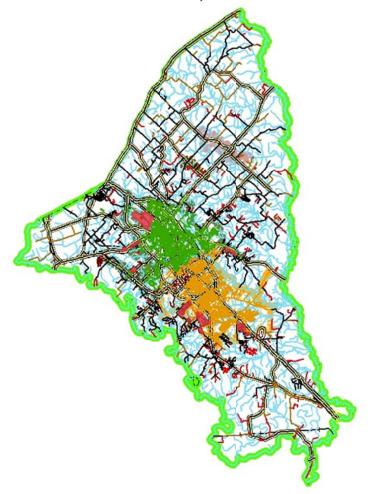
BRAZOS COUNTY



URBANIZED AREA OUTSIDE CITY LIMITS IN BRAZOS COUNTY BRYAN, TEXAS 77803

PERMITTEE: CN600512792, BRAZOS COUNTY



Storm Water Management Program

Table of Contents

Section I – Overview and Definitions

1. Overview	3
2. Definitions	4-11
Section II – Permit Applicability and Coverage	
1. Urbanized Area	12
2. Regulatory Restrictions on Texas Counties	12
Section III – Storm Water Management Program (SWMP)	
Overview and Contrasts with Cities	13
Active Participation in an Approved TMDL	14
MCM 1: Public Education, Outreach, and Involvement	15
MCM 2: Illicit Discharge Detection and Elimination	16-17
MCM 3: Construction Site Storm Water Runoff Control	18-19
MCM 4: Post Construction Storm Water Management in New Development and Redevelopment	20-21
MCM 5: Pollution Prevention/Good Housekeeping for Municipal Operations	22-23
Section IV – Recordkeeping and Reporting	
1. Recordkeeping	24
2. Annual Report	24

Overview

Phase 1 of the U.S Environmental Protection Agency's (EPA) municipal storm water program started in 1990 under the authority of the Federal Clean Water Act (CWA). Phase 1 relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address pollutants from storm water runoff and dry weather discharges. Phase 1 permits are required for large and medium municipal separate storm sewer systems (MS4s), serving populations of 100,000 or greater.

The Storm Water Phase 2 Final Rule (promulgated December 8, 1999) was the next step in the EPA's efforts to protect the nation's water resources from polluted storm water runoff and dry weather discharges into storm drain systems. The Phase 2 program requires local governments to implement programs and practices to control stormwater pollution, to the "maximum extent practicable" (MEP) in urbanized areas of small MS4s (population less than 100,000). The program requires Phase 2 local governments to obtain a permit that includes "minimum control measures" (MCM) that must be implemented for coverage. The minimum control measures include: Public Education, Outreach, and Involvement; Illicit Discharge Detection and Elimination; Construction Site Stormwater Runoff Control; Post Construction Stormwater Management in New Development and Redevelopment; and Pollution Prevention and Good Housekeeping for Municipal Operations. There are significant penalties for non-compliance with federal permit provisions.

The Texas Commission on Environmental Quality (TCEQ) is now authorized by EPA to issue and enforce the Texas Pollutant Discharge Elimination System (TPDES) Phase 1 and 2 stormwater permits, in lieu of federal NPDES permits. TCEQ Commissioners approved a new Small MS4 General Permit, TPDES Permit No. TXR040000, on December 13, 2013 to authorize discharge of stormwater from regulated Phase 2 MS4s. Permittees must submit applications for coverage to TCEQ within 180 days. Applicants seeking authorization to discharge under this general permit must submit a completed Notice of Intent (NOI) on a form approved by the executive director, and a Stormwater Management Program (SWMP). The NOI and SWMP must be submitted to the TCEQ Water Quality Division. The NOI is a written submission to the executive director from an applicant requesting coverage under this general permit. The SWMP is a comprehensive program to manage the quality of discharges from the municipal separate storm sewer system; it describes what actions are to be implemented by the permitee. The SWMP describes in detail which Best Management Practices (BMPs) will be implemented to meet permit requirements. The permit term covers 5 years. Brazos County has assessed and modified the Stormwater Management Program to meet the requirements of the new Small MS4 General Permit.

Definitions

Arid Areas - Areas with an average annual rainfall of less than ten (10) inches.

Best Management Practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Catch basins - Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

Classified Segment - A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (TAC) § 307.10.

Clean Water Act (CWA) - The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

Common Plan of Development or Sale - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

Construction Activity - Soil disturbance, including clearing, grading, and excavating; and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Small Construction Activity is construction activity that results in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land.

Large Construction Activity is construction activity that results in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land.

Construction Site Operator - The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

(a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or

The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Control Measure - Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

Conveyance - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

Discharge – When used without a qualifier, refers to the discharge of stormwater runoff or certain non-stormwater discharges as allowed under the authorization of this general permit.

Edwards Aquifer - As defined in 30 TAC §213.3 (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the TCEQ or the TCEQ website.

Final Stabilization - A construction site where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered

by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

- (b) For individual lots in a residential construction site by either:
 - (1) The homebuilder completing final stabilization as specified in condition (a) above; or
 - (2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.
- (c) For construction activities on land used for agricultural purposes (for example pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.
- (d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:
 - (1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and
 - (2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

General Permit - A permit issued to authorize the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) §26.040.

Groundwater Infiltration - For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

High Priority Facilities - High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices,

and discharge of pollutant(s) of concern to impaired water(s).

Hyperchlorinated Water – Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

Illicit Connection - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge - Any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency firefighting activities.

Impaired Water - A surface water body that is identified on the latest approved CWA §303(d) List as not meeting applicable state water quality standards. Impaired waters include waters with approved or established total maximum daily loads (TMDLs), and those where a TMDL has been proposed by TCEQ but has not yet been approved or established.

Indian Country - Defined in 18 USC § 1151 as: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and

(c) All Indian allotments, the Indian titles to which have not been extinguished, including rights- of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Indicator Pollutant - An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

Industrial Activity - Any of the ten (10) categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 Code of Federal Regulations (CFR) §122.26(b)(14)(i)-(ix) and (xi).

Maximum Extent Practicable (MEP) - The technology-based discharge standard for municipal separate storm sewer systems (MS4s) to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

MS4 Operator - For the purpose of this permit, the public entity or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

Municipal Separate Storm Sewer System (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer

district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA §208 that discharges to surface water in the state;

- (b) That is designed or used for collecting or conveying stormwater;
- (c) That is not a combined sewer; and
- (d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2.

Non-traditional Small MS4 - A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

Notice of Change (NOC) - A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

Notice of Intent (NOI) - A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) - A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

Outfall - A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the and are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right-or-way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

Permittee - The MS4 operator authorized under this general permit.

Point Source - (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant(s) of Concern – For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will

receive a discharge from an MS4. (Definition from 40 CFR § 122.32(e)(3)).

Redevelopment - Alterations of a property that changed the "footprint" of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

Semiarid Areas - Areas with an average annual rainfall of at least ten (10) inches, but less than 20 inches.

Small Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA § 208;
- (b) Designed or used for collecting or conveying stormwater;
- (c) Which is not a combined sewer;
- (d) Which is not part of a publicly owned treatment works (POTW) as defined in 40 CFR § 122.2; and
- (e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7).

This term includes systems similar to separate storm sewer systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to a small MS4 that is also operated by that public entity.

Stormwater and Stormwater Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity - Stormwater runoff from an area where is either a large construction or a small construction activity.

Stormwater Management Program (SWMP) - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

Structural Control (or Practice) - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in

stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Total Maximum Daily Load (TMDL) - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Traditional Small MS4 - A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

Urbanized Area (UA) - An area of high population density that may include multiple small MS4s as defined and used by the U.S. Census Bureau in the 2000 and the 2010 Decennial census.

Waters of the United States - (According to 40 CFR § 122.2) Waters of the United States or waters of the U.S. means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate wetlands;
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (3) Which are used or could be used for industrial purposes by industries in

- (4) interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e)) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding the CWA jurisdiction remains with the EPA.

SECTION II - PERMIT APPLICABILITY AND COVERAGE

Urbanized Areas

The TPDES permit requirements apply only to the portions of unincorporated Brazos County that are identified as urbanized areas. There are approximately 8 non-contiguous urbanized areas in unincorporated Brazos County. These areas are identified based upon data in the 2010 U.S. Census map. The Brazos County Urbanized Area Map may be viewed at http://brazoscountytx.gov/index.aspx?NID=429

The Brazos County SWMP addresses permit required BMPs only in the unincorporated urbanized area portions of the county; however, certain elements of the SWMP may be voluntarily implemented by the permittee within the larger unincorporated area. One example is Public Education and Outreach, which may be implemented on a more regional basis, such as area events and on the Brazos County website.

Regulatory Mechanism Restrictions for Counties

Texas is somewhat unique in the U.S. regarding the restrictions it places upon counties. Basically, the Texas Constitution and State statutes do not grant Texas counties the ability to create and enforce ordinances, such as the ones that Texas cities (Home Rule) are allowed to create in order to meet the TPDES permit requirements. To address this restriction, TCEQ rules contain text stating "to the extent allowable under the state and local law". This statement is cited several times in the, SWMP development and implementation, of the general permit. Brazos County will address the various elements in the General Permit SWMP requirements to the extent allowable under current state and local law.

SECTION III – STORM WATER MANAGEMENT PLAN (SWMP)

Overview of Brazos County's SWMP

To the extent allowable by State and local law, Brazos County's SWMP was developed and will be implemented according to requirements of Part III of TPDES General Permit TXR 040000, for discharges of storm water to surface water in the State. This SWMP was developed to prevent pollution in storm drainage systems to the maximum extent practicable. The SWMP addresses five minimum control measures (MCMs) as required by TCEQ rules. MCMs will be implemented in the urbanized areas of unincorporated Brazos County and may be voluntarily implemented in other unincorporated areas of Brazos County if warranted by special conditions such as participation in regional initiatives. MCMs will be evaluated based upon the accomplishment of activities (BMPs) listed under each MCM. Brazos County storm water staff from two departments will monitor MCM activities and are identified in each section.

Legal Authority (Contrast with Cities)

Unlike cities, counties are not authorized by the State Constitution or State Statutes to enact the ordinances and implement all of the regulatory requirements that Phase 2 (small MS4) requires. Brazos County addresses "to the extent allowable under state and local law" in appropriate MCM sections.

Ditch Drainage System (Contrast with Cities)

Unlike cities, Brazos County's storm drainage system is not a traditional underground drainage system (curb inlets, underground pipes and outfall discharges from pipes). Instead, Brazos County's storm drainage system is mostly comprised of unlined (pervious) above ground ditches. Benefits and challenges associated with this type of system will be addressed in the appropriate MCM sections.

Large Area and Long Distances Between Non Contiguous Urbanized Areas (Contrast with Cities)

Unlike cities, Brazos County has approximately 8 small noncontiguous Urbanized Areas scattered across a county wide area of 590 square miles. Long travel distances, often exceeding those found in large MS4 cities will be required by small MS4 County staff to implement daily activities associated with this program. This extra challenge is another element to consider when comparing the SWMPs of counties to cities in the area.

Annexation and De-annexation (Contrast with Cities)

Unlike cities, counties will be losing land areas when annexation occurs. Counties will not be adding new areas of responsibilities and will not have to provide services to the annexed land.

Active Participation in an Approved TMDL

The Carters Creek watershed is located in Brazos County. Segments 1209C, 1209D, and 1209L are located in the 58 square mile Carters Creek watershed and have had recorded high concentrations of bacteria. 11.42 square miles of this watershed are in unincorporated Brazos County. Only approximately 0.58 square miles of the Carter Creek watershed are located within unincorporated Brazos County and the Urbanized Area (UA) as defined and used by the U.S. Census and required to meet the conditions of the general permit. However, Brazos County is an active participant in the Implementation Plan designed with measures to reduce pollutant loads to the TMDL targets. The TMDL and Implementation Plan were approved by TCEQ on August 22, 2012. The TMDL and Implementation Plans aim to restore and maintain the quality of the impaired water bodies.

Targeted Controls:

- 1. Coordinate and expand existing water quality monitoring in the watershed and conduct a watershed bacteria source survey.
- 2. Determine the feasibility of modifying tax valuation requirements for agricultural lands and quantify expected water quality impacts of modifications and impacts of transitioning from agriculture to wildlife valuations.
- 3. Work to improve OSSF identification, inspection, planning, education, operation, maintenance and tracking to ensure proper system functioning.
- 4. Implement voluntary Best Management Practice (BMPs) on agricultural or undeveloped properties.
- 5. Continue existing efforts and work to establish new mechanisms that encourage and promote future development and redevelopment that will mitigate adverse water quality impacts in the watershed.

Measurable Goals:

- 1. Texas Water Resources Institute initiated monitoring in May 2013 and is continuing monthly.
- 2. Tax valuation discussions are complete; changes are not feasible at this time.
- 3. The Brazos County Health Department has been going to cluster OSSF systems and checking them in person. Some properties might be joining with the city sanitary sewer line, but more information is needed on the city being able to cover these costs. Efforts are ongoing to coordinate with Texas Water Resources Institute for the GIS mapping database.

4. Agriculture land use is declining in the watershed. Prioritizing has been done, but nothing more since then.

MCM 1: Public Education, Outreach, and Involvement

Brazos County will inform the public about water quality issues regarding storm water runoff and illicit discharges by providing information in multiple formats. Brazos County, City of Bryan, City of College Station, Texas A&M University, and Texas Department of Transportation have formed Brazos Clean Water, a committee to facilitate collaboration among each MS4 and maximize effectiveness of local storm water efforts in the Brazos region The community to be addressed will consist of residents, public service employees, businesses, commercial/industrial facilities and construction site personnel in unincorporated/urbanized areas of Brazos County. Due to the lack of a centralized location to attract visitors within the approximately 8 non-contiguous urbanized areas in unincorporated Brazos County, visitors will not be a target group. Also these areas are mostly residential in nature and not intended to attract visitors.

(a) MCM, Measurable Goal and Date – Public Education and Outreach

Brazos County will continue to distribute storm water related material in county buildings and on the Brazos County website: http://www.brazoscountytx.gov/index.aspx?nid=182, at the annual Brazos Valley Earth Day, and with the Brazos Clean Water website http://www.brazoscleanwater.org/ Examples include such items as information sheets and/or brochures. Handout materials and website notices will pertain to: hazards associated with illegal discharges and improper disposal of waste, the impact of stormwater on water quality, and ways to reduce pollutants in stormwater. These materials may be developed by Brazos Clean Water, EPA, TCEQ, or any other source. Some of these materials will address illicit discharges, construction, NOI submittals and other informational materials required by this permit.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(b) BMP, Measurable Goal and Date – **Public Involvement**

Brazos County will publish notice of TCEQ's preliminary determination on the NOI and SWMP in The Eagle newspaper. The notice will provide an opportunity for public to comment on the NOI and SWMP; also the notice will allow the public to request a public meeting. Once approved, Brazos County will present the new SWMP and related development in the Brazos County Commissioners Court. The meetings are open and available to the public. Should any issue about the SWMP Plan occur; any person can address the Commissioners Court during the Call for Citizen input and/or concerns period.

Goal and Date: Brazos County will publish notice after the preliminary determination.

Brazos County will help organize and, post information about opportunities for citizens to participate in the implementation of the SWMP through Brazos Clean Water activities. Brazos Clean Water sponsors activities such as; Earth Day and Stream Clean, and Household Hazardous Waste Collection.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

MCM 2: Illicit Discharge Detection and Elimination

To the extent allowable under State law, Brazos County will continue an illicit discharge program. Since Texas counties do not have the rule/ordinance making authority that cities have, illicit discharges that Brazos County cannot enforce against, after seeking voluntary compliance, will be referred to the TCEQ Region 9 Office in Waco. Malfunctioning onsite sewage facilities, such as septic systems, are subject to Brazos County Health Department corrective actions and enforcement, as necessary.

Another item that impacts the development of this MCM is actual structure of the MS4 system. Brazos County's MS4 is mostly composed of open drainage ditches, as opposed to underground pipe systems and outfalls found in urbanized cities. This means that illicit connections/discharges to underground systems, which are often an important source of illicit discharges for cities, are not as hidden or difficult to locate in open drainage ditch systems found in many counties. Also dry weather flows are not as common in ditch systems but easily observed since they are not lined in concrete and water is absorbed into the ground, while also being exposed to wind and sunlight. Additionally, outfalls are not as commonly found in a ditch system compared to an underground pipe system which discharges into readily identifiable outfalls. Pipes, wet spots, and nutrient-responsive vegetation are easily seen in open ditches.

Brazos County accepts the TCEQ list of allowable non-storm water discharges in the MS4. These non-storm water sources may be discharged from the MS4 and are not required to be addressed in the MS4's Illicit Discharge and Detection MCM or other MCM's, provided they have not been determined by the MS4 to be substantial sources of pollutants to the MS4.

(a) BMP Measurable Goal and Date- An up-to-date MS4 map

A current Brazos County MS4 map is on the county website http://brazoscountytx.gov/index.aspx?NID=429 for easy public viewing and attached to the SWMP.

Goal and Date: Brazos County has accomplished this.

A drainage map of individual culvert location and ditch route is being collected via GPS in all urbanized areas of Brazos County. The location of Brazos County maintained culverts in the urbanized area that drain to creeks and rivers will be noted and recorded in the GIS system for monitoring and maintenance. If an illicit discharge is detected it will become a Priority Area; subject to increased monitoring.

Goal: Brazos County has accomplished this and the map will be updated as needed.

(b) BMP, Measurable Goal and Date- Informing and Training of Field Staff

In order to successfully monitor for illicit discharges, a training program has occurred and will continue for new County employees who have the potential to impact storm water quality.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(c) BMP, Measurable Goal and Date-

Procedures for Tracing the Source of an Illicit Discharge

Illicit discharge detection will be accomplished by visually monitoring culvert outfalls, flow, and overall drainage ditch systems for indicators of illicit discharges or water pollution. When deemed appropriate by staff, chemical testing or toxicity testing may also be performed to confirm the presence of an illicit discharge.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(d) BMP, Measurable Goal and Date- Detection and Correction: Citizen Reports and County Staff Surveillance.

In addition to monitoring for illicit discharges, citizen reporting of apparent water pollution in neighborhood creeks is a reasonable means of detecting illicit discharges in unincorporated areas of Brazos County. During the performance of other duties, such as road or drainage maintenance, staff may see signs of illicit discharges: Brazos County will report signs for investigation. Since the County's enforcement powers are restricted (see II.2 Regulatory Restrictions) TCEQ's Region 9 Field Office will be notified of illicit dischargers that do not comply voluntarily.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(e) BMP, Measurable Goal and Date - Correction: On Site Sewage Facilities

The Brazos County Health Department, Environmental Health Division staff will maintain records, for the storm water program, of actions taken regarding malfunctioning of on-site sewage facilities. Brazos County has authority from the State (TCEQ) to enforce rules regarding the installation and operation of on-site sewage facilities. Brazos County Health Department inspectors are all Designated Representatives of the Authorized Agents of TCEQ. Records regarding action taken upon discharge violations of on-site sewage facilities will be reported in the annual report.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(f)BMP, Measurable Goal and Date – **Detection and Correction: Illegal Dumping**

The Brazos County Sheriff's Department and Constables investigate illegal dumping in the county. Storm water staff will coordinate with the Sherriff's Department team to report annual activities (number of illegal dumping cases, cases investigated, violations identified or not, cleanups, enforcement actions) that occurred in the county's storm water drainage right of ways.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(g) BMP, Measurable Goal and Date – Household Waste Collection

In order to reduce dumping; Brazos County provides the use of 6 manned trash compactor facilities around the county as a service to rural county residents to ensure proper disposal of household solid waste. A rural resident may deposit garbage at any facility of his choosing for a fee.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

MCM 3: Construction Site Storm Water Runoff Control MCM

To the extent allowable under State law, the County will develop and implement a modified construction inspection program in the urbanized areas of unincorporated Brazos County. Since Texas counties do not have the rule/ordinance making authority that cities have, the County cannot enforce a program to reduce pollutants in storm water runoff from construction sites. The County will participate in this MCM by providing general information about the TCEQ requirements to construction site operators, both in the Brazos County Road and Bridge Office and on the Brazos County website http://www.brazoscountytx.gov/index.aspx?nid=182. Brazos County will collect documentation of voluntary reactive and proactive inspections and maintain a file of Notices of Intent (NOI) recieved from operators. This file will be readily accessible to TCEQ staff. Any required enforcement will be conducted by TCEQ.

(a) BMP, Measurable Goal and Date – **NOI File for Construction**

Since TCEQ requires NOIs and Construction Site Notices (CSN) from the construction site operators to be submitted directly to MS4s, the County will set up a file for this. This file will be divided into two sections: urbanized area NOIs/CSNs and nonurbanized area NOIs/CSNs. TCEQ may access this file at any time after it is established to obtain information about construction sites in unincorporated Brazos County. Small construction sites are not required to send NOIs to TCEQ offices; however, they are required to submit CSNs to the MS4. A link to TCEQ and information about Construction Storm Water TPDES Permit will posted on Brazos County website; available to the citizens and the construction industry. This will inform readers about requirements of the NOI and CSN.

Status: Brazos County has accomplished this and the effort is ongoing.

(b) BMP, Measurable Goal and Date – Public Submittal of Information

The County will address public submittals of information regarding storm water quality issues associated with construction sites. The County will receive information and evaluate an appropriate response. The response may include a voluntary construction site visit to observe conditions and resolve issues, or a direct referral to TCEQ, and records will be maintained.

Status: Brazos County has accomplished this and the effort is ongoing.

(c) BMP, Measurable Goal and Date – **Site Plan Review**

The County's current site review requirements entail drainage and floodplain management considerations during the platting procedures. Brazos County Health Dept. reviews plats for compliance to OSSF Subdivision Regulations. At this time state law allows counties to review preliminary and final plats for drainage and floodplain issues but not potential water quality impacts. Brazos County intends to try and satisfy this requirement by giving additional storm water information to developers through the county's office and on the website.

Status: Brazos County has accomplished this and the effort is ongoing.

(d) BMP, Measurable Goal and Date – Site Inspection and Enforcement

The County will conduct voluntary construction site inspections of new development or redevelopment that have submitted NOI to our office, that disturb one acre or more, in urbanized areas of unincorporated Brazos County. Site Operators will be checked for, the presence of a functional Storm Water Pollution Prevention Plan (SWP3) and general compliance with TCEQ requirements. If after inspection, there are significant violations which have not been corrected, then the TCEQ will be notified that the County is discontinuing its voluntary inspections at the site. Also, if entrance to a site or a request to review records is denied, then the County will notify TCEQ that it will not be performing inspections at the site.

Status: Brazos County has accomplished this and the effort is ongoing.

MCM 4: Post Construction Storm Water Management in New Development and Redevelopment

The intent of this MCM is to lessen the storm water quality impacts after construction has been completed on new or redeveloped sites (1 acre or larger of disturbed earth) and while people occupy and/or use the sites.

To the extent allowable under state law, Brazos County will develop and implement a Post Construction MCM in unincorporated Brazos County, which includes both urbanized areas. Since Texas counties do not have the rule/ordinance making authority that cities have, the County cannot enforce a program to reduce pollutants in post construction storm water runoff at new and redeveloped sites.

The County will participate in this MCM by allowing the use of unlined or pervious drainage ditches, instead of impervious concrete gutter and underground storm drain pipe systems, which cities typically require, and other activities such as culverts and detention structures.

Compared to impervious underground storm drain pipe systems, above ground open grassy drainage ditch systems allow more storm water runoff to soak into the ground, which reduces downstream runoff velocities (erosion reduction), provides a means of detaining and treating, to a degree, some pollutants (sediment, oils and grease, nutrients/fertilizers, detergents etc.) and allows illicit discharges to be easier to observe and locate. Drainage ditch systems are usually less costly to install, which provides an obvious incentive for their continued installation during and beyond this permit period.

Brazos County maintains drainage ditches and channels that serve Brazos County roads and will continue to do so throughout the permit term. Ditch maintenance data will be provided in the annual report to TCEQ.

(a)BMP, Measurable Goal and Date – Allow pervious drainage Systems

Instead of requiring impervious concrete curb and gutter systems, Brazos County will generally allow developers, home builders and residents in unincorporated areas to use open, unlined grassy storm drainage ditches next to streets. This is an example of a policy that is both cost effective to the construction community and environmentally effective for the County's storm water permit. Specific legal agreements with some adjacent cities may supercede this policy, but overall the policy will continue to be allowed.

<u>Goal and Date</u>: Brazos County will allow open grassy drainage ditches and channels to receive and transport storm water runoff from roads and other impervious surfaces such as roofs, driveways and sidewalks. This activity is currently in effect and will remain in effect during the permit term.

Status: Brazos County has accomplished this and the effort is ongoing.

(b)BMP, Measurable Goal and Date - Tracking Additional Pervious Drainage Systems

Brazos County crews will maintain the open grassy drainage ditches beside County maintained roads in unincorporated Brazos County. This will allow the drainage system to operate properly and produce storm water quality benefits listed above.

Goal and Date: Report annual additions to the Brazos County maintained ditches.

Goal and Date: Brazos County has accomplished this and the effort is ongoing

(c)BMP, Measurable Goal and Date – County Facilities

New landscaping installed at County facilities will be encouraged to plant landscapes that require less pesticides, fertilizers and water to thrive. Storm water staff will work with the Brazos County landscape and maintenance staff to come up with a plan for future planting. Brazos County will include progress information in the annual report.

Goal and Date: Brazos County has accomplished this and the effort is ongoing

MCM 5: Pollution Prevention and Good Housekeeping for Municipal Operations

Brazos County will establish a program to conduct its general operations in a manner that prevents or reduces pollution in storm water runoff to the maximum extent practible. This MCM requires a local government to examine multiple internal operations to see if they can be maintained or modified to prevent or minimize storm water pollution or illicit discharges. As stated by TCEQ, examples of local government operations include, but are not limited to: park and open space maintenance, street, road or highway maintenance, fleet and building maintenance, storm water system maintenance, new construction and land disturbances, parking lots, vehicle and equipment maintenance and storage yards, waste transfer stations, and salt/sand storage yards.

(a)BMP, Measurable Goal and Date – County Operations

Brazos County does not have any operations that generate illicit discharges. Brazos County has provided Stormwater Training Material to all employees. Training material includes information to reduce/prevent pollution from county activities and county owned areas included but not limited to park and open space maintenance; road maintenance; fleet and building maintenance; open channel stormwater system maintenance; new construction and land disturbances; county parking lots; vehicle and equipment maintenance and storage yards; and sand storage locations. A contact for any stormwater related questions and concerns is included.

Goal and Date: Brazos County has accomplished this and the effort is ongoing

(b)BMP, Measurable Goal and Date –

Inventory of the Facilities and Stormwater Controls

Brazos County has completed a GIS mapped inventory of the Stormwater drainage system throughout the Brazos County Urbanized MS4 area.

Goal and Date: Brazos County has accomplished this and the inventory is updated as needed.

(c)BMP, Measurable Goal and Date – Proper Waste Disposal

Proper disposal of waste generated from County MS4 related operations or maintenance will be included in the annual report. The report will address dredge spoil, accumulated sediments and trash and debris in storm drain systems.

Brazos County works with Rogue Waste Recovery to safely empty our two 250 gallon waste oil tanks. Amounts of waste oil will be included in the annual report. Brazos County works with Safety Kleen to have our sediment grit trap emptied. Amounts of sediment waste removed will be included in our annual report. The sediment grit trap used by the county is inspected regularly by the City of Bryan Industrial Pretreatment/Environmental Compliance Department.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

(d) BMP, Measurable Goal and Date – SPCC Plans for County Facilities

Brazos County will comply with federal spill prevention control and counter measure plan regulations, and review spill response procedures to ensure storm water quality protection measures are considered during spill response.

Goal and Date: Brazos County has accomplished this and the effort is ongoing.

Section IV - Recordkeeping and Reporting

Recordkeeping

Brazos County will maintain all records, a copy of the TPDES general permit and all data used to complete the application (NOI) for this permit, for a period of at least three years, or for the term of this permit, whichever is longer. A current/updated copy of the SWMP, NOI and a copy of the permit language/requirements will be maintained at the Brazos County Road and Bridge Department and posted upon Brazos County website.

Brazos County will make records, including the NOI and SWMP available to the public, if requested to do so in writing. The SWMP will be available within 5 working days following the request from the public. Other records will be provided within 10 working days, unless the written request requires an unusual amount of time or effort to assemble. In which case, Texas Law regarding the Public Information Act will be followed. Reasonable charges, in accordance with Texas Law, may be levied by the County for researching and preparing any requested materials.

Annual Report

Brazos County will submit a concise annual report to the Executive Director of TCEQ within 90 Days of the end of each permit year. The annual report will address the requirements listed in the MS4 general permit rules. The County will also maintain copies of annual reports at the Brazos County Road and Bridge Department.