

City of Belton, Missouri



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MAY 2 2007
WATER PROTECTION PROGRAM

NPDES Phase II Storm Water Management Program (SWMP) Permit Application

Rev. Nov 9, 2007

6.00 FOR EACH KNOWN STORMWATER OUTLET GIVE LEGAL DESCRIPTION

Stormwater Outlet Number	1	1/4	NE	1/4	NE	Sec	6	T	46N	R	32W	County	CASS
Stormwater Outlet Number	2A	1/4	NW	1/4	NE	Sec	10	T	46N	R	33W	County	CASS
Stormwater Outlet Number	2B	1/4	NW	1/4	NW	Sec	1	T	46N	R	33W	County	CASS
Stormwater Outlet Number	3A	1/4	NE	1/4	SE	Sec	5	T	46N	R	33W	County	CASS
Stormwater Outlet Number	3B	1/4	SW	1/4	SE	Sec	5	T	46N	R	33W	County	CASS
Stormwater Outlet Number	3C	1/4	SE	1/4	SE	Sec	8	T	46N	R	33W	County	CASS
Stormwater Outlet Number	4	1/4	NW	1/4	SE	Sec	23	T	46N	R	33W	County	CASS
Stormwater Outlet Number	5	1/4	NE	1/4	NW	Sec	30	T	46N	R	32W	County	CASS
Stormwater Outlet Number	6A	1/4	SE	1/4	NE	Sec	6	T	46N	R	32W	County	CASS
Stormwater Outlet Number	6B	1/4	SE	1/4	SE	Sec	6	T	46N	R	32W	County	CASS

6.10 FOR EACH KNOWN STORMWATER OUTLET LIST THE NAME OF THE RECEIVING WATER

Stormwater Outlet Number	1	Receiving Water	OIL CREEK
Stormwater Outlet Number	2A	Receiving Water	SCOPE CREEK
Stormwater Outlet Number	2B	Receiving Water	SCOPE CREEK
Stormwater Outlet Number	3A	Receiving Water	MILL CREEK
Stormwater Outlet Number	3B	Receiving Water	MILL CREEK
Stormwater Outlet Number	3C	Receiving Water	MILL CREEK
Stormwater Outlet Number	4	Receiving Water	WEST FORK EAST CREEK
Stormwater Outlet Number	5	Receiving Water	EAST CREEK
Stormwater Outlet Number	6A	Receiving Water	LUMPKIN'S FORK
Stormwater Outlet Number	6B	Receiving Water	LUMPKIN'S FORK

Information on the Permittee:

Name of the Permittee: City of Belton, Missouri
Type of Entity: City - Municipality
Total Area (acres): 8960 acres
Mailing Address: 506 Main St., P.O. Box 230, Belton, MO 64012
Primary Contact: Cliff Fain
Phone Number: (816) 331-4331
Secondary Contact: Chris Cochran
Phone Number: (816) 331-4331

Information on the Municipal Separate Storm Sewer System:

MS4 System Location: Belton
Name of Organization: City of Belton
County Permittee Resides: Cass County
The major receiving waters within the permitted area include:
Oil Creek, East Creek, Mill Creek, Scope Creek and Lumpkin's Fork
The receiving waters are on the latest CWA's list of impaired waters: N/A
Received certification that their SWMP complies with the requirements of Part 3.1: N/A

Information on Adjacent Waterways:

The Permittee is within 100 feet of: Streams, lakes, or reservoirs
The Permittee is not within 100 feet of waters classified as major reservoirs

The Permittee does have areas that are defined as wetlands on FEMA floodways.
The Permittee has received a CWA, Section 404 permit from the US Army Corps of Engineers.
Stormwater from Belton does not discharge to a sinkhole.

Information on Critical Areas:

There are threatened or endangered species in the area: See Below
The Permittee has met eligibility criteria for protection of threatened or endangered species.
There are critical habitats in the area: See Below
The Permittee has met eligibility criteria for protection of critical habitats.
There are no historic properties in the area:

Endangered Species:

County	Species	Status	Habitat
Cass	Mead's Milkweed (Asclepias Meadii)	Threatened	Virgin prairies

INTRODUCTION

The City of Belton, Missouri is an operator of a small municipal separate storm sewer system (MS4). As part of the National Pollutant Discharge Elimination System (NPDES) Phase II requirements, the City is required to develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants from their MS4 to the "maximum extent practicable" to protect water quality requirements of the Clean Water Act. The stormwater management program must include six minimum control measures; public education and outreach; public participation/involvement; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention/good housekeeping.

The City of Belton is regulated and permitted through the Water Pollution Control Branch of the Missouri Department of Natural Resources. The implementation of the stormwater management program began in March 2003 with a five year permit cycle. The following stormwater management program is an undated to provide the activities that will occur over the next five year permit cycle beginning in March of 2008.

CURRENT PROGRESS SUMMARY

During the previous five-year period, the City of Belton has attempted to implement procedures and regulations that meet the expectations of the NPDES Phase II requirements for MS4s. The City of Belton currently supports the Mid-America Regional Council (MARC) whose primary focus is public education and outreach. Belton supports MARC financially and by serving on various committees including the public outreach committee.

Belton has ordinances, regulations and staff to enforce illicit discharges, site construction and post-construction stormwater management. Based upon a review of previous projects and a review of projects on the horizon, the City has recognized a need to further strengthen its regulations. Some minimum design standards and stormwater revisions have been reviewed by the Planning Commission. Adoption of these changes is planned prior to the permit renewal in March, following a formal public hearing and review by the Board of Alderman.

The current budget being reviewed by the City includes funding for a re-write of the entire *Subdivision Regulations* and of the *Zoning Ordinances* over the next two years. The primary goal is to eliminate conflicting requirements and to provide a cohesive document that supports the new standards; this includes supporting the new best management practices. The City recognizes that different departments have conflicting desires. For example emergency services supports wider-streets for better access; however, engineering and planning encourages the reduction of impervious areas. The re-write will include input, cooperation, and compromise by all departments.

Another item of significance is Belton's Stormwater Bond Issue that was passed in November 2006. This Bond issue includes a number of projects to address flooding throughout the city. It also includes funding for a Stormwater Master Plan. The Master Plan will include accurate mapping of inlets, stormwater piping, detention systems, and other components of the drainage system throughout the project. This will be incorporated into the City's GIS system. The Master Plan will also provide guidance on addressing future needs of Belton, which may include funding mechanisms, altering existing (dry) detention ponds throughout the City, and regional stormwater management facilities.

One final undertaking of the City, is an electronic work order system. Generally tasks, time, results and other relevant information are recorded manually on hand-written forms. Belton has recognized the difficulty in reporting on city tasks, including those involving our NPDES permit. Several departments are currently training on GBA Master Series, a work order and assets management software package. Other departments are also researching options. The goal is to provide not just more effective communication and reporting, but to provide faster, more efficient responses to public comments.

MCM #1: Public Education and Outreach on Stormwater Impacts

4.2.1.1 Permit Requirements

Belton plans to continue its public education program by distributing educational materials to the community and conducting outreach activities. The focus of these efforts will be to educate the public with activities discussing the impact of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

4.2.1.2 Decision Process

Belton developed their stormwater public education and outreach program in cooperation with other jurisdictions in the region. The target pollutants were identified and prioritized. The actions that impact the target pollutants were identified. The public education program was designed to impact the actions identified.

The following is a prioritized list of the leading pollutants, experienced in the permitted area, that are carried by stormwater runoff into water bodies. (1 = having most impact and 10 = having least impact)

<u>7</u>	Suspended Solids
<u>N/A</u>	Nutrients
<u>N/A</u>	Pesticides
<u>N/A</u>	Metals
<u>N/A</u>	Bacteria
<u>N/A</u>	Oxygen-Depleting Substances (BOD & other organics)
<u>9</u>	Oil and Grease
<u>10</u>	Salinity (Salt)
<u>N/A</u>	Priority Toxic Organic Chemicals (Household Hazardous Waste Pesticide/Herbicides)
<u>N/A</u>	Habitat Alterations
<u>8</u>	Floatables
<u>N/A</u>	Temperature

4.2.1.2.1 Inform Public on Steps

Belton plans to inform individuals and households in the community about the steps they can take to reduce stormwater pollution. A number of brochures have already been developed in cooperation with the Mid-America Regional Council's (MARC) and will continue to be distributed. The categories of brochures include Land and Garden Activities, Hazardous Waste Disposal, Pet Waste Management, Trash Management, Vehicle Maintenance and Washing,

and Illicit Discharges. Belton will continue to cooperate with MARC in updating and distributing brochures.

A new primary topic will be added to the available brochures providing information on the newer Post-Construction BMP's. The first goal will be educating developers and engineers on the available BMPs for design and construction. The second goal will provide homeowners and homeowner associations an understanding of the operations of these BMPs and the maintenance that may be required.

4.2.1.2.2 How to Become Involved

Belton plans to inform individuals and groups on how to become involved in the stormwater program by providing those instructions in all materials distributed to the public. This is described in more detail in 4.2.2 Public Involvement/Participation.

4.2.1.2.3 Target Audiences

During the development of the education program, Belton identified the sources of stormwater pollutants that needed to be reduced to improve overall water quality. The target audiences were selected because changing their behavior would have a significant stormwater quality impact on the target pollutants. The target audiences for the public education program are:

1. Citizens (Homeowners)
2. Developers and Home Builders
3. Elected Officials
4. City Staff

4.2.1.2.4 Target Pollutant Sources

The target pollutant sources having a major impact on stormwater quality were identified. The following is a list of these sources:

The following is a list of potential sources of pollutants that are experienced in the permitted area. (1 = Major impact, 2 = Minor impact, 3 = Not an impact)

- | | |
|---|--|
| 1 | Construction activities (sediment, construction chemicals and debris, solid and sanitary wastes) |
| 3 | Over application of fertilizer, herbicides, pesticides |
| 3 | Improper disposal of paint and household hazardous chemicals |
| 3 | Pet waste contamination |
| 2 | Improper disposal of waste oil, grease, and gasoline disposal |
| 2 | Trash, debris, and illegal dumping |
| 3 | Detergents washed into drains |

2	Snow removal (salt, sand and snow disposal)
2	Sanitary sewer overflows
3	Infiltration from cracked sanitary sewers
3	Failing septic systems
3	Sewer service connections to storm drainage system
3	Foundation drains connected to storm drainage system
3	Downspouts connected to storm drainage system
3	Lake or water body used for motor boating
2	Spills from roadway accidents or fires
2	Connected impervious areas covering large acreages (such as malls, institutions with large parking areas)
2	Stream bank erosion
3	Waste transfer station

4.2.1.2.5 Outreach Strategy & Partnerships

Belton's outreach strategy is to implement a variety of methods to reach a number of different target audiences multiple times. To change behavior, repetition is important. The mechanisms are described in 4.2.1.2.1 of this permit application.

The strategy is to partner with other governmental and non-governmental entities to execute the public outreach strategy. The idea is to share information and resources so duplication does not occur. The following entities will be assisting with the effort:

1. Other Communities in the Region
2. Regional Planning Organization (MARC)

The number of people targeted to be reached by the public education and outreach strategy is 4500 per year.

4.2.1.2.6 Person Responsible

The person responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the **PUBLIC WORKS DIRECTOR**. Others may be involved in the execution of each of the individual activities in the programs.

4.2.1.2.7 Measurable Goals Selection

The following table provides the measurable goals for the Public Education and Outreach program.

Public Awareness:	Number Issued Per Year				
	Year 1	Year 2	Year 3	Year 4	Year 5
Issue Press Release Regarding Local Storm Water Issues	1	1	1	1	1
Publish Articles in Local Newspaper*	1	1	1	1	1
Show Public Service Announcement on Local TV Station*	1	1	1	1	1
Run Public Service Announcement on Local Radio Stations*	1	1	1	1	1
Brochures Distributed*	15000	15000	15000	15000	15000
Website*	Update Quarterly				

*The topics for the articles, public service announcements, and brochures will be dependent on the topics in (MARC) seasonal campaign for public educational. Additional topics will be included in the program, depending on the immediate needs of the surrounding communities. Detailed information about each seasonal campaign will be included in Belton's annual report.

MCM #2: Public Involvement and Participation

4.2.2.1 Permit Requirements

Belton will comply with State and Local public notice requirements when implementing the public involvement and participation program.

4.2.2.2 Decision Process

The following is the documentation for Belton's decision process and rationale statement for the development of a stormwater public involvement and participation program. It documents the overall program and the individual BMPs, measurable goals, and responsible party for the program.

4.2.2.2.1 Involving the Public in Developing the Submittal

Belton involved the public in the development of the original application and stormwater management program through a posting of public meeting announcements and having a public hearing. Belton will continue to update the public and allow for public comments as the program evolves and grows.

4.2.2.2.2 Involving the Public in Program Implementation

Belton will continue to actively involve the public in the development and implementation of the stormwater program through two primary methods. First Belton will continue to partner with local communities and MARC to achieve a greater impact on the region by sharing resources. These activities should include a regional attitude survey, online surveys, and support of local non-profit activities through grants. Secondly Belton will continue to engage the public through local activities; including holding public meetings and through the development review process.

4.2.2.2.3 Target Audiences to Involve in Program

The target audiences for the permittee's public involvement program are:

1. Developers/Builders/Contractors
2. Citizens (Homeowners)
3. Mass Media
5. Local Elected Officials
6. Civic Organizations

4.2.2.2.4 Public Involvement Activities and Measurable Goals

Belton plans will involve the public through the activities described below:

Public Involvement Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Regional Activities*					
Conduct Attitude Survey on Regional Water Quality	1		1		1
Seasonal Online Surveys	1	1	1	1	1
“Clean River Program”	1	1	1	1	1
“Get to Know Your Watershed” program	1	1	1	1	1
“Earth Day”	1	1	1	1	1
Local Activities					
Hold Public Meetings	1	1	1	1	1
Hold Development Review Meetings	weekly				
Stormwater Bond Projects – Public Meetings	1 (min.) per project.				

*The topics and timing for the articles Regional Activities will be dependent on the MARC campaign for public educational. Additional topics and activities will be included in the program, depending on the immediate needs of the surrounding communities. Detailed information about each seasonal campaign will be included in Belton’s annual report.

4.2.2.2.5 Person Responsible

The person responsible for the overall management and implementation of the permittee’s stormwater public involvement/participation program is the **PUBLIC WORKS DIRECTOR**. Others will be involved in the execution of each of the individual activities in the programs.

MCM #3: Illicit Discharge Detection and Elimination

4.2.3.1 Permit Requirement.

4.2.3.1.1 Overview

Belton will develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in 10 CSR 20-6.200) into their small MS4.

4.2.3.1.2 Map

Belton will develop a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the State that receive discharges from those outfalls. The City recently acquired the funding for a stormwater master plan through a public approved bond in November 2006. The City is currently working to hire a consulting engineer to assist in developing this master plan.

The map will be developed using: information from Stormwater Master Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
Storm Sewer Mapping	X				
Regional detention/retention facilities			x	x	x
Public Complaints	X	X	X	X	X

4.2.3.1.3 Enforcement

Belton will effectively prohibit non-stormwater discharges into the stormwater system of Belton's stormwater system using Ordinances: 92-2107,89-1947 and98-256. Each ordinance is enforceable by Belton with appropriate procedures and consequential actions.

4.2.3.1.4 Methods to Detect

Belton has implemented a plan to detect and address illicit discharges. It includes walking the stream channels on Oil and East creek, along all sewer mains and addressing public complaints. Subject to budget constraints, Belton may implement field testing.

	Year 1	Year 2	Year 3	Year 4	Year 5
Field Testing of Dry Weather Discharges		x	x	x	X
Visual Inspection	x	x	x	x	X
Public complaints	X	X	X	X	X

4.2.3.1.5 Informing the Public

Belton will inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste using the following methods:

	Year 1	Year 2	Year 3	Year 4	Year 5
Educational Programs:					
Procedural Training for first responders		X			
Distribute Literature	X	X	X	X	X
Recycling Program for Household Hazardous Waste	X	X	X	X	X

	Year 1	Year 2	Year 3	Year 4	Year 5
Volunteer Programs:					
Support regional volunteer programs thru MARC	X	X	X	X	X
Household Hazardous Waste Collection	X	X	X	X	X
Illegal Dumping Hotline referred to code enforcement/Police			X	X	X

4.2.3.1.6 Not Significant Contributors

Belton has not identified any of the following categories of non-stormwater discharges or flows (i.e. illicit discharges) as significant contributors of pollutants to their small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined in 10 CSR 20-6.200), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, flows from riparian habitats and wetlands, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and will only be addressed where they are identified as significant sources of pollutants to waters of the State.)

4.2.3.1.7 Occasional Incidental Non-Stormwater Discharges

Belton ordinances 98-256,92-2107, and 89-1947 address dumping dirt, debris and other incidental non- stormwater discharges. These ordinances provide penalties and enforcement of pollutants that enter waterways through illegal dumping and non permitted storage of debris and trash. Code enforcement records all violations and corrective actions taken.

4.2.3.2 Decision Process

Belton has documented their decision process for the development of a stormwater illicit discharge detection and elimination program. Belton's rationale statement addresses both their overall illicit discharge detection and elimination program and the individual BMPs, measurable goals, and responsible persons for their program.

4.2.3.2.1 Sources for Mapping

Belton will develop a storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Belton used the following sources to compile the maps:

1. Storm Sewer Mapping
2. Public Complaints
3. GIS

Once the map is established, Belton will use proposed building plans to locate new outfalls and update the maps.

4.2.3.2.2 Regulatory Mechanism

Belton will use the following mechanism to effectively prohibit illicit discharges to the MS4:

1. City Ordinance
2. Inspection

This mechanism was selected because ordinances are commonly used by Belton to establish laws and set forth the enforcement mechanisms. The ordinance establishes legal authority: to regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) of stormwater discharges by any use; to prohibit illicit connections and discharges to the MS4; and to establish legal authority to carry out all inspections, surveillance and monitoring procedures necessary to ensure compliance.

4.2.3.2.3 Enforcement

Belton will set forth in the ordinance enforcement procedures intended to remove the source of the illicit discharge detected.

Belton will ensure implementation of the mechanisms described in 4.2.3.2.2 above with the following enforcement actions:

	Year 1	Year 2	Year 3	Year 4	Year 5
Civil Penalties	X	X	X	X	X

4.2.3.2.4 Detection

Belton will detect and address illicit discharges to the MS4, including discharges from illegal dumping and spills. Belton's program will address on-site sewage disposal systems that flow into the MS4. Personnel will be trained on how to detect illicit discharges.

4.2.3.2.4.1 Identify Priority Areas

Belton will use the system maps identified in 4.2.3.1.2 above and other data to identify priority areas with likelihood of illicit connections.

4.2.3.2.4.2 Trace the Source

First responders to complaints about illicit discharge will use the storm sewer map.

4.2.3.2.4.3 Removal

Belton will follow the ordinance adopted and the enforcement mechanisms detailed in the ordinance including those legal actions described in 4.2.3.1.3 above to enforce the removal of an identified illicit connection.

4.2.3.2.4.4 Program Evaluation

The success of the described program will be evaluated annually by analyzing the number of illicit connections discovered and eliminated.

4.2.3.2.5 Public Information

Belton will inform public employees, business and the general public of hazards associated with illegal discharges and improper disposal of waste through the following methods:

	Year 1	Year 2	Year 3	Year 4	Year 5
Educational Programs:					
Procedural Training for City Staff		X			
Distribute Literature	X	X	X	X	X
Recycling Program for Household Hazardous Waste	X	X	X	X	X

	Year 1	Year 2	Year 3	Year 4	Year 5
Volunteer Programs:					
Storm Drain Stenciling			X		
Household Hazardous Waste Collection	X	X	X	X	X
Illegal Dumping Hotline			X	X	X

Where applicable the information distributed through these means will coordinate with the information distributed in the Public Education minimum control measure (e.g., consistent/coordinated messages in literature).

4.2.3.2.6 Responsible Party

The **PUBLIC WORKS DIRECTOR** will be responsible for overall management and implementation of Belton’s stormwater illicit discharge detection and elimination program. Others will be involved in the execution of each of the individual activities in the programs.

4.2.3.2.7 Measurable Goals

Belton will evaluate the success of the program based on:

All sanitary sewer mains are field investigated twice per year to check for illegal connections to sewers that flow into streams. We will investigate the number of illicit connections based on complaints. These illicit connections will be recorded and corrected as needed.

MCM #4: Construction Site Stormwater Runoff Control

4.2.4.1 Permit Requirements

Belton is implementing and will continue to operate and enforce a program to reduce pollutants in any stormwater runoff from construction activities that result in disturbance of greater than or equal to one acre. Belton also plans to reduce pollutants in stormwater runoff from construction activities that disturbs an area less than one acre if the site is part of a larger common plan of development or sale.

4.2.4.1.1 Regulatory Mechanism

Section 8.42 of the Subdivision Regulations currently has basic erosion control requirements. The City is in the process of adopting the more stringent APWA-KC Grading and Erosion Control Standards. These documents have been developed in cooperation with the Kansas City Metro area municipalities and were designed to address the requirements of the MS4 permitting process. Enforcement is provided through section 12.10 and 12.20 of the Subdivision Regulations, and includes fines and possible jail time for violations.

4.2.4.1.2 Best Management Practices (BMPs)

The APWA-KC Erosion Control and Grading specifications provide design guidance for appropriate Best Management Practices for this area. Belton has a preconstruction conference at the site on all public and private projects that include public infrastructure.

4.2.4.1.3 Wastes to Be Controlled

Belton requires construction site operators to control wastes that may cause adverse impacts to water quality such as:

1. Discarded Building Materials
2. Concrete Truck Washout
3. Chemicals
4. Sediment
5. Litter or Trash
6. Sanitary Waste

Regulatory enforcement of wastes is currently provided by *Sec 19-7. Dumping prohibited* of the Belton Code of Ordinances.

4.2.4.1.4 Site Plan Review

Belton's current procedures include the review of all site development plans prior to the issuing of a building permit. The plans must include appropriate Best Management Practices for the site.

4.2.4.1.5 Receipt & Consideration of Public Comment

Plats and Development Plans are required to have a public hearing. These meetings allow the public to provide input and ask questions regarding the project. City Staff and the Planning Commission attempt to address all public comments at that meeting or the following public meeting; including comments regarding stormwater management.

During construction, comments and complaints regarding the project are handled through the Public Works Department. The City has a Public Works Inspector who also addresses erosion control measures. He may be assisted by a city engineer or other staff as needed.

4.2.4.1.6 Site Inspection

The City of Belton will continue to perform site inspections. Belton currently has Inspection Procedures identified in Section 8.60 of the Subdivision Regulations. All work will continue to be inspected by the City Building Inspector and/or the City Engineer or his designee. Projects are inspected by the Building Inspector and Public Works Inspector at key events during the construction process and at random times during construction. The City also relies on public complaints for notice of problems including those related to stormwater runoff.

4.2.4.2 Decision process

The following is the rationale statement for the development of Belton's overall construction site stormwater runoff control program. It documents the individual BMPs, measurable goals, and responsible party for their program.

4.2.4.2.1 Regulatory Mechanism

The City of Belton currently requires certain Erosion Control measures per Subdivision Regulation 8.42. This requirement is in the process of being amended to be more stringent by explicitly referring to and requiring the APWA-KC Grading and Erosion Control Measures be met.

4.2.4.2.2 Enforcement

Belton will ensure compliance with the ordinances through several options. Construction Permits will not be approved until the plans indicate adequate construction phase stormwater control measures. Section 8.60 of the Subdivision Regulations includes the ability to issue stop work orders for defective or deficient work. Section 12.20 includes additional enforcement actions should they be necessary. Violators can be subject to a fine or jail time.

4.2.4.2.3 Implementation of Proper Controls

Belton will require construction site operators to construct and maintain the BMPs approved on the site plans. The KC-APWA standards were developed in cooperation with and specifically for the KC-Metro area. Belton will continue to review the standards to see if additional requirements are needed for our local community. Belton will also continue to review each project plan and project construction to see if additional or alternate measures should be included. City inspectors receive training from MARC, APWA and local and regional agencies.

4.2.4.2.4 Pre-Construction Site Plan Review

Belton's current procedures include the site plan review, including the review of pre-construction plans, and consider the potential water quality impacts. Considerable guidance is provided in the APWA-KC specifications that are specific to this region and are continuing to be updated and revised to meet the NPDES requirements and improve water quality in the region.

Sites smaller than one acre do not necessarily have to acquire a MDNR Land Disturbance permit and follow the same guidelines. However the City of Belton does review all site plans that require a building permit and does consider the impacts it may have on stormwater runoff. Future goals of the City may include additional regulations specific to these small site projects.

4.2.4.2.5 Public Input on Submittals

As provided above Belton encourages public input during the preliminary phases of a project to catch problems before they may occur. Belton also responds to comments during construction to address any problems that may occur. In addition, public comments are received and discussed at Planning Commission and Board of Aldermen meetings.

4.2.4.2.6 Site Inspection & Enforcement

Belton currently makes the best use of available City staff and resources by combining stormwater inspection tasks with other required inspections. The Public Works Department is seeking additional funding to allow an increase in the frequency of site inspections. The goal is to move towards a more

proactive approach to site inspection and rely less on other inspections, random inspections, and public comments.

4.2.4.2.7 Person Responsible

The person responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the **PUBLIC WORKS DIRECTOR**. Others will be involved in the execution of each of the individual activities in the programs.

4.2.4.2.8 Measurable Goals

Belton would like to move towards a more proactive approach to site inspection over the next five (5) year period. This will require additional staff time; requiring additional staff. As a minimum goal, Belton will plan to inspect erosion control measures after each 2 inch (per 24 hour period) storm event. Belton will continue to review the need for additional inspections partially or fully dedicated to construction site stormwater management control. A future goal may include inspection of each project once per month.

MCM #5: Post-Construction Stormwater Management in New Development and Redevelopment

4.2.5.1 Permit Requirement

4.2.5.1.1 Overview

Belton is currently amending existing stormwater regulations to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

4.2.5.1.2 Strategies

Belton is implementing strategies developed in the region and incorporated in APWA-KC "Best Management Practices Manual" It includes a combination of structural and/or non-structural Best Management Practices (BMPs), appropriate for the community.

4.2.5.1.3 Ordinance

The existing requirement is found in Section 4.83 of the Subdivision Regulations. The currently proposed amendments will also be included in this section. Amendments include changes to reduce the requirements for storm water piping, provide disconnect between impervious surfaces, and provide buffers adjacent to streams.

4.2.5.1.4 Long-Term Operation & Maintenance

Paragraph C of the Section 4.83 identifies maintenance responsibilities. It includes that "major maintenance such as sediment removal, outlet repair, and other major items shall be the responsibility of the City." Other solutions for long term maintenance are being considered and may be implemented on a case by case basis. Homeowner Associate covenants or other agreements would need to be in place to ensure proper maintenance is addressed.

The subdivision regulations are also being amended to superficially require non-structural BMPs such as stream set backs to be established and will typically be dedicated to the City. Those maintained under private ownership will have covenants, restrictions, or other agreements that must include maintenance.

4.2.5.2 Decision Process

The following is the rationale statement for the development of a post-construction stormwater management program. It documents the BMPs, measurable goals, and responsible party for the program.

4.2.5.2.1 Priority Areas

Belton will implement regulatory procedures to address stormwater runoff from new development and redevelopment projects. There are no areas identified as a priority for regulatory procedures. All projects will be reviewed to the same standard.

4.2.5.2.2 Application of Appropriate Measures

The City of Belton partners with other Kansas City Metro communities in the Mid-America Regional Council. In 2003, a Best Management Practices Manual was published. A revision of this manual is currently in a draft form (2007) and is in the final comment stage. A primary goal of the latest revision was to tailor the design guidance to specifically address the needs of our local communities to better maintain pre-development runoff conditions. The City of Belton will need to continue to provide involvement with these metro organizations and/or consider what additional procedures and regulations might need to be implemented to further address Belton's needs.

4.2.5.2.3 Non-Structural Best Management Practices (BMPs)

4.2.5.2.3.1 Policies & Ordinances

The APWA-KC Best Management Practices Manual and the Section 5600 Storm Drainage Systems and Facilities that are or will be part of Belton's site design requirements already include the protection of sensitive areas such as wetlands and riparian areas and require buffers along sensitive water bodies.

Belton also has a number of items in the Zoning Ordinances to address open space. A summary is provided in the table below.

II.15.E.	BP-R	limited to 75% maximum lot coverage
Appendix B	R-3 & R-3-P	Limited to 25% maximum lot coverage
V.E.14	PUD	Residential Use requires 1000ft ² open space/dwelling unit
II.14.G.12	BP	Open space minimum is 20%
III.19.E	All	Provides for Minimum Tree Requirements
III.19.G	All	Minimum of 6% landscaping provided on interior of parking lots
IV.2.B	All	10' landscape strip on front of property line

4.2.5.2.3.2 Infill Development

The City of Belton encourages redevelopment and growth already developed areas. While not specially intended for this purpose, the Arterial Street Impact Fee provides a credit for redevelopment of existing buildings/areas. Belton has also provided financial assistance through TIFs, TDDs and other means when appropriate. The existing downtown district and the commercial area along North Scott are the two areas of highest priority for the City of Belton.

4.2.5.2.3.3 Education

Public Education is being addressed as part of Minimum Control Measures No.1 and No.2.

4.2.5.2.3.4 Other Non-Structural Measures

As part of the above mentioned revisions to the stormwater regulations, Belton is addressing to further improve the stormwater runoff conditions. A number of design requirements included in the regulations that are outdated and conflict with the goals of the current BMP practices. The proposed amendments include allowance for more open swales, less piping, and disconnecting impervious areas by removing pilot channels in dry detention ponds.

4.2.5.2.4 Structural BMPs

4.2.5.2.4.1 Structural BMPs

Design guidance and provisions for Structural BMPs are included in the APWA-KC manual referenced above. This extensive manual includes design guidance on twelve primary types of structural BMPs.

4.2.5.2.5 Regulatory Mechanism

Current regulations require all site plans to be reviewed. The plans must meet the minimum stormwater requirements in order to receive a construction permit. This requirement is included in Section 8.43 and 8.50 of the Subdivision Regulations.

Section 8.35 of the regulations specifically requires the stormwater facilities to be in place prior to issuing building permits or occupancy permits.

4.2.5.2.6 Long-Term Operation & Maintenance

Paragraph C of the Subdivision Regulation 4.83 identifies maintenance responsibilities. It includes that "major maintenance such as sediment removal,

outlet repair, and other major items shall be the responsibility of the City.” Other solutions for long term maintenance are being considered and may be implemented on a case by case basis. Homeowner Associate covenants or other agreements would need to be in place to ensure proper maintenance is addressed.

4.2.5.2.7 Responsible Party

The person responsible for overall management and implementation of the permittee’s stormwater public education and outreach program is the **PUBLIC WORKS DIRECTOR**. Others will be involved in the execution of each of the individual activities in the programs.

4.2.5.2.8 Measurable Goals

Past projects constructed privately and publically used traditional means of stormwater management: curb and gutter, stormwater pipe, and dry detention ponds (often with concrete pilot channels). Green space in parking areas are traditionally elevated, providing interception and treatment of only on the area of the island itself. Belton would like to track the amount of new best management practices that are used in lieu of traditional site design. This will include as a minimum of:

1. Length of Stormwater Pipe Eliminated
2. Area of Greenspace Used for Bio-retention, Biofilter, or other Stormwater Quality BMP

Since the results will be dependent on the pace of new development, the length and area cannot be estimated at this time, but will be provided in Belton’s Annual reports.

MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations

4.2.6.1 Permit Requirement.

4.2.6.1.1 Overview

Belton will update and review an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

4.2.6.1.2 Training

Using training materials that are available from EPA, State and other organizations, Belton's program will include employee training to prevent and reduce stormwater pollution from activities.

4.2.6.2 Decision Process

Belton has documented the process for pollution prevention/good house keeping program for municipal operations.

4.2.6.2.1 Pollution Prevention & Good Housekeeping Measures

Belton has implemented pollution prevention and housekeeping procedures. A street department manual of standard operating procedures has been developed. We will evaluate annually the procedures and good housekeeping measures based on the first 5 years of performance.

	Year 1	Year 2	Year 3	Year 4	Year 5
Street Sweeping	X	X	X	X	X
Recycling Program	X	X	X	X	X
Maintenance Schedule	X	X	X	X	X
Employee Training	X	X	X	X	X

4.2.6.2.2 Employee Training

Belton has implemented an employee training program. Over the next 5 years, Belton will continue to evaluate procedures to reduce stormwater pollution:

	Year 1	Year 2	Year 3	Year 4	Year 5
Fleet and Building Maintenance	X	X	X	X	X
Street Maintenance	X	X	X	X	X
Snow Removal Operations	X	X	X	X	X

These activities will be coordinated with the outreach programs developed for the public information and illicit discharge minimum control measures so that a consistent message is presented throughout Belton's program.

4.2.6.2.3 Activities

Belton's program has addressed the following areas:

4.2.6.2.3.1 Clean Up Activities

The following activities will be evaluated and used to measure goals.

	Year 1	Year 2	Year 3	Year 4	Year 5
Street Sweeping	X	X	X	X	X
Maintenance Schedule	X	X	X	X	X

4.2.6.2.3.2 Pollutant Locations

Belton will continue to reduce or eliminate the discharged pollutants from the following locations:

1. Streets
2. Maintenance and Storage Yards
3. Fleet or Maintenance Shops with Outdoor Storage Areas
4. Salt/Sand Storage Locations
5. other city departments outside Public Works

The following controls and/or programs will be implemented to reduce or eliminate the discharge of pollutants from facilities owned by Belton:

	Year 1	Year 2	Year 3	Year 4	Year 5
Recycling Program	X				
Employee Training		X			

4.2.6.2.3.3 Pollutant Removal

Belton will evaluate annually training procedures for the removal of dredge spoil, accumulated sediments, floatables and other debris based on the first 5 years of performance.

4.2.6.2.3.4 Flood Management

Belton will continue review their current regulations concerning flood management to ensure they allow for:

1. Assessment and implementation of solutions that address impacts to water quality for new projects and;
2. Review of existing projects for inclusion of water quality aspects.

4.2.6.2.4 Responsible Party

The **PUBLIC WORKS DIRECTOR** will be responsible for overall management and implementation of the pollution prevention and good housekeeping program for Belton. Others will be involved in the execution of each of the individual activities in the programs.

4.2.3.2.5 Program Evaluation

Belton will evaluate the success of the pollution prevention/good housekeeping minimum control measure by tracking the progress of each measure against the implementation schedule. Each one of the measures described in this permit was chosen based on its implementability by Belton staff and impact on water quality.