

Storm Water Management Plan (SWMP)

Cameron County, Texas



February 2008

This document was developed with the requirements
of the Texas Pollutant Discharge Elimination Systems
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Acknowledgements

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SECTION 1 PURPOSE OF STORM WATER MANAGEMENT PLAN

1.1 INTRODUCTION / BACKGROUND

As an identified small municipal separate storm sewer system (small MS4) operator, Cameron County has initiated the development of a storm water management program with the development of the Cameron County Storm Water Management Plan (SWMP). This purpose of this plan is to implement programs and practices to control polluted storm water runoff through the Texas Commission on Environmental Quality's (TCEQ) Texas Pollution Discharge Elimination System (TPDES) permit program, specifically in accordance with the requirements of TPDES General Permit TXR040000.

1.2 SCOPE OF CAMERON COUNTY SWMP

In general, the scope of the SWMP includes an inventory of specific actions, called Best Management Practices (BMP) that will be implemented over a five-year period to reduce pollutants and protect water quality. The various BMPs were developed for six Minimum Control Measures (MCM) that are required by the US Environmental Protection Agency's (EPA) municipal storm water program (Phase II). These six MCM are as follows:

- Public Education and Outreach on Storm Water Impacts;
- Public Involvement / Participation;
- Illicit Discharge Detection and Elimination;
- Pollution Prevention / Good Housekeeping for Municipal Operations;
- Construction Site Storm Water Runoff Control; and,
- Post-Construction Storm Water Management in New Development / Re-development.

Under the Cameron County's SWMP, BMPs will be implemented by Cameron County in order to achieve the regulatory standard of reducing pollutants to the Maximum Extent Practicable (MEP). Measurable goals and an implementation schedule for the BMPs are identified within this plan. The effectiveness of the selected BMPs and success in achieving the selected measurable goals will be reviewed annually.

1.3 DEFINITIONS AND ACRONYMS

Appendix A includes a list of definitions and commonly used acronyms.

SECTION 2 REGULATORY AUTHORITY OVERVIEW

2.1 CLEAN WATER ACT

The Clean Water Act (CWA) is a law that establishes environmental programs to protect US water quality. It establishes the EPA as the authority to issue rules and development programs to implement the CWA. One such program is the National Pollution Elimination Discharge System (NPDES). Under the NPDES program, a municipal storm water program was developed in two phases (more specifically identified in Sections 2.2 and 2.3 herein).

Pertinent to the municipal storm water program is the definition of municipal separate storm sewer system (MS4), which is defined by Part 40 of the Code of Federal Regulations (40 CFR 122.26 (b) (8) as a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains: (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created to or pursuant to state law), 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 Section 208 of the Clean Water Act that discharges into waters of the United States, (ii) Designed or used for collecting or conveying storm water, (iii) Which is not a combined sewer, and (iv) Which is not part of a Publicly Owned Treatment Works (POTW).

2.2 PHASE I OF EPA MUNICIPAL STORM WATER PROGRAM

In response to the 1987 Amendments to CWA, the EPA developed Phase I of the NPDES Storm Water Program in 1990. The Phase I program addressed sources of storm water runoff that had the greatest potential to negatively impact water quality. Under Phase I, EPA required NPDES permit coverage for storm water discharges from:

- "Medium" and "large" MS4s located in incorporated places or counties with populations of 100,000 or more; and
- Eleven categories of industrial activity, one of which is construction activity that disturbs five or more acres of land.

The NPDES MS4 permit requires at a minimum the development, implementation, and enforcement of a storm water management program that is designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), in order to protect water quality, and to satisfy the appropriate water quality requirements of the CWA.

2.3 PHASE II OF EPA MUNICIPAL STORM WATER PROGRAM

The Storm Water Phase II Final Rule, promulgated December 8, 1999, to the TCEQ, was the next step in the EPA's efforts to preserve, protect, and improve the nation's water resources from polluted storm water runoff. Phase II requires additional operators (small MS4s in urbanized areas) to implement programs and practices to control polluted storm water runoff through the Texas Pollution Discharge Elimination System (TPDES) permit program. Under Phase II, the small MS4 is required to develop a SWMP. The SWMP

should be designed to prevent harmful pollutants from being washed by storm water runoff into the MS4 (or from being dumped directly into the MS4) and then discharged from the MS4 into local water bodies.

On September 14, 1998, EPA authorized Texas to develop and implement the TPDES Program, including TPDES storm water permitting for MS4s. Prior to that time EPA Region 6 (located in Dallas) served as the permitting authority. Under the terms of this authorization, the TCEQ assumes the role of the permitting authority. TCEQ will administer the TPDES storm water permits for MS4s once the existing EPA administered MS4 individual storm water discharge permits expire. The expiration date for an MS4 individual permit is specified in the individual permit and is typically 5 years. Until that time, EPA Region 6 remains the permitting authority for the MS4 Storm Water Program in Texas, however, there are no federal storm water permitting requirements for small MS4s in Texas until TCEQ issues its permit. TCEQ published their Draft General Permit for small MS4s in the September 27, 2002 issue of the Texas Register and requested comments by November 15, 2002. On August 2, 2007, the TPDES General Permit No. TXR040000 was finalized. All small MS4s are required to submit their proposed SWMPs no later than February 11, 2008.

SECTION 3 CAMERON COUNTY

3.1 SETTING

Cameron County is 140 miles south of Corpus Christi in the Rio Grande Plains region of South Texas. The county, named for Mier expedition member Capt. Ewen Cameron, is bordered on the north by Willacy County, on the west by Hidalgo County, on the east by the Gulf of Mexico, and on the south by Mexico (Rio Grande). The county's largest town and county seat is Brownsville, which serves as the terminus of U.S. Highways 77, 83, and 281 and the Missouri Pacific and Southern Pacific railroads. The center point of the county is at 26°10' north latitude and 97°30' west longitude. Other large communities include Harlingen, La Feria, Port Isabel, San Benito, South Padre Island, Los Fresnos, Palm Valley, Port Isabel, Rio Hondo, and San Benito. Smaller communities include Bayview, Combes, Indian Lake, Laguna Vista, Los Indios, Primera, Rancho Viejo, and Santa Rosa.

Cameron County covers 905 square miles, with an elevation range from sea level to sixty feet. Along the eastern edge of the county, the soils are sandy and saline, with some cracking clay. The remainder of the county has brownish to reddish soils, with loamy to clayey surface layers and clayey subsoils. Vegetation along the eastern edge of the county is typical of the Gulf Prairie and Marsh vegetation areas, with marsh grasses, bluestems, and grama grasses predominating. The vegetation of the rest of the county is like that of the South Texas Plains area, with small trees, brush, weeds, and grasses found in abundance. Mesquite, live oak, post oak, and shrubs also grow densely in some areas. Between 41 and 50 percent of the county is considered prime farmland. Natural resources include oil and gas, barite, celestite, chromium, bentonite clay, fluor spar, manganese, and phosphate.

Cameron County's climate is subtropical and subhumid, with hot summers and mild winters. Temperatures range from an average low of 50° F to 69° in January and from an average high of 75° F to 94° in July. Rainfall averages twenty-six inches per year. Snowfall is exceedingly rare. The growing season lasts 320 days, with the first freeze in mid-December and the last in late January.

According to U.S. Census Bureau information, Cameron County consists of a population estimate of 387,717 (year 2006), a total size 905.76 square miles with 370 persons per square mile on average (year 2000). According to U.S. Census Bureau information, the population of Cameron County has grown 15.7% from April 2000 to July 1, 2006. This percent growth is 3% higher than the State average for the same period.

3.2 DRAINAGE PATTERNS

The Lower Rio Grande Basin is located in the southern-most part of Texas, encompassing Hidalgo, Willacy, and Cameron counties. The basin has an area of over 2.2 million acres. The boundaries of the Lower Rio Grande Basin include Starr County to the west, Brooks and Kenedy Counties to the north, the Gulf of Mexico to the east, and the Rio Grande River to the south.

The southern portion of Cameron County drains to the Rio Grande and the northern portions of the county drain to the Arroyo Colorado ultimately outfalling to the Laguna Madre. The Arroyo Colorado and the Rio

Grande are both listed on the TCEQ's Draft 2000 303(d) list of impaired stream segments with TMDL scheduled. Bacteria are the pollutant parameter of concern in both the Arroyo Colorado above tidal segment and the Rio Grande below Falcon Dam Reservoir.

SECTION 4 CAMERON COUNTY STORM WATER MANAGEMENT

4.1 MANAGEMENT / ORGANIZATION

Management / Organization The Cameron County's Storm Water Management Plan is comprised of various program elements and activities designed to reduce storm water pollution to the maximum extent practicable and eliminate prohibited non-storm water discharges in accordance with Federal and State laws and regulations. Cameron County recognizes the importance of effective storm water management and has allocated resources to administer and implement the SWMP. The following figure illustrates the organization structure of Cameron County for storm water management:

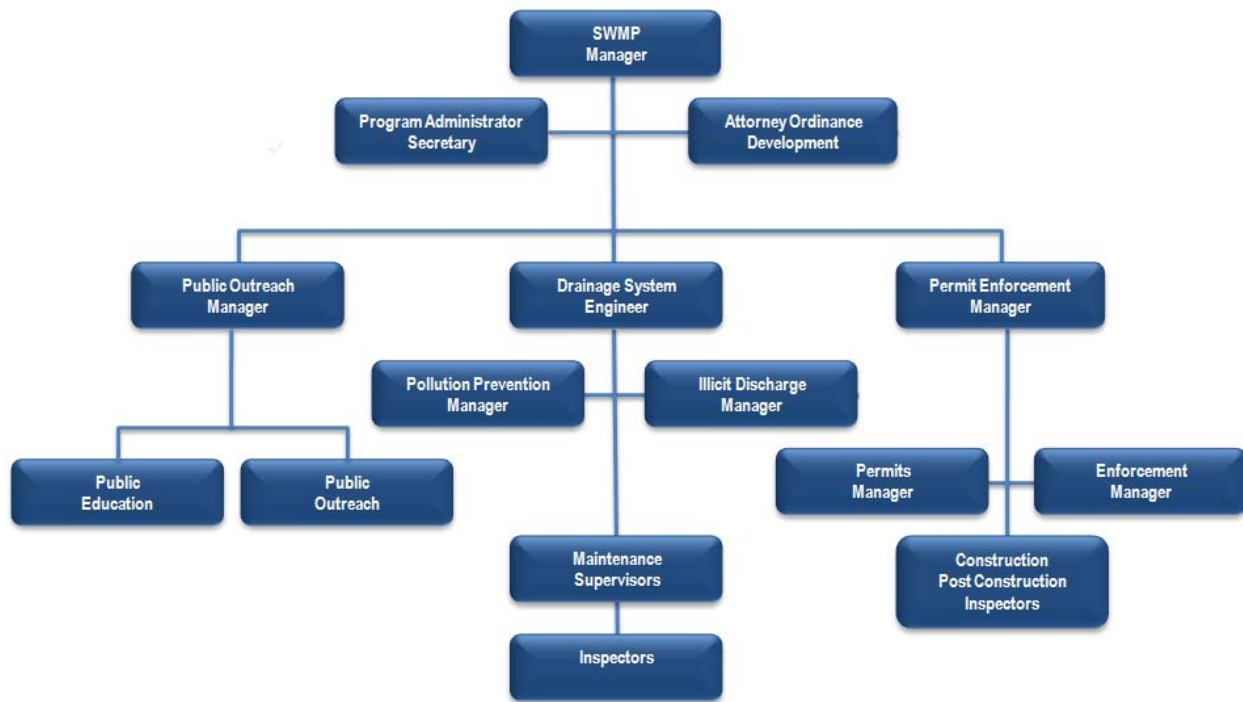


Figure 4-1 SWMP Organization Chart

Ernesto Hinojosa, Transportation Department Staff Engineer, will be the manager of the Cameron County SWMP program. Management and administration of the Program is provided by Program/Administrator/Drainage System Manager, along with all aspects associated with good housekeeping/pollution prevention and illicit discharge detection and elimination. The Public Outreach Manager is responsible for all public education and outreach/public participation and involvement activities. Meanwhile, the Permit Enforcement Manager is responsible for construction site runoff control and post construction storm water management in new development/redevelopment projects.

4.2 STRATEGY, VISION, AND MISSION

In 1987, amendments to the CWA added Section 402(p), which established NPDES permit requirements for municipalities to develop and implement storm water management plans addressing specific water quality control measures. The storm water management plans were required to describe BMPs to reduce the discharge of pollutants in storm water runoff to the maximum extent practicable. The Cameron County SWMP reflects the following strategy, vision, and mission statements:

4.2.1 STRATEGY

Develop and implement programs to reduce or eliminate discharges of pollutants and non-storm water discharges of pollutants and non-storm water discharges entering the Cameron County storm drainage system to the maximum extent practicable, thereby protecting local receiving waters and complying with Federal and State laws and regulations.

4.2.2 VISION

Adopting behaviors and attitudes that contribute to the reduction of urban runoff pollution and help promote community stewardship of our water bodies, thus improving the health of our local waterways.

4.2.3 MISSION

Provide resources and direction toward achieving reduction of storm water pollution to the maximum extent practicable, elimination of non-storm water discharges in accordance with the Cameron County MS4 Permit, and ultimately, protection of beneficial uses, including applicable water quality objectives.

4.2.4 IMPLEMENTATION

The above strategy, vision and mission will be pursued through the implementation of the Cameron County Storm Water Management Plan. The Plan is a living document subject to periodic modifications to ensure that it is effectively carrying out activities aimed at the general permit goals, minor additions and modifications will be identified in the Annual Reports, which will be submitted to the TCEQ for review and approval.

Significant changes in the scope or direction of the Plan will be accomplished through a Plan revision or update process in accordance with the TCEQ's regulations and procedures. Modifications to the Plan will generally be made in response to the effectiveness evaluations and will include the option to incorporate new BMPs. It is important that the SWMP reflects current and improved BMPs and includes activities that have been shown to be successful in other storm water management programs.

BMPs will be selected and revised based on the following criteria:

- Pollutant Removal: Will the BMP address the target pollutant?
- Pollutant Removal: Will the BMP address the target pollutant?
- Public Acceptance: Does the BMP have public acceptance?
- Implementation: Is the BMP compatible with land uses, facilities, or the activity in question?
- Technical Feasibility: Is the BMP technically feasible considering soils, geography, etc.?

- Cost Effectiveness: Is the cost for the BMP proportional to the environmental benefit?
- Financial Feasibility: Does the BMP meet a reasonable cost/benefit ratio and are the funds available for implementation?

Cameron County is committed to the continual expansion of the core elements of the SWMP to further incorporate pollutant reduction activities. These strategies explore opportunities for participation in regional, State, and national efforts to address storm water pollution issues that are beyond the Cameron County 's ability to control at the local level.

4.3 PRIORITIES AND MANAGEMENT ACTIVITIES

Plan priorities for 2008-2013 include implementing the Cameron County SWMP and achieving regulatory compliance. The Cameron County SWMP staff will continue to develop, implement and improve activities to reduce storm water pollution to the MEP and eliminate prohibited non-storm water discharges, while facilitating understanding and involvement in storm water management by various Cameron County departments.

Another high priority for Cameron County SWMP staff will be to keep abreast of the latest technology and approaches to storm water management. Activities will also strive to encourage environmental stewardship and continue to build partnerships with other agencies and the community for active participation in accomplishing the Cameron County SWMP mission.

4.4 LEGAL AUTHORITY

Legal authority and responsibility to implement a municipal storm water management plan is provided in the CWA and the TCEQ TPDES. To the extent allowed by law, Cameron County shall ensure legal authority to control discharges to and from those portions of the MS4 over which it has jurisdiction. This legal authority may constitute a combination of statute, ordinance, permit, contract, order, or inter-jurisdictional agreements between MS4 municipalities with adequate existing legal authority to accomplish the following items:

- Control the contribution of pollutants to the MS4 by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activities;
- Prohibit illicit discharges to the MS4;
- Control the discharge of spills and the dumping or disposal of materials other than storm water (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, etc.) into the MS4;
- Control the contribution of pollutants from one portion of the MS4 to another;
- Require compliance with conditions in ordinances, permits, contracts or orders; and

- Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with permit conditions.

4.5 OVERALL COMMITMENT

Cameron County SWMP is a storm water management program that includes the traditional core elements necessary to comply with Federal and State regulations. Cameron County seeks to implement innovative, proactive activities to tackle the most significant local problems. Public education and resultant changes in behavior are necessary to bring about long-term improvements to urban runoff quality and protection of the environment.

Another important aspect of the Plan is that each core element includes ongoing development in an interactive feedback process, resulting in a host of activities tailored to meet Plan goals. It is important to strive to measure or assess the effectiveness of activities and BMPs, so they can meet current regulatory conditions and be improved as needed.

Cameron County as a whole, including elected officials, department heads, and county employees, are responsible for compliance with the TCEQ MS4 Permit requirements and the Cameron SWMP. The review process will ensure that construction projects have the necessary permits and that onsite regional control measures are considered for new development projects.

Cameron County staff assignments include responsibilities associated with the program activities, as well as, assistance with management activities such as coordination with other agencies. The Plan will establish several control programs, procedures, and policies aimed at identifying and reducing sources of storm water pollution and water quality degradation caused by discharges, during wet and dry weather, from the Cameron County storm drain system. Cost effectiveness will be obtained by integrating the Plan with existing resources, programs, and functions whenever possible.

One of the goals of the Program is for the Cameron County employees to become concerned and knowledgeable, as well as responsible for protecting the quality of storm water. Implementation of the Program will require that active participation and assistance of several Cameron County departments to help reach our goals.

4.6 ANNUAL PLANNING AND REPORTING

At the end of each fiscal year, the Cameron SWMP Coordinators will develop an Annual Report, which will summarize the progress of implementing the SWMP and qualitatively evaluate the effectiveness of the BMPs and measurable goals. The Annual Report will be available for review upon request.

Each Cameron County department involved in the implementation and enforcement of the storm water management program shall contribute to the preparation of an annual system-wide report to be submitted by no later than six months following the period covered by the report. The Annual Report shall cover the 12 month period beginning on the effective date of this permit and annually thereafter. The preparation and submittal of a system-wide Annual Report shall be coordinated by a "committee" composed of the Cameron County's SWMP Coordinators, including a member or designated representative from each Cameron County departmental agency responsible for the implementation and enforcement covered under this

permit. Each Cameron County departmental agency shall be individually responsible for maintaining its informational tracking database, providing information on the portions of the MS4 for which they are accountable and for providing this information in a timely manner with regard to the development of the system-wide Annual Report.

The Annual Report shall include a statement or resolution certifying that the contents of the Annual Report have been appraised or reviewed by the program administration and all responsible Cameron County departments prior to the development and submittal of the system-wide Annual Report.

The Annual Report shall include the following sections:

- Contacts List - list of contacts and responsible parties (e.g., agency, name, phone number) who had input and are responsible for the preparation of the Annual Report.
- SWMP Evaluation - provide an overall evaluation of the SWMP including: Program Objective, Major Findings, Major Accomplishments, Overall Program Strengths/Weaknesses, and the Future Direction of the Program.
- Narrative Report - provide a general discussion of SWMP elements, explanations of element activity deficiencies, assessment of controls, status of compliance, implementation, activities completed and those in progress.
- Monitoring Section - include a summary of monitoring program developed and implemented under the permit along with a brief summary statement of the objective of each monitoring project included under the program, a summary chart of the data from the completed monitoring activities, a discussion of any results or conclusions derived from the completed monitoring activities, status of monitoring with respect to the developed compliance schedule.
- Summary of SWMP and Monitoring Modifications - provide a summary of SWMP and Monitoring Modifications made during the permit year.
- Fiscal Analysis - provide a complete fiscal analysis for each implemented program, both for the past calendar year and the next. The analysis shall indicate budgets and funding sources.
- Appendices - list of any data specifically requested by EPA to substantiate statements and conclusions reached in the Annual Report.

4.7 STAFF/BUDGET RESOURCES

Cameron County recognizes the multi-department commitment to this effort. Cameron County has identified Ernesto Hinojosa – Staff Engineer Transportation Division and his staff as the principal program coordinators. In addition, the program will seek the assistance of the Public Outreach and Permit Enforcement Managers, Planning Department, Health Department, and Environmental Health Department managers, supervisors, code enforcement officers, engineers, inspectors, engineering technicians, and field personnel. The Cameron County SWMP will also seek the assistance of vested volunteer organizations to the extent that they are available.

Implementation of the Cameron County SWMP will have a significant financial impact. Adequate funding needed to maintain staff, equipment and materials necessary to develop and implement an effective storm water management program is critical to its success, but attaining it can be difficult as many other programs compete for limited revenue from a general fund. As an operator of a regulated small MS4, Cameron County will be faced with the challenge of finding funding for its storm water management program, as well as developing and considering creative alternative funding options. The following provides a brief introduction to some of the various funding options currently being used across the country to finance storm water management programs, which Cameron County is currently reviewing for funding of the Cameron County SWMP:

- **Debt Financing:** Typically used for capital intensive-intensive projects, local governments can issue debt to finance storm water management programs and facilities. Revenue bonds---or bonds that rely on ongoing source of revenue may be used. Alternatively, a general obligation bond can be issued which are backed by the full faith and credit of a municipality (based on its ability to generate revenues through taxes and other fees).
- **Grants and Loans:** Federal, State, or Regional grant or loan funds may be available for some elements of the storm water program, depending on the BMPs selected and the location. Grants and loans are usually applicable to specific projects and not on-going activities, such as operation and maintenance.
- **Users/Utility Fees:** Utility services charges are rates billed to customers for providing storm water management services. These service charges may be flat rates, or variable rates based on classes of customers (e.g., residential, commercial, industrial). Utility service charges may represent a dedicated source and an ongoing method of funding for some or all storm water management programs.
- **Special Assessment:** Properties can be assessed annually to fund storm water management programs. Often, special assessments are used to fund a special district or authority that can implement all or portions of a region's storm water management program.
- **Local Improvement:** Under this type of funding system, individual properties benefited by storm water projects are assessed to fund the project. Some states require special enabling legislation to establish this type of special benefits district.
- **General Fund:** General fund monies are used for many storm water programs. If storm water programs are funded from the General Fund, the programs are at risk in each budget cycle. In addition, in order to increase funding levels for the program, other local government services may be affected or a general tax increase may be required.
- **Inspection Fees:** Plan review and inspection fees allow the community to recover some or all of the direct cost associated with performing design reviews for pre-construction and post-construction BMPs.
- **Developer Impact Fees:** The developers construct needed on-site storm water facilities as a condition of development and bear associated costs.

- **Alternative Fees:** Instead of constructing on-site facilities to meet development requirements, developers may be given the option of paying a comparable fee to be used by the local government to build regional facilities that are designed to meet the same objectives as the developer-constructed on-site mitigation.
- **Connection Fees:** A onetime charge assessed at the time of development to recover a proportionate share of the cost of existing facilities and planned future facilities. The applicability depends upon legislation in each state.
- **319(h) Nonpoint-Source Implementation Grants:** These are formulated grants provided to the states to implement nonpoint-source mitigation projects and programs in accordance with Section 319 of the Clean Water Act. Examples of projects that 319(h) grants cover are implementation of best management practices (BMPs) in agricultural settings; implementation of BMP systems for lake, estuary, or stream watersheds; and basin-wide education programs. These grants are funded federally for 60% of the cost of the project, with a local match of 40%.
- **Hazardous Mitigation Grant Program:** The purpose of this funding source is to provide financial assistance to state and local governments for projects that reduce or eliminate the long-term risk to human life and property from the effects of natural hazards. The grant program has 75% federal and 25% local contribution. The nonfederal share may be met with local cash contributors, in-kind services, or certain other grants such as Community Development Block Grants. The Federal Emergency Management Agency makes the final decisions on project eligibility, but the state agencies administer the program. Eligible projects include acquisition of property retrofitting of buildings, development of standards with implementation as an essential component, and structural hazard control or protection measures such as dams and sea walls.
- **Clean Water State Revolving Loan Fund:** Initially funded with federal and state money and continued by repayment of earlier loans, State Revolving Funds (SRFs) provide low-interest loans for storm water programs-usually a small fixed interest rate of 3-4% and the closing cost. Nonpoint-source funds may be utilized for major capital equipment, capital projects, and associated engineering costs related to the projects. The Clean Water Act of 1987, Section 606, requires each state to prepare annually an Intended Land Use Plan identifying the use of funds in the Clean Water SRF.
- **Stream Restoration Mitigation Bank:** This relatively new financial tool will gain wider acceptance as watershed management and development continue to occur. It can be a public or public/private relationship tool. Communities assess their streams for restoration, preservation, and enhancement, and then submit a plan to the Army corps of Engineers for approval and the establishment of the bank. If local governments develop the bank on their own, they can sell the credits for the restoration of the stream segments. If a partnership is established, a bank is created and credits are sold for development of the stream bank program. There are also other ways to develop this type of program funding tool.
- **Surface Transportation Program:** This federally funded program, known as TEA-21, can be used by local governments for any roads not functionally classified as local or rural minor collectors. Each state sets aside funds for transportation enhancements, which can include but are not limited

to such activities as wetland mitigation and implementation of control technologies to prevent polluted highway runoff from reaching surface water bodies. This program also funds other enhancements not linked to watershed-related projects. Local governments, profit and nonprofit entities, and colleges and universities may be eligible for this funding, which usually 80% funding is federal and 20% is local match.

SECTION 5 RECEIVING WATER DESCRIPTION

5.1 URBAN RUNOFF BACKGROUND

Runoff from storms is part of the natural hydrologic process. Rainwater that does not infiltrate into the ground flows by gravity into our stream, rivers, lakes, and estuaries. The development of land for housing, agriculture, business, and industry alters the quantity and quality of runoff entering our waterways. The construction of roofs, roads, and other impervious surfaces increases the volume and velocity of storm water runoff that enter our water bodies. In response, the banks of our streams and rivers erode when they are forced to handle the extra water. This runoff may carry a wide range of pollutants including sediment, nutrients, pathogens, trash and debris, petroleum hydrocarbons, and synthetic organics, such as pesticides.

Storm water does not originate from a distinct point source, such as a sanitary sewer treatment plant outfall or industrial facility; rather it is considered a non-point source of pollution. Non-point sources (NPS) of pollution originate from runoff from lawns, streets, and agricultural activities. Urban runoff transporting non-point source pollution is widely regarded as the nation's leading threat to water quality. Urbanization and increases in population directly affect the type of pollution that enters our storm drains that will eventually affect and reach our local waterways.

5.2 RIO GRANDE, ARROYO COLORADO, AND THE LOWER LAGUNA MADRE

The Rio Grande is the international boundary between Texas and Mexico. The river, which starts in Colorado, enters the western end of the Rio Grande Valley near the town of Roma and finishes the last 150 miles of its more than 1,600-mile course passing through the valley before it empties into the Gulf of Mexico at Brownsville, TX.

The Arroyo Colorado is one of the more complex watercourses in the state. From its headwaters to its mouth, it has been extensively modified by the activities of man, which is reflected in both its hydrology and water quality. Watershed activities are principally agricultural, although the Arroyo also drains the urban areas of Harlingen, McAllen, and other smaller communities who add their treated wastewater to the river. Its lowest reach is estuarine, and drains into the Laguna Madre, an extremely productive, high salinity lagoon lying behind the barrier of Padre Island.

The water quality of the Arroyo Colorado has been variable historically. At low stages, it exhibits all the problems expected of an effluent dominated system in a hot, arid climate: high coliform counts, low dissolved oxygen and high algal concentrations. In the estuarine reach, these parameters are intensified by the circulation associated with salinity intrusion in a deepened channel. These same areas act as sinks for silt and mud, and frequently absorb contaminants. During high stages, the water may be affected by urban and agricultural contaminants, especially pesticides.

The Laguna Madre is a large body of shallow water separating Padre Island from the South Texas mainland. It covers 609 square miles of estuarine and coastal marine systems. The boundary of Padre

Island National Seashore encompasses approximately 20,000 acres of the Laguna Madre. The Laguna Madre is located in parts of Cameron, Willacy, Kennedy, Kleberg, and Nueces counties.

Since no major rivers flow into the Laguna Madre, its salt content is quite high, about 35 parts per 1000 parts of water. This increases to 45 parts per 1000 parts of water in the Lower Laguna Madre and during periods of hot, dry weather.

The average water depth is about 2.5 feet, with some areas reaching a depth of 5 feet. Variable depths and salinity support different types of sea grasses, hyper-saline marches, algal flats and lomas.

The Laguna Madre is an important breeding ground for many aquatic birds, as well as an important wintering and stopover area for numerous species. The extremely shallow areas provide excellent feeding grounds for winter duck populations, which number in the thousands. The Lower Laguna Madre receives significant quantities of agricultural pesticides and other environmental contaminants from the Arroyo Colorado, irrigation drainage of the Lower Rio Grande Valley. Oil spills from barges, discharge from the Mexican side of the Rio Grande, and hydrocarbon extraction are the threats posed by the high volume of commercial activities taking place on the Laguna Madre.

SECTION 6 MINIMUM CONTROL MEASURES

In order to meet the federal requirements of Section 402(p)(6) of the CWA, federal regulations (40 Code of Federal Regulations (CFR) Chapter 122), and state regulations, (Chapter 26 of the Texas Water Code) as specified in the TPDES Draft General Permit TXR040000, a small MS4 must protect and reduce pollutants from storm water. The SWMP must set measurable goals and provide a schedule for the implementation of specific activities referred to as BMPs. Various BMPs must be developed for each of the six minimum control measures (MCM). A description of each MCM is as follows:

6.1 PUBLIC EDUCATION & OUTREACH ON STORM WATER IMPACTS

Public education is an important element in preventing water quality impacts from storm water pollution. The goal of the Cameron County SWMP public outreach and education component is to inform targeted public about storm water pollution and to encourage behavior that reduces negative impacts to the environment. The public outreach and education program consists of a variety of written materials, a project website, workshops, and other strategies, designed to appeal to the general public while providing technical information on the negative impacts of polluted storm water runoff.

The goal of the county's SWMP public outreach and education program is to minimize potential storm water pollution from accidental spills, illicit connections, and illegal discharges and dumping. Cameron County aims to reduce potential for storm water pollution by the development and implementation of an Educational Program to Civil Groups and Real Estate Organizations – which highlights strategies to increase awareness of water quality issues, storm water pollution, and pollution prevention concepts and practices.

Cameron County SWMP will use a variety of methods to educate the public about the importance of managing storm water. In addition, Cameron County will investigate the benefits of undertaking a "cooperative approach" to storm water management with local municipalities and targeted agencies, such as the local Association of General Contractors (AGC), the Cameron County area Association of Realtors, and other respective civil and/or citizen groups through the signing of "Interlocal Cooperative Agreements", in which respective parties agree to participate in the efforts to increase awareness of water quality issues, the effects of storm water pollution, and overall storm water management. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps of tasks. The responsibility for the implementation of this minimum measure is described with each BMP procedure.

6.2 PUBLIC INVOLVEMENT / PARTICIPATION

Without citizen input, local and state governments cannot have a true understanding of community values and needs with respect to public services. Effective public involvement complements the strategic planning process, helps to form a consensus, and lays the foundation for solid decisions.

Cameron County's Storm Water Management Program (SWMP) will include a comprehensive public education/outreach and public involvement component that will underline the county's strategy to provide

opportunities to engage and inform citizens about the impacts polluted storm water runoff discharges can have on water quality. Moreover, key target groups, such as civil groups and real estate organizations, will be able to become involved and make recommendations on strategic and effective implementation techniques – thereby, facilitating the public involvement process and providing a venue for public education and outreach.

The SWMP public involvement program will help guide Cameron County's efforts to effectively implement a program that will help prevent polluted storm water runoff, provide educational tools for identifying and addressing environmental problems in affected communities, and encourage citizen participation in program development and implementation.

The objective of the Cameron County SWMP is to provide the highest quality public involvement possible for civil groups, real estate organizations, and other targeted public in order to maximize community awareness and education. This can only be achieved when residents are identified and brought into the planning process.

Along with the desire to include a diversified public in its planning processes, it is advised that Cameron County and other program officials/participants rely on various federal statutes to help guide its public involvement activities.

Title 23; Section 450.212, Code of Federal Regulations leaves the methods for carrying out public involvement to the discretion of each state; however, public involvement processes must provide:

- Early and continuous opportunities for involvement
- Timely information on project issues, processes and procedures
- Reasonable access to technical and policy information
- Adequate notice of involvement opportunities at key decision points
- Methods for considering and responding to public input
- A course of action for seeking out and considering the needs of traditionally underserved groups
- Periodic review and evaluation of the public involvement process

The Americans with Disabilities Act of 1990 (ADA) states that “no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity.” Sites for public involvement activities, as well as the information presented, must be accessible to persons with disabilities. ADA requires specific participation – such as:

- Outreach by developing contacts, mailing lists, and other means of notification
- Consultation with disabled individuals
- Opportunity for public comment

- Accessible formats
- Public hearings
- Summaries of significant issues raised during the public comment period
- Ongoing efforts to involve persons with disabilities in planning

Title VI of the Civil Rights Act of 1964, together with related statutes and regulations, provide that “no person shall on the ground of race, color, national origin, gender, or disabilities be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal funds. The entire institution, whether educational, private or governmental must comply with Title VI and related Federal civil rights laws, not just the program or activity receiving federal funds.”

Executive orders regarding environmental justice and outreach to persons with limited English proficiency are also regulated under Title VI of the Civil Rights Act.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 1994, states that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations.” Underserved groups such as low-income and minority populations must be identified and given increased opportunity for involvement in order to ensure effective participation.

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, 2000, requires that recipients of federal financial aid must ensure that the programs and activities normally provided in English are accessible to persons with limited English proficiency. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps of tasks. The responsibility for the implementation of this minimum measure is described with each BMP procedure.

6.3 ILLICIT DISCHARGE AND ELIMINATION

The Illicit Discharge Detection and Elimination minimum measure consists of Best Management Practices (BMPs) that focus on the detection and elimination of illicit discharges into the MS4. A storm sewer system map showing the location of all outfalls and the names and location of all receiving waters will be developed from existing mapping information, GIS map base. The BMPs describe map update procedures; the legal authority mechanisms (to the extent allowable under State, or local law) which will be used to effectively prohibit illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; the dry weather screening program and procedures for tracing and locating the source of an illicit discharge; procedures for training of public employees, businesses, and the general public with regard to the hazards associated with illegal discharges and improper disposal of waste are described in the Public Education minimum measure.

6.4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

The Construction Site Runoff minimum measure consists of Best Management Practices (BMPs) that focus on the reduction of pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs describe the legal authority mechanism (to the extent allowable under State, or local law) which will be used to require erosion and sediment controls; enforcement procedures and actions to ensure compliance; requirements for construction site operators to implement appropriate erosion and sediment control BMPs; requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site; procedures for site plan review which incorporate the consideration of potential water quality impacts; procedures for receipt and consideration of information submitted by the public and procedures for site inspections and enforcement of control measures. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

6.5 POST-CONSTRUCTION STORM WATER MANAGEMENT

The Post-Construction Storm Water Management minimum measure consists of Best Management Practices (BMPs) that focus the prevention or minimization of water quality impacts 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 that discharge into the small MS4. The BMPs describe structural and/or non-structural practices; the legal authority mechanism (to the extent allowable under State, or local law) which will be used to address post-construction runoff from new development and redevelopment projects; and procedures to ensure long term operation and maintenance of BMPs. Best Management Practices focusing on education programs for developers and the general public with regard to project design that minimize water quality impacts are described in the Public Education minimum measure. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

6.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The Pollution Prevention/Good Housekeeping minimum measure consists of Best Management Practices (BMPs) that focus on training and on the prevention or reduction of pollutant run off from municipal operations. The BMPs describe the use of available training materials available from EPA, State, or other organizations; specific municipal operations that are impacted by the proposed operation and maintenance program (BMPs); maintenance activities, schedules and long term inspection procedures for controls to reduce floatable and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste areas; procedures for the proper disposal of waste removed from the MS4 and municipal operations, including dredge spoil,

accumulated sediments, floatables and other debris; and procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices. Evaluation of success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

SECTION 7 BEST MANAGEMENT PRACTICES (BMP)

The following presents a 5-year plan to develop a SWMP for Cameron County. The program addresses the six MCM, the regulatory requirements, the existing program, the goals of each BMP, and the schedule of implementation of the BMP.

7.1 PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

7.1.1 REGULATORY REQUIREMENTS

40 CFR 122.34 (b)(1) states a public education program and outreach activities must be implemented to distribute educational materials to the community about the impacts of storm water discharges on water bodies and the steps the public can take to reduce pollutants in storm water runoff. The EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program, and that the public participation process should make efforts to reach out and engage all economic and ethnic groups.

The Texas Draft General Permit specifies a public education program, which distributes educational material, conducts outreach activities to the community, to inform them about the impacts of polluted storm water runoff can have on water quality, and was they can minimize it. Groups to be informed are residents, visitors, public service employees, business, commercial and industrial facilities, and construction site personnel.

7.1.2 CURRENT PROGRAMS

Cameron County does not have a current public education and outreach storm water impacts program.

7.2 SELECTED PUBLIC EDUCATION AND OUTREACH (PE/O) BMPS:

7.2.1 PE/O – BMP 1 – DEVELOP AND MAINTAIN A WEBSITE

Cameron County has selected to create, maintain, and update a website as a tool to provide easy access to the public for storm water education. An internet website will be created for Cameron County SWMP that will be accessible through the County's home page website. The website provides information on all storm water outreach activities, including brochures, bulletins, and workshops, as well as bulletins on related topics, information related to construction and maintenance activities, and links to key related sites.

7.2.1.1 Measurable Goals

Creation/development of the website maintained as needed and updated quarterly.

7.2.1.2 Schedule: Website

Activity	Date Due
1. Develop / Design	Year One
2. Maintain and Update	Year Two - Five

7.2.1.3 Responsible Persons

To be determined.

7.2.2 PE/O - BMP 2 – STORM WATER BUMPER STICKER

Cameron County will create a bumper sticker campaign to help increase storm water awareness. This public information BMP will use a creative logo and phrase/slogan that will help “brand” the storm water management plan. The bumper sticker logo and phrase/slogan will incorporate local, recognizable images that will represent the importance of storm water to the local environment.

7.2.2.1 Measureable Goals

Develop logo, phrase/slogan, create and distribute 1000 bumper stickers.

7.2.2.2 Schedule: Storm Water Bumper Sticker

Activity	Date Due
1. Create slogan for bumper stickers	Year One
2. Print Bumper Stickers	Year Two
3. Distribute Stickers	Year Two

7.2.2.3 Responsible Persons

To be determined.

7.2.3 PE/O – BMP 3 – INFORMATIONAL BROCHURE

Cameron County SWMP officials will issue information brochures covering pertinent topics in storm water management and research. The brochures will be distributed to the general public meetings, to members of local governing bodies, members of the press, Cameron County department(s) personnel, public agency personnel, citizen/civil groups, real estate organization meetings, and other interested parties throughout the county. The brochures will be printed in both English and Spanish and will also be available through the program website. Proposed brochures may include the following topics:

Storm Water Program Brochure: Describes Cameron County's overall storm water program and how it will be implemented to meet state requirements.

Research and Monitoring Studies Brochure: Describes all categories of storm water research and monitoring studies, as well as environmental effects of polluted storm water.

Litter Management Brochure: Describes Cameron County's litter management regulations and programs, including illegal dumping fines and compliance monitoring.

7.2.3.1 Measurable Goals

Design, print, distribute 1,000 brochures. Determination of target audience and manner and level of detail of information to be used in the brochure.

7.2.3.2 Schedule: Informational Brochure

Activity	Date Due
1. Determine target audience	Year Two
2. Determine manner/level of information	Year Two
3. Design brochure	Year Two
4. Print and distribute	Year Three

7.2.3.3 Responsible Persons

To be determined.

7.2.4 PE/O -BMP 4 HOTLINE

Cameron County has elected to develop a Hotline for the purpose of disseminating general information concerning the topic of storm water and its management and the county's storm water project. The hotline's phone number will be printed on various paper materials that will be circulated. This hotline, will also take citizens reports of illicit dumping and poor water quality.

7.2.4.1 Measurable Goals

The measurable goals for implementation of BMP4 are the creation of a general educational hotline accessible by the public. This program will work to research a series of anticipated questions along with being able to present an overview of this county's SWMP. The goals shall be implemented according to the schedule below.

7.2.4.2 Schedule: Hotline

Activity	Date Due
1. Outline the County's SWMP	Year One
2. Create and research a series of anticipated questions	Year One
3. Install Hotline	Year Two
4. Maintain Hotline	Year Two - Five

7.2.4.3 Responsible Persons

To be determined.

7.2.5 PE/O -BMP 5 EDUCATIONAL PROGRAM FOR COMMERCIAL, INDUSTRIAL FACILITIES AND CONSTRUCTION SITE

Cameron County has chosen to present an educational program to civil groups, real estate organizations, commercial, industrial, and construction site owners/operators. The educational program will address specific storm water issues relevant to the different groups found within the county's SWMP.

7.2.5.1 Measurable Goals

The measurable goals for implementation of this BMP is to determine what issues related to storm water management are pertinent to each group in the community and develop a program to meet their needs. The goals shall be implemented according to the schedule below.

7.2.5.2 Schedule: Educational Program (Commercial/Industrial)

Activity	Date Due
1. Determine pertinent issues	Year One
2. Develop program	Year One
3. Present program	Year Two - Five
4. Update program	Year Three - Five

7.2.5.3 Responsible Persons

To be determined.

7.2.6 PE/O -BMP 6 EDUCATIONAL PROGRAM FOR COUNTY ELECTED OFFICIALS, COUNTY EMPLOYEE, AND INSPECTORS

Cameron County has chosen to present an educational program to County Elected Officials, County Employees, and County Inspectors on erosion control. The educational program will address specific storm water issues relevant to the different groups found within the county.

7.2.6.1 Measurable Goals

The measurable goals for implementation of this BMP is to determine what issues related to storm water management are pertinent to each group in the county work force and develop a program to meet their needs. The goals shall be implemented according to the schedule below.

7.2.6.2 Schedule: Educational Program (County)

Activity	Date Due
1. Determine pertinent issues	Year One
2. Develop program	Year One
3. Present program	Year Two - Five
4. Update program	Year Three - Five

7.2.6.3 Responsible Persons

To be determined.

7.3 PUBLIC INVOLVEMENT AND PARTICIPATION

7.3.1 REGULATORY REQUIREMENTS

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

The Texas General Permit states one must implement a public involvement and participation program that includes provisions to allow opportunities for all constituents within the MS4 to participate in the development and implementation of the storm water management program, comply with state and local public notice requirements, and that the MS4 must document efforts to ensure sufficient opportunities were allotted to those interested.

7.3.2 CURRENT PROGRAMS

At the present time, Cameron County has no public involvement program for storm water protection.

7.4 SELECTED PUBLIC INVOLVEMENT AND PARTICIPATION (PIP) BMPS

7.4.1 PIP -BMP 1 POSTER BOARD CONTEST

Cameron County has selected to hold a contest designed to raise awareness of Storm Water Pollution and Management. It will be advertised to the public to create a poster that ties in storm water related issues and their affect on fishing and recreation in the Laguna Madre Ecosystem. There will be a first place, second place, and third place winner. The poster selected for first place can then be replicated and placed in commissioners' court, and other public places (i.e. Library), if arrangements can be made.

7.4.1.1 Measurable Goals

Cameron County shall determine the rules for the poster contest and select the appropriate means to get the word out to the public on this poster contest. A selection of judges will be made for the contest. A day shall be selected for a public judging of the posters by the panel of judges. The winning poster will be replicated and placed in public venues.

7.4.1.2 Schedule: Board Contest

Activity	Date Due
1. Determine rules for contest	Year One
2. Select judges	Year Two
3. Announce contest	Year Two
4. Judge posters	Year Three
5. Print/post copies of winning posters	Year Three

7.4.1.3 Responsible Persons

To be determined.

7.4.2 P/I/P -BMP 2 PRESENTATIONS OUTSIDE OF BOARD MEETINGS

Cameron County will provide public Presentations outside of the Board Meetings to present a public forum to present the SWMP to the public and solicit input into the plan development. This will allow the public to stay informed with proceedings, procedures and planning.

7.4.2.1 Measurable Goals

The measurable goal for implementation of BMP2 is to hold three public presentations. Implementation will be according to the schedule below.

7.4.2.2 Schedule: Public Meeting/Presentation

Activity	Date Due
1. Prepare presentations	Year One
2. Present presentations/hold meetings	Year Two
3. Collect public input	Year Two
4. Modify SWMP if necessary	Year Three

7.4.2.3 Responsible Persons

To be determined.

7.4.3 P/I/P – BMP 3 STORM DRAIN MARKING

Cameron County will develop a storm drain-marking program addressed at identifying all storm drains within Cameron County's system. This program may use stencil kits, pre-cast messaging, and tiles to identify storm drains and not to dump pollutants into the marked drain. This program may utilize the slogan/phrase and storm water logo is created in the SWMP to help identify storm drains. This program may also combine County employees as well as outside groups to help implement this program.

7.4.3.1 Measurable Goals

Develop marking information, develop type of markings to be used, and begin marking program.

7.4.3.2 Schedule

Activity	Date Due
1. Develop storm drain markings – wording & type	Year One
2. Identify volunteer groups and County staff to be involved in marking program	Year Two
3. Implement Marking Program	Year Three - Five

7.4.3.3 Responsible Persons

To be determined.

7.5 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.5.1 REGULATORY REQUIREMENTS

40 CFR 122.34 (b) (3) states develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26 (b) (2)) into your small MS4. Develop a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the United States that receives discharges from those outfalls. To the extent allowable under state, tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions. Develop and implement a plan to detect and address non-storm water discharges including illegal dumping, to your system. Inform the public employees, businesses, and the public of hazards associated with illegal discharges and improper disposal of waste. Address categories listed in 122.34 (b) (3) (D) (iii) if you determine they are significant contributors of pollutants to MS4.

The Texas General Permit states that MS4 must develop a program to detect and eliminate illicit discharges to the MS4, including the manner, ordinance, or other regulatory mechanism used to effectively prohibit illicit discharge. The SWMP must address detection, a list of the techniques for detecting illicit discharges, elimination and appropriate enforcement procedures and actions for removing the source of an illicit discharge.

The SWMP must also develop a program to detect, non-storm water discharges and illegal dumping to the MS4, including the development of ordinance and appropriate enforcement procedures and actions. A list of occasional incidental non-storm water discharges may also be developed. Any local controls or conditions placed on these discharges must be documented in the SWMP. A list of incidental non-storm water discharges that are reasonably expected not to be significant sources of pollutants, which will not be addressed as illicit discharge may be developed.

A map of the storm sewer system must be developed and must include location of storm water pipes, ditches, and other conveyances owned by the permittee, location of all major outfalls, and names and location of all water of the US that receive discharges from the outfalls. Sources of information in the development of the map, how outfalls will be verified and how the map will be regularly updated must be included in the SWMP.

7.5.2 CURRENT PROGRAMS

Cameron County does not have a current program to address illicit discharges and their subsequent elimination.

7.6 SELECTED ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD/E) BMPS

7.6.1 IDD/E -BMP 1 CAMERON COUNTY SYSTEM MAP

Cameron County currently has a GIS mapping system in place. However this system is used primarily for emergency service vehicle use (911). Cameron County will work to incorporate storm water elements such as the location of storm sewer pipes, ditches, and other conveyances, or at a minimum, the drainage area for each outfall, and names and locations of all major laterals and all waters of the US that receive discharges from outfalls.

7.6.1.1 Measurable Goals

The measurable goal for implementation of this BMP is to identify structures and to map a specific percentage of the county's drainage system per year.

7.6.1.2 Schedule: GIS-Based System Map

Activity	Date Due
1. Continue GIS mapping updates	On-going
2. Identify permit (structures)	Year Two-Five
3. Input permit information	Year Two-Five

7.6.1.3 Responsible Persons

Text

7.6.2 IDD/E -BMP 2 ILLICIT DISCHARGES AND DUMPING REPORTING HOTLINE

The county has selected to add to the public information hotline for implementation as part of this SWMP. This BMP shall provide should add the capability to report illicit discharges and dumping to the public information hotline. This BMP will supplement the drive by inspections.

7.6.2.1 Measurable Goals

The measurable goal for implementation of this BMP is to install and operate the Detection/Reporting portion of the Hotline established for Public Outreach.

7.6.2.2 Schedule: Hotline

Activity	Date Due
1. Add illicit reporting capacity to the existing hotline	Year Two - Five

7.6.2.3 Responsible Persons

To be determined.

7.6.3 IDD/E -BMP 3 WATERSHED SIGNAGE

Cameron County shall develop a sign that can be used at specific sites to inform the public as to which watershed any discharge will ultimately flow. These signs will incorporate the Cameron County SWMP logo and phrase/slogan.

7.6.3.1 Measurable Goals

The measurable goal for implementation of this BMP is to create 10 signs that indicate that any discharge in an area goes to the Laguna Madre, Arroyo Colorado, or Rio Grande watershed and ultimately has an impact on these water bodies.

7.6.3.2 Schedule: Watershed Signage

Activity	Date Due
1. Determine location for posting signs	Year One
2. Determine wording of signs	Year One
3. Create and post signs	Year Two

7.6.3.3 Responsible Persons

To be determined.

7.6.4 IDD/E -BMP 4 DEVELOPING ORDINANCES TO PROHIBIT NON-STORM WATER DISCHARGE

Cameron County has elected to develop a county ordinance to prohibit non-storm water discharge. The ordinance will address such areas as illicit connections, street and utility construction, improper disposal, organic waste, litter and refuse control.

7.6.4.1 Measurable Goals

A committee shall be formed in order to research and decide which issues will need to be addressed specifically for this county's SWMP. The committee will then customize an ordinance for the county. The ordinance will then be put into place and enforced.

7.6.4.2 Schedule: Ordinances

Activity	Date Due
1. Form committee	Year Two
2. Develop ordinances	Year Two
3. Implementation and enforcement of ordinances	Year Two - Five

7.6.4.3 Responsible Persons

To be determined.

7.7 CONSTRUCTION SITE STORM WATER CONTROLS

7.7.1 REGULATORY REQUIREMENTS

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

The Texas General Permit states the MS4 operator must develop, implement and enforce a program to reduce pollutants in any storm water runoff from construction activities that results in a land disturbance of greater than or equal to one acre or if the construction activities is part of a larger common plan of development. At a minimum an ordinance to require erosion and sediment control as well as sanctions to ensure compliance to the extent allowable under state and local law. The construction site contractor at a minimum must implement erosion and sediment control BMPs, control waste, such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality. The MS4 must develop procedures for site plan review receipt and consideration of information submitted by the public and site inspection and enforcement of control measures.

7.7.2 CURRENT PROGRAMS

The county presently has building code procedures for subdivision development. The county is to review all subdivision plans to ensure developers obtain a drainage permit. The Cameron County Planning Department is the regulatory agency, for the subdivision codes as they employ the building inspectors.

7.8 SELECTED CONSTRUCTION SITE STORM WATER CONTROLS (CSSWC) BMPS:

7.8.1 CSSWC -BMP 1 EVALUATE AND UPDATE REGULATORY AUTHORITY AND PROCEDURES

Cameron County will review all existing regulated authority and procedures, ensure they meet existing federal and state regulations in regards to Storm water and update the procedures, if necessary. The procedures will require construction operations to comply with EPA/TCEQ rules and regulations. The procedures will include the construction site operators to control waste (discarded building materials, litter, chemicals, concrete truck washout, and sanitary waste), allow the county review of site plans, (that incorporates potential water quality impacts), procedures for receipt of information submitted by the public, procedures for site inspection and enforcement of control measures.

7.8.1.1 Measurable Goals

Review existing regulatory authority and procedures and ensure they are updated with current Federal and State regulations.

7.8.1.2 Schedule: Evaluate and Update Regulatory Authority and Procedures

Activity	Date Due
1. Review of code	Year One
2. Draft modification	Year Two
3. Public comment to changes	Year Two
4. Approval by Commissioner's Court	Year Three

7.8.1.3 Responsible Persons

To be determined.

7.8.2 CSSWC -BMP 2 DEVELOP AN EROSION AND SEDIMENT CONTROL ORDINANCE

Develop and implement a construction site ordinance, which meet EPA's requirements and TCEQ's storm water general permit requirements.

7.8.2.1 Measurable Goals

The measurable goals include development of an erosion and sediment control ordinance.

7.8.2.2 Schedule: Erosion & Sediment Control Ordinance

Activity	Date Due
1. Develop and draft ordinance	Year Two
2. Obtain public input	Year Two
3. Approval by Commissioners Court	Year Three
4. Implement ordinance	Year Three
5. Enforce ordinance	Year Three - Five

7.8.2.3 Responsible Persons

To be determined.

7.8.3 CSSWC -BMP 3 INSPECTION OF CONSTRUCTION SITES

Shall establish an inspection program for construction sites within Cameron County, to ensure they are complying with federal, state, and local storm water requirements.

7.8.3.1 Measurable Goals

The measurable goals include developing procedures for construction site inspections and conducting inspections of 20 % of construction site within the second year.

7.8.3.2 Schedule: Inspection of Construction Sites

Activity	Date Due
1. Develop inspection procedures	Year One
2. Conduct inspections (20% of total)	Year Two
3. Enforce ordinances	Year Two

7.8.3.3 Responsible Persons

To be determined.

7.9 POST CONSTRUCTION STORM WATER MANAGEMENT FOR NEW DEVELOPMENT/REDEVELOPMENT

7.9.1 REGULATORY REQUIREMENTS

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

Texas General Permit states the MS4 operator must develop, implement and enforce a program to address storm water 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 that will result in disturbance of one or more acres that discharge into the small MS4. Cameron County's program will ensure controls are in place that will minimize water quality impacts, develop, and implement strategies for structural and non-structural BMPs appropriate for the community, develop ordinance to address post construction runoff allowable under state and local law, and ensure adequate long-term operation and maintenance of BMPs.

7.9.2 CURRENT PROGRAMS

At the present time there is not a post construction storm water management program in place, however, Cameron County will develop and implement this program in tandem with the development and implement of the construction storm water management program.

7.10 SELECTED POST CONSTRUCTION STORM WATER MANAGEMENT FOR NEW DEVELOPMENT REDEVELOPMENT (PC-N/RD) BMPS

7.10.1 PC-N/RD -BMP 1 GUIDANCE DOCUMENT FOR DEVELOPERS

Develop a guidance document to assist and guide developers as to the newly formed post construction ordinances and give them information including BMPs (structural and non-structural) that can be implemented on their site to minimize storm water run-off.

7.10.1.1 Measurable Goals

Creation of the document and distribution, and evaluation of post construction sites to check for the documents effects on construction sites in conjunction with post construction ordinances.

7.10.1.2 Schedule: Evaluation of Existing Drainage Plan

Activity	Date Due
1. Identification of BMPs and procedures	Year One
2. Creation of document and distribution	Year Two
3. Onsite Evaluation	Year Three-Five

7.10.1.3 Responsible Persons

To be determined.

7.10.2 PC-N/RD -BMP 2 EVALUATE AND ESTABLISH POST CONSTRUCTION ORDINANCES

Develop a strategy for structural and non-structural BMPs, and establish an ordinance or other regulatory mechanism for post construction controls. Reduce the percent of new impervious surfaces associated with new development projects within the county.

7.10.2.1 Measurable Goals

The existing Drainage Plan shall be evaluated according to the schedule below.

7.10.2.2 Schedule: Evaluate and Establish Post Construction Ordinance

Activity	Date Due
1. Develop structural and non-structural BMPs	Year One
2. Develop ordinance	Year Two
3. Reduce % of impervious cover associated with new development	Year Three

7.10.2.3 Responsible Persons

To be determined.

7.11 POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

7.11.1 REGULATORY REQUIREMENTS

40 CFR 122.34 (b) (6) -Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, the State, tribe, or other organizations, the program must include

The Texas General Permit states must establish an operation and maintenance program that identifies methods and practices for conduction municipal operations in a manner to prevent or reduce pollution to storm water runoff. The program must address good housekeeping and best management practices, training, structural control maintenance, disposal of wastes, and municipal operations and industrial activities.

Municipal operations and municipally owned areas that must control their discharge of runoff pollution from their operations are park and open space, street, road or highway, fleet and building, storm water system maintenance, new construction and land disturbances, municipal parking lots, vehicle and equipment maintenance and storage yards, waste transfer stations, and salt/sand storage location.

Training must be developed for all employees responsible from municipal operations subject to pollution prevention.

If BMP include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4, and consistent with maintaining the effectiveness of the BMP. The SWMP must list maintenance activities, the schedule, and long-term inspection procedures for the controls used to reduce floatable and other pollutants. All waste removed from the MS4 including dredge spoil, accumulated sediments, and floatable must have procedures for proper disposal and be properly disposed. The SWMP must include a list of municipal operation that are subject to the operation, maintenance, or training program developed and municipally owned or operated industrial activities that are subject to the storm water regulations.

7.11.2 CURRENT PROGRAMS

Cameron County has one oil collection site, Precinct 3 Maintenance Facility, located at corner of FM 510 and FM 3462, near San Benito, Texas. All County vehicles due for oil changes / filter replacements are done at this Maintenance facility. Oils, lubricants, filter, etc., are collected in a large on site container and picked up by a vendor from Corpus Christi, Texas for proper disposal. There is also a mobile tank truck that operates from Precinct 3 that collects oils / lubricants from "in field" maintenance vehicles / construction equipment within the County area and brought back to Pct 3 Maintenance Facility for disposal in the on-site container.

7.12 SELECTED POLLUTION PREVENTION I GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (PP/GH) BMPS

7.12.1 PP/GH -BMP 1 SPILLS RESPONSE PROGRAM FOR MAINTENANCE YARD

Cameron County has selected the evaluation maintenance facility as a BMP for implementation as part of their SWMP. This BMP will develop a program that will respond to spills at the maintenance yard. An

inventory shall be taken and the necessary equipment shall be purchased. This program will address procedures for spill response.

7.12.1.1 Measurable Goals

The measurable goal for implementation of this BMP is to create a spills response program for the Cameron County’s maintenance yard. The yard will be stocked with the necessary equipment to clean up a spill in a very timely manner. Development and implementation will be according to the schedule below.

7.12.1.2 Schedule: Spill Response Program for Maintenance

Activity	Date Due
1. Develop spill response program	Year One
2. Purchase necessary equipment	Year Two
3. Implement spill response program	Year Three - Five

7.12.1.3 Responsible Persons

To be determined.

7.12.2 PP/GH -BMP 2 INSPECTION AND MAINTENANCE OF DRAINAGE AND MAINTENANCE YARD

Cameron County has selected to develop an inspection/maintenance program of the maintenance yard.

7.12.2.1 Measurable Goals

The measurable goals for implementation of this BMP include the development of an inspection/maintenance program followed by the implementation of this program according to the schedule below.

7.12.2.2 Schedule: Evaluate Drainage or Maintenance Facility

Activity	Date Due
1. Develop inspection and maintenance program	Year One
2. Implement inspection and maintenance program	Year Two - Five

7.12.2.3 Responsible Persons

To be determined.

7.12.3 PP/GH -BMP 4 TRAINING PROGRAM

Cameron County will develop and implement a training program for all employees that are responsible for municipal operations subject to the pollution prevention/good housekeeping program.

7.12.3.1 Measurable Goals

The measurable goals for the implementation of this BMP will be the development of a training curriculum customized to meet the needs of this particular SWMP, and presentation of program to employees. The development and implementation will follow the schedule below.

7.12.3.2 Schedule: Pollution Prevention / Good Housekeeping Program

Activity	Date Due
1. Development of curriculum for training program	Year One
2. Presentation of training programs	Year Two - Five

7.12.3.3 Responsible Persons

To be determined.

7.12.4 PP/GH -BMP 5 STREET CLEANING

Cameron County will develop a street cleaning program designed at reducing the amount of sediment and contaminants that are released from Cameron County streets into downstream MS4's and receiving water bodies.

7.12.4.1 Current Programs

Cameron County owns and operates three street cleaning machines for use throughout the County.

7.12.4.2 Measureable Goals

The measureable goals of this program will be the development of the program designed at keeping county roads clean and increased efficiency of existing equipment.

7.12.4.3 Schedule: PP/GH -BMP 5 Street Cleaning

Activity	Date Due
1. Development of street cleaning program	Year Two
2. Implementation of Program	Year Three - Five

7.12.4.4 Responsible Persons

To be determined.

APPENDIX A – DEFINITIONS & COMMONLY USED ACRONYMS

A. Definitions

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.

Classified Segment - refers to a water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 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 Site Operator - The person or persons associated with a small or large construction project that meets either of the following two criteria:

- a) the person or persons 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
- b) the person or persons that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the Storm Water Pollution Prevention Plan or comply with other permit conditions).

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

Daily Maximum - For the purposes of compliance with the numeric effluent limitations contained in this permit, this is the maximum concentration measured on a single day, by grab sample, within a period of one calendar year.

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

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

- a) All soil disturbing activities at the site have been completed and a uniform (e.g, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% 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 (e.g. 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.

Ground Water 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.

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 storm water, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire fighting activities.

Indian Country - Defined in 18 USC Section (*) 1151, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States 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 United States 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.

Industrial Activities - manufacturing, processing, material storage, and waste material disposal areas (and similar areas where storm water can contact industrial pollutants related to the industrial activity) at an industrial facility described by the TPDES Multi Sector General Permit, TXR050000, or by another TCEQ or TPDES permit.

Large Construction Activity - Construction activities including clearing, grading, and excavating that result 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. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar storm water conveyance. Large construction activity does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.

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

MS4 Operator – For the purpose of this permit, the public entity, and/ 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.

Notice of Change (NOC) - 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 - For the purpose of this permit, a point source at the point where a municipal separate storm sewer discharges to waters of the United States (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 U.S. and are used to convey waters of the U.S.

Permittee - The MS4 operator authorized under this general permit.

Permitting Authority - For the purposes of this general permit, the TCEQ.

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 storm water runoff.

Pollutant(s) of Concern - Include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, 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.

Small Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction 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. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar storm water conveyance. Small construction activity does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.

Small Municipal Separate Storm Sewer System (MS4) – refers to a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains): (i) Owned or operated by the United States, 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, storm water, 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 ' 208 of the CWA; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR ' 122.2; and (v) Which was not previously authorized under a NPDES or TPDES individual permit as a medium or large municipal separate storm sewer system, as defined at 40 CFR §§122.26(b)(4) and (b)(7). This term includes systems similar to separate storm sewer systems at military bases, large hospital 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 an MS4 that is also operated by that public entity.

Storm Water and Storm Water Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Associated with Construction Activity - Storm water runoff from an area where there is either a large construction activity or a small construction activity.

Storm Water 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 storm water runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, storm water 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 (MHW) 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.

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

Waters of the United States - (from 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 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 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 United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States 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 Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

B. Commonly Used Acronyms

BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit, TXR150000
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
FR	Federal Register
IP	Implementation Procedures
MCM	Minimum Control Measure
MSGP	Multi-Sector General Permit, TXR050000
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOD	Notice of Deficiency
NOI	Notice of Intent
NOT	Notice of Termination (to terminate coverage under a general permit)
NPDES	National Pollutant Discharge Elimination System
SWMP	Storm Water Management Program
SWP3 / SWPPP	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code