protection Division has developed an industrial stormwater audit that is directed at businesses that have been identified as required to have an industrial stormwater permit (multi sector general permit – MSPG) or a No Exposure Certification. The audit verifies that the business is still in existence and operating, the classification has not changed, the permit is still current and that the permittee has conducted all requirements of the permit. The audit will also ask if there have been any spills or discharge during the audit period. This will also help determine if businesses that have been classified as No Exposure have changed and will need to file a Notice of Intent (NOI).

In addition to this the Pretreatment Division conducts Industrial Waste Surveys and Small quantity generator (generating more than 220lbs but less than 2200 lbs per month). The information in these surveys is complimentary to the goals of the stormwater program.

Measurable Goals

The measurable goal for implementation of this BMP is to conduct an annual MSGP audit and to collect all annual survey data from the Industrial Pretreatment Division.

Schedule

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Program	BMP	Activity	Date Due
Industrial Stormwater Sources	Ordinance to address Illicit Discharge Detection and Elimination	1. Evaluated and updated audit and other survey process	Year 1
		2. Distribute audit and create audit report. Correspond with permittees on any discrepancies in report.	Year 2-5
		3. Create annual report on audit and survey data.	Year 2-5

Responsible Persons

The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment has the responsibility for developing and implementing this BMP.

Spill Reporting and Response Plan

Measurable Goals

The Watershed Protection Division will develop a Spill response plan that will provide guidance, response and documentation for spills and illicit discharges. This plan will integrate other programs and BMPs to address spills and organizational deficiencies that can contribute to spills

Schedule

Program	BMP	Activity	Date Due
Pollution Prevention/Good Housekeeping	Spill Reporting and Response Plan	1. Develop Plan	Year 1
		2. Document all compliance issues and resolutions	Year 2-5

for Municipal Operations	3. Report annual plan statistics	Year2- 5
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Responsible Persons

The Stormwater Specialist has the responsibility over the Spill Response Plan program. Annual reports will be made available to the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Stormwater Asset Management and Watershed Characterization Plan, Hotspot Analysis and Routine Assessment and Inspection of Critical City Facilities

The City of Denton, Watershed Protection will maintain a database of the stormwater system, stormwater system assets, water quality monitoring data, land use changes and development and maintain it in a geographic database. This data will be used to determine locations where problems may be occurring and will allow staff and management to focus resources and possibly areas where cost savings can occur. Staff will regularly update the list of stormwater assets and conduct, at minimum, annual inspections of city facilities. Some more critical facilities will be inspected or audited on a more frequent basis if needed.

This BMP includes modeling information, hot spot analysis, GIS information, and maintaining a database of various strategic assets important to stormwater decision making. Industrial stormwater permittee locations will be recorded. Outfalls locations will be requested from permittees.

Measurable Goals

Water quality databases will be updated and maintained quarterly. Updated land use data from the Planning and Development Department and geo-referenced water quality data will be utilized to focus resources. Audits and inspections will be documented and any issues will be addressed in a timely manner.

Schedule

Program	BMP	Activity	Date Due
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Industrial Stormwater Sources	Stormwater Asset Management and Watershed Characterization Plan	1. Assess status of databases and GIS layers and continue updating existing datasets	Year 1
		2. Ascertain and prioritize future needs and continue maintaining existing datasets. Begin inspection activities; report inspection results.	Year 2
		3. Develop maps, models and/or graphs for decision making.	Year3- 5

Responsible Persons

The Watershed Coordinator has responsibility over this plan. Annual reports, maps and graphics will be made available on a regular basis and prior to the submittal of the SWMP annual report.

Stormwater Best Management Practice, Green Infrastructure and Low Impact Development Tracking

Green infrastructure (GI) refers to a decentralized network of site-specific stormwater management techniques (see below for examples). GI techniques are implemented to reduce the volume of stormwater runoff entering the sewer system while also restoring the natural hydrologic cycle. As opposed to gray infrastructure - the traditional network of costly large scale conveyance and treatment systems - green infrastructure manages stormwater through a variety of small, cost-effective landscape features located on-site.

A tracking and performance assessment database is being developed for green infrastructure implementation activities. The objective for development of a tracking and performance assessment database is to define, at a minimum, the location, ownership, financial investment, performance, and installation date of the green infrastructure practices.

Measurable Goals

The Watershed Protection Division will work with the Planning and Engineering Departments to document any installed structural Best Management Practices or implementations of Green Infrastructure. The City of Denton, Watershed Protection will maintain a database of the stormwater system structural BMPs, implementations of Green Infrastructures. An Annual report on GI, LID or Structural Stormwater BMP will be produced as part of the Stormwater Management Plan Annual report. Along with this any calculations on pollutant load reduction will be part of the database.

Schedule

Program	BMP	Activity	Date Due
Industrial Stormwater Sources	BMP, GI, LID Tracking	1. Develop Monitoring plan and database	Year 1-2
		2. Complete program and database creation	Year 2-5
		3. Report annual program statistics	Year 3- 5

Responsible Persons

The Watershed Protection Coordinator and the Environmental Compliance Coordinator have the responsibility over this measure. Annual reports will be created by the Watershed Protection Coordinator prior to the submittal of the SWMP annual report.

Public Education on Illegal Discharges and Improper Disposal

The City of Denton will continue to develop a public education effort to inform 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). Materials will be distributed to industrial stormwater permittees.

Measurable Goals

The City of Denton will develop or acquire public education materials in Year 1 of the permit period and determine an effective means of distribution in year 2.. During Year 3, the materials will be distributed to half of the businesses that represent industrial activities that require permit coverage under a Multi-Sector General Permit. These industries will be identified through the industries primary SIC code, or equivalent. During Year 4, materials will be mailed to the remaining industries. If possible, the distribution of the public education materials outlined in this section will coincide with the implementation of the illicit discharge ordinance.

Schedule

Program	BMP	Activity	Date Due
Industrial Stormwater Sources	Public Education on Illegal Discharges and Improper Disposal	1. Develop or acquire public education materials.	Year 1
		2. Determine an effective means of distribution.	Year 2
		3. Distribute materials to 50% of identified businesses.	Year 1-5
		4. Distribute materials to remaining 50% of identified businesses.	Year 1-5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for distribution of public education materials on illegal discharges and improper disposal. The Manager, Watershed Protection and Industrial Pretreatment will work the Public Communications Office (PCO) and the Industrial Pretreatment Program to implement this measure. The PCO will assist in preparing and distributing the public education materials to the public and businesses. The Industrial Pretreatment Program will assist in targeting specific industries if necessary and providing information relevant to content to assist industries in addressing illicit discharges and improper disposal practices.

Hotline for Receipt and Consideration of information from the Public Regarding Illicit Discharges

The City of Denton will continue to operate a hotline to allow the public to submit information relevant to illicit discharges. The hotline will have a voice mail message recorder to allow concerns to be expressed 24 hours a day. Public concerns will be tracked to document the City's response to such concerns.

Measurable Goals

The measurable goals for implementation of this BMP will be to set up and publicize the hotline number and to document the number of calls received and the number of responses. Development and implementation will be according to the schedule below.

Schedule

Program	BMP	Activity	Date Due
Industrial Stormwater Sources	Hotline	1. Continue to publicize hotline number	Year 1-5
		2. Document number of calls received and responded to	Years 1-5
		3. Implementation Complete	Year 5

Responsible Persons

The Manager, Watershed Protection and Industrial Pretreatment has responsibility for implementation of this BMP. The Manager, Watershed Protection and Industrial Pretreatment will work with the Drainage Department and other appropriate City of Denton departments to implement this measure. Administrative assistants with the Water/Waste Water Department may take calls associated with the hot line. Electronic reports will be forwarded to the Manager, Watershed Protection and Industrial Pretreatment as calls are received and responses occur.

Illicit Discharge Ordinance

Section 26-189 of the current City of Denton Code of Ordinances concerns discharges to natural outlets. The code states that “it shall be unlawful for any person to discharge polluted water to any storm sewer or natural outlet within the area served by the city, except where suitable treatment has been provided in accordance with the provisions of this article and except where a Federal National Pollutant Discharge Elimination Systems (NPDES) permit has been duly issued and is currently valid for such discharge. A valid copy of such a permit and any modification thereof must be filed with the Assistant City Manager – Utilities. (Ord. No. 93-112, § I, 6-15-93; Ord. No. 2001-200, § 1, 5-15-01). If needed, the City of Denton will modify this ordinance (or produce another regulatory mechanism) to effectively prohibit non-stormwater discharges into the storm sewer system and to implement appropriate enforcement procedures and actions.

Measurable Goals

The measurable goal for implementation of this BMP is to review the existing ordinance and update if needed relative to any changes in regulation or conditions at the City of Denton.

Schedule

Program	BMP	Activity	Date Due
Industrial Stormwater Sources	Ordinance to address Illicit Discharge Detection and Elimination	1. Review and develop a draft ordinance, if needed	Year 1
		2. Finalize ordinance	Year 2
		3. Implement ordinance	Year 3-5

Responsible Persons

The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment has the responsibility for developing and implementing the illicit discharge ordinance. The Manager of the Division of Environmental Quality and the Manager, Watershed Protection and Industrial Pretreatment will work with the Utilities Attorney to develop the actual ordinance. If the current ordinances of the City of Denton are deemed inadequate, it is very likely that existing ordinances from other North Texas cities will be the basis for the final Denton ordinance.

Appendices

Appendix A--Watershed Protection Program Plan
(Note: this plan and other appendices are in the process of
being updated or developed as part of this SWMP).
Electronic in Attached CD or available on the City of Denton
website –Dentonwatersheds.com

**Appendix B--Sewer Overflow Response Plan
(Updated annually)**

(Note: this plan and other appendices are in the process of being updated or developed as part of this SWMP).

Electronic in Attached CD or available on the City of Denton website –Dentonwatersheds.com

**Appendix C--Street Sweeping Debris Management Plan
(Note: this plan and other appendices are in the process of
being updated or developed as part of this SWMP).
Electronic in Attached CD or available on the City of Denton
website –Dentonwatersheds.com**

Appendix D--Quality Assurance Project Plan

(Note: this plan and other appendices are in the process of being updated or developed as part of this SWMP).

Electronic in Attached CD or available on the City of Denton website –Dentonwatersheds.com

**Appendix E--City of Denton Watershed and Departmental
Standard Operating Procedures**

**(Note: this plan and other appendices are in the process of
being updated or developed as part of this SWMP).**

**Electronic in Attached CD or available on the City of Denton
website –Dentonwatersheds.com**