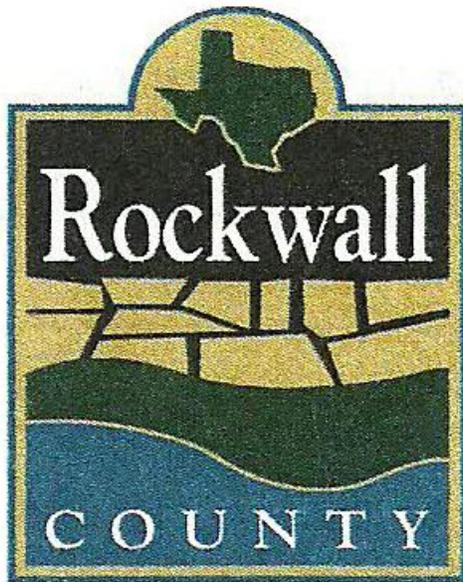


**ROCKWALL COUNTY, TEXAS**

Unincorporated Urbanized Areas

TPDES General Permit - Number TXR040000

August 13, 2007 through August 13, 2012



Storm Water Management Program (SWMP)

Five (5) Year Comprehensive Plan

Submitted May 25, 2010

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Note:

Detailed information about the Texas Commission on Environmental Quality (TCEQ) storm water permit rule, executive decision, and fact sheets are available at the TCEQ website, [www.tceq.state.tx.us](http://www.tceq.state.tx.us), and at the Rockwall County Environmental Health Coordinator and Road and Bridge Department offices.

## **Section I - Overview , Definitions, and Acronyms**

### **Section I.1. Storm Water Rule Overview**

Phase 1 of the U.S. Environmental Protection Agency's (EPA) municipal storm water program began in 1990 under the authority of the Federal Clean Water Act (CWA). Phase I relies on the National Pollutant Discharge Elimination System (NPDES) permit coverage to address pollutants from storm water runoff and dry weather discharges. Phase I permits are required for large and medium Municipal Separate Storm Sewer Systems (MS4's) serving populations of 100,000 or greater.

The Storm Water Phase 2 Final Rule (promulgated December 8, 1999) was the next step in the EPA's efforts to protect the nation's water resources from polluted storm water runoff and dry weather discharges into storm drain / sewer systems. The Phase 2 program requires local governments to implement programs and practices to control water pollution to the "Maximum Extent Practicable" (MEP) in urbanized areas of small MS4's (population less than 100,000).

The program requires Phase 2 local governments to obtain a permit that includes "Minimum Control Measures" (MCM's) that must be implemented for coverage. These six (6) MCM's include: public education and outreach; public involvement / participation; illicit discharge detection and elimination; construction site storm water runoff control; post-construction storm water management in new development and redevelopment; and pollution prevention / good housekeeping for local government operations. There are significant penalties up to \$27,500 per day for non-compliance with federal permit provisions.

The Texas Commission on Environmental Quality (TCEQ) is authorized by the EPA to issue and enforce the Texas Pollutant Discharge Elimination System (TPDES) Phase 1 and 2 Storm Water permits in lieu of the federal NPDES permits. Effective August 13, 2007, TCEQ Commissioners approved the TPDES General permit to authorize the discharge of storm water from regulated Phase 2 MS4's. Permittees' application submittal deadline to the TCEQ for coverage under this statewide permit was February 11, 2008.

The application must include a Notice Of Intent (NOI) for coverage and a Storm Water Management Program (SWMP). The NOI is a document that provides the TCEQ with an official notification to seek permit coverage and identifies legally responsible parties for permit enforcement. The SWMP describes what actions are to be implemented by the permittee to address the required elements of a storm water program. The SWMP describes in detail which Best Management Practices (BMP's) will be utilized through implementation of the Minimum Control Measures (MCM's) to meet permit requirements. The statewide permit term covers a five (5) year period from August 13, 2007 to August 12, 2012. The permit renewals, at five (5) year intervals, may require significant changes to the SWMP for future permit approvals.

## Section I.2. - Definitions

Best Management Practices (BMP's) – Schedules of activities including, but not limited to: maintenance procedures, structural controls, local ordinances, management practices to prevent or reduce the discharge of pollutants, pollution prevention education and promotion of same, and public involvement, and prohibited practices. BMP's also include treatment requirements, operating procedures, and practices to control runoff, spills, 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 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..

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.

Discharge – When used without a qualifier, refers to the collection and release of storm water runoff or certain non-storm water releases as allowed under the authorization of this general permit.

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

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

Maximum Extent Practicable (MEP) – The technology-based discharge standard for MS4's to reduce pollutants in storm water discharges that was established by CWA § 402 (p); and within legal authority of a jurisdiction to enforce. A discussion of MEP as it applies to small MS4's is found at 40 CFR § 122.34.

MS4 (Municipal Separate Storm Sewer Systems) Operator – The public entity, and / or the entity contracted by the public entity responsible for management and operation of the small MS4 that is subject to the terms of this general permit.

MS4 (Municipal Separate Storm Sewer Systems) Small – Refers to a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm sewers / drains: (i) owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body created pursuant to State law having jurisdiction over the disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district, 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 MS4, 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 sewer systems in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm sewers / drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm sewers / 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.

Outfall – A point source at the point where a MS4 discharges to the waters of the United States. This does not include open conveyances connecting two (2) MS4's, 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..

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, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or 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.

Urbanized Area (UA) – An area of high population density, which may include multiple MS4's, as defined and used by the U.S. Census Bureau in the 2000 decennial census.

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 or 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 U.S. 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.

Exclusions: Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA, are not waters of the U.S.. This exclusion applies only to man-made bodies of waters which neither were originally created in waters of the U.S. (such as a disposal area in a wetlands) nor resulted from the impoundment of waters of the U.S.. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA.

**Section I.3. - Acronyms**

BMP's - Best Management Practices

CSN – Construction Site Notice

CWA - Clean Water Act

RBD – Road and Bridge Department

EHC – Environmental Health Coordinator

EPA – Environmental Protection Agency

ETJ – Extra Territorial Jurisdiction

FEMA – Federal Emergency Management Agency

FEMA's NFIP – Federal Emergency Management Agency's National Flood Insurance Program

HAZ MAT – Hazardous Materials, Substance, and / or Waste, etc.

iSWM – integrated Storm Water Management

MCM – Minimum Control Measures

MEP – Maximum Extent Practicable

MPO – Metropolitan Planning Organization

MS4 – Municipal Separate Storm Sewer System

NCTCOG – North Central Texas Council Of Governments

NOI – Notice Of Intent

OSSF – On Site Sewage Facilities

POTW – Publicly Owned Treatment Works

RDI – Regionally Developed Initiative

SWMP – Storm Water Management Program

SW3P or SWPPP – Storm Water Pollution Prevention Plan

TCEQ – Texas Commission on Environmental Quality

TPDES – Texas Pollutant Discharge Elimination System

TRC CDC – Trinity River Corridor Corridor Development Certificate

UUA – Unincorporated Urbanized Area

USACE – U.S. Army Corps of Engineers

## **Section II – Permit Applicability and Coverage**

### **Section II.1. - Urbanized Area**

The TPDES permit requirements apply only to the portions of the Unincorporated Rockwall County that are identified as Urbanized Areas (UUA's for Unincorporated Urbanized Areas) in the latest Census. There are two (2) non-contiguous UUA's identified within Rockwall County based upon data in the 2000 U.S. Census Map (Attachment 2). This data was compared to the NCTCOG 2000 Population Density Map (Attachment 3) for validation at finer scale. These maps may also be viewed at:

- <http://cfpub.epa.gov/npdes/stormwater/urbanmapresult.cfm?state=TX> Two (2) maps are available: (1) Overview map; (2) Detailed map with roads. These maps are linked to the TCEQ storm water permit website.
- <http://www.nctcog.org/ris/census/maps/Rocpopden.pdf>

The Rockwall County Storm Water Management Program (SWMP) addresses permit required Best Management Practices (BMP's) only in the Unincorporated Urbanized Area portions of the County; however, certain elements of the SWMP may be voluntarily implemented by the permittee within the entire Unincorporated Area. One example is Public Education and Outreach which may be implemented County-wide within the Unincorporated Area, such as television broadcasts or websites associated with the North Central Texas Council Of Governments (NCTCOG).

### **Section II.2. Regulatory Restrictions on Texas Counties**

The State of Texas is somewhat unique of these United States regarding the restrictions it places upon Counties. Basically, the Texas Constitution and State statutes do not grant Texas Counties the ability to create and enforce ordinances such as the ones Cities (Home Rule) are allowed to create in order to meet the TPDES permit requirements. To address this restriction, TCEQ rules contain text stating enactment or enforcement will be to "the extent allowable under state and local law". This statement is cited several times in Part III, SWMP development and implementation, of the general permit. Given these restrictions and direction, Rockwall County will address the various elements in the General permit SWMP requirements to the extent allowable under current state and local law.

### **Section III – Storm Water Management Program (SWMP)**

Storm Water Management Programs establish the guidelines of the implementation of the various practices selected to support the permit and when those practices will be initiated. There are some practical and legal limits in implementing a program in unincorporated county areas compared to the abilities of incorporated municipalities.

#### **Section III.1. - Overview of Rockwall County's SWMP**

*This Storm Water Management Program was developed to support Rockwall County's efforts in preventing or reducing pollution in storm water drainage systems to the Maximum Extent Practicable. This SWMP was developed and will be implemented, to the extent allowable under state and local law (see II.2 above), according to requirements of Part III of the TPDES General permit TX040000, for discharges of storm water to Surface Water in the State. During the five (5) year permit term, Best Management Practices (BMP's) will be phased in that meet or exceed Minimum Control Measures (MCM's).*

The SWMP addresses the six (6) Minimum Control Measures (MCM's) required by TCEQ. These MCM's will be implemented in the Unincorporated Urbanized Areas (UUA's) of Rockwall County and may be voluntarily implemented in other Unincorporated Areas if warranted by special conditions such as participation in Regionally Developed Initiatives (RDI's). All MCM's will be periodically evaluated based upon accomplishment of each MCM's BMP activities. These six MCMs are:

1. Public Education and Outreach on Storm Water Impacts;
2. Public Participation and Involvement;
3. Illicit Discharge Detection and Elimination;
4. Construction Site Runoff Control;
5. Post-Construction Runoff Control; and
6. Pollution Prevention and Good Housekeeping.

Rockwall County's SWMP was developed by County staff with coordination provided by outside contractor. Responsibilities for implementing the SWMP are primarily divided between the Environmental Health Coordinator (EHC) and the Road and Bridge Department (RBD). Each MCM contains the respective County Department primarily responsible for that specific MCM. The County staff is considerably leaner than most municipalities with the same population because of the lack of demand on the County for concentrated services.

During the development of County's SWMP, County staff considered BMP's that would protect water quality, comply with General Permit TX040000, meet the Maximum Extent Practicable (MEP) test, and ensure program costs that would not create undue hardship on County residents and businesses. Established Phase 2 storm water programs from other MS4 operators were reviewed and evaluated.

Regionally Developed Initiatives (RDI's) regarding BMP's from the U.S. EPA NPDES National Menu of Stormwater Best Management Practices were also reviewed and evaluated. A variety of BMP's for each MCM were considered and compared. BMP's were ultimately selected based on an evaluation of overall effectiveness, affordability, and suitability of the MS4 system for the Rockwall County Unincorporated Urbanized Areas. The program will allow continual adjustment and refinement through County implementation, "hands on" experience, and feedback from various sectors of the Unincorporated Area population. (reference: <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/>)

Rockwall County has access to and will develop a more active and effective partnership with the NCTCOG, the local Metropolitan Planning Organization (MPO), and an established and recognized leader in creating Regional Developed Initiatives (RDI's) in storm water management.

The Rockwall County staff having primary responsibility for certain MCM's will be identified in subsequent subsections; however, the following two departments have general oversight responsibility for the SWMP:

Environmental Health Coordinator (EHD) contact:

Ron Merritt, R.S., Administrator  
108 South Fannin Street  
Rockwall, TX 75087  
Ph: (972) 204-7600  
Fax: (972) 204-7609  
Email: [rmerritt@rockwallcountytexas.com](mailto:rmerritt@rockwallcountytexas.com)

Road and Bridge Department (RBD) contact:

Patrick NeSmith, Road & Bridge Administrator  
1350 East Washington Street  
Rockwall, TX 75087  
Ph: (972) 204-7890  
Fx: (972) 204-7669  
Email: [pnesmith@rockwallcountytexas.com](mailto:pnesmith@rockwallcountytexas.com)

### **Section III.2. - Contrasting Municipal Programs with County Programs**

#### a. Legal Authority

Unlike Texas Cities, Counties are not authorized by the State of Texas Constitution or State Statutes to enact ordinances necessary implement and enforce all of the TPDES Phase 2 (small MS4) regulatory requirements. Rockwall County will implement selected BMP's "to the extent allowable under state and local law" as outlined in the appropriate MCM sections.

#### b. Ditch Drainage System

Rockwall County land area remains largely rural in nature and primarily agricultural in use. Unlike Cities, the County's storm drainage / sewer system is not a traditional underground enclosed storm sewer system (i.e. curb inlets, underground pipes, and outfall discharges from pipes). Instead, Rockwall County's storm drainage system is mostly comprised of unlined (pervious) road-side ditches. Benefits and challenges associated with this type of system will be addressed in the appropriate MCM sections.

#### c. Proportional Area and Distances between Non-Contiguous Urbanized Areas

Unlike Cities, Rockwall County has approximately two (2) small non-contiguous Unincorporated Urbanized Areas (UUA's). They constitute approximately less than one (1) square mile of the total 81 square miles of the County Unincorporated Area (about 1% of the total area). Therefore, the regulated Rockwall County "system" is more a collection of several systems interrupted by municipal jurisdictional boundaries and physical barriers. Additionally, travel distances, often exceeding those found even in some Phase 1, MS4 permitted Cities, will be required by County staff to implement regular activities associated with this program.

#### d. Annexation and De-annexation

Unlike Cities, Counties typically lose land area over time as City annexation and growth occurs. Counties will not be adding new land areas of responsibilities, nor have to provide services to such annexed land. As one of the fastest growing counties in the nation, Rockwall County will likely lose unincorporated areas rapidly as the economy rebounds from the 2008 tumble. The County will only add Unincorporated Urbanized Areas if population densities increase such that the regional UA boundary is expanded, as designated by the U.S. Census Bureau on a ten (10) year cycle (i.e. next one is 2010), or when Cities de-annex land.

**Section III.3. – Minimum Control Measure #1: Public Education and Outreach**

Rockwall County will expand upon its current efforts to ensure that the public, within the Unincorporated Urbanized Areas, is informed about the impacts that storm water runoff can have on water quality, the hazards associated with illegal discharges, and improper disposal of waste. This MCM will be accomplished by providing informational materials in multiple formats and media from various sources including Rockwall County, the Rockwall County branch of the Texas AgriLife Extension, the North Central Texas Council Of Governments (NCTCOG), and other resources that may be used to further develop and distribute public education and outreach material. If practical, Rockwall County will work with NCTCOG and other local governments to develop suitable community materials for website posting and/or distribution at Rockwall County facilities. This information dissemination will be across a broad spectrum of recipients including residents, County employees, businesses, commercial/industrial facilities, and construction site personnel in the Unincorporated Urbanized Areas of Rockwall County. Due to the lack of a centralized location to attract visitors within the non-contiguous County Unincorporated Urbanized Areas, visitors will not be a targeted group. Best Management Practices to support this MCM are programmed below.

**a. BMP, Measurable Goal, and Date – Educational Materials and Distribution**

Rockwall County will distribute storm water related material at two or more County buildings and at household hazardous waste collection events. Examples may include such items as information sheets, brochures, and bookmarks. Whenever possible, these materials will be made available in digital format on the County website. These materials may be developed by County staff, NCTCOG Storm Water Education Taskforce, EPA, TCEQ, or any other source, current or future. Some of these materials will address illicit discharges, construction, NOI submittals, and other informational materials required by the permit. Additionally, Rockwall County may elect to use materials that are intended for TV or radio broadcasts, if such materials are affordable. Rockwall County may also participate in regional storm water education projects to supplement this BMP and will report such activities in the annual report.

Responsible Department: Library

Goal and Date: At least two hundred (200) articles will be distributed or made available, annually, beginning in Permit Year 1 and continuing through Permit Year 5. TV or radio broadcasts may substitute for such distribution.

Status: In Progress

**b. BMP, Measurable Goal, and Date – Rockwall County Website**

The Rockwall County website <http://www.rockwallcountytexas.com> will be used to post information on all implemented Best Management Practices, development requirements, chemical use regulations and general storm water pollution tips.

Rockwall County will also provide links to the TCEQ, EPA, NCTCOG and other storm water management resource websites as appropriate.

Responsible Department: Environmental Health Coordinator

Goal and Date: Ensure that the Rockwall County website and linked sites will be active and contain storm water information beginning in permit Year 3 and continuing through Permit Year 5. Review all sites annually to determine if content revisions are needed, or links modified.

Status: In Progress

c. BMP, Measurable Goal, and Date – Rockwall County News

Rockwall County News is published within the Metro section of the Dallas Morning News newspaper on a routine basis. Annually, staff will prepare an article for the Metro News section that targets the TCEQ public education and outreach groups. The Environmental Health Coordinator will determine whether the article is relevant and suitable for publication. If not, documentation will be provided that at least two storm water related articles from other sources have been published in other sections of the newspaper during the permit year. Participation in NCTCOG programs will aid in meeting this goal through regional efforts.

Responsible Department: Library

Goal and Date: Publish one annual Rockwall County storm water related news story prepared by County staff, or two stories created by others, in the Dallas Morning News, beginning in Permit Year 3 and continuing through Permit Year 5.

Status: Not Started

d. BMP, Measurable Goal, and Date – March is *Texas SmartScape* Month

*Texas SmartScape* Month is a coordinated annual activity of local governments jointly conducting public education and awareness events to promote less pesticide and fertilizer use associated with landscapes. Additionally, this NCTCOG RDI promotes water conservation which produces less runoff and thereby reduces pollution of our waterways. Rockwall County will participate in this annual event via the Rockwall County website by providing a link to the Texas SmartScape website, [www.txsmartscape.com](http://www.txsmartscape.com) that is currently maintained by the NCTCOG.

Responsible Department: AgriLife Extension Agent

Goal and Date: Published one (1) website posting or newspaper article to support “March is *Texas SmartScape* Month”. Any additional efforts will be documented and reported as part of the annual report to TCEQ. Rockwall County will initiate participation in Permit Year 3 and will continue “March Is SmartScape month” activities through Permit Year 5, as may be supported regionally.

Status: Not Started

e. BMP, Measurable Goal, and Date – Earth Kind™ or similar Demonstration Garden

With assistance from the Rockwall County AgriLife Extension, install and maintain a demonstration garden on the grounds of one County facility. This garden features drought resistant vegetation that rarely needs fertilizer or pesticides. Public viewing and tours of this garden are arranged by the Master Gardner office of the Rockwall County AgriLife Extension. Additional information may be viewed at the Rockwall County AgriLife Extension website as follows: <http://rockwall-tx.tamu.edu/>

Responsible Department: AgriLife Extension Agent

Goal & Date: Install an Earth Kind™ demonstration garden on County facility grounds by Permit Year 1.

Status: Accomplished and ongoing

f. BMP, Measurable Goal, and Date – Texas AgriLife Extension

The Texas AgriLife Extension conducts a variety of environmental educational activities (speeches, TV shows, radio programs and newspaper stories, training, etc.) in Rockwall County, and surrounding counties. County staff will coordinate with the Rockwall County AgriLife Extension staff (which will include the Master Gardeners volunteer group) to report any annual educational activities that are storm water related in Rockwall County. The AgriLife Extension staff coordinates with many other volunteer groups (i.e. 4-H groups) and will be a good resource to reach the community.

Responsible Department: AgriLife Extension Agent

Goal and Date: Continue AgriLife Extension educational activities within Rockwall and surrounding Counties. County staff will document this information and include it in the annual report, beginning in Permit Year 1 and continuing through Permit Year 5.

Status: In Progress

g. BMP, Measurable Goal, and Date – NCTCOG Participation

Participate in the NCTCOG's Storm Water Education Task Force and the Regional Storm Water Management Coordinating Council (as budget constraints will allow), in order to develop storm water educational materials which can be used by MS4s in the North Central Texas region. Any materials developed by the Taskforce or Council will be reviewed by Rockwall County staff and may be selected for use during appropriate times during the permit term. Also see (a) Educational Materials and Distribution.

Responsible Department: Road and Bridge Department

Goal and Date: Document participation in NCTCOG Storm Water groups. Participation will be initiated in Permit Year 3 and continue throughout the permit term, unless the Task Force and/or Council are dissolved or funds are unavailable.

Status: Not Started

**Section III.4. – Minimum Control Measure #2: Public Involvement / Participation**

Rockwall County will rely upon compliance with public notice requirements regarding public meetings at the North Central Texas Council of Governments (NCTCOG) and the Rockwall County Commissioners' Court to receive public input on the storm water management program development and implementation. Also the Draft SWMP will be posted on the County Website prior to submitting it to TCEQ for TPDES General Storm Water Permit coverage. Best Management Practices to support this MCM are programmed below.

**a. BMP, Measurable Goal, and Date – Public Notice for Meetings**

Both Rockwall County Commissioner's Court and NCTCOG meetings are subject to state/local public notice requirements, which meet TCEQ minimum requirements for public involvement/participation.

Responsible Department: County Secretary

Goal and Date: Staff will verify that Commissioner's Court and NCTCOG meetings comply with public notice requirements and include that information in annual reports to TCEQ. Public notice for meetings is already in effect and will continue from Permit Year 1 to Permit Year 5.

Status: Accomplished & Ongoing

**b. BMP, Measurable Goal, and Date – Posting Draft SWMP on Website**

After internal review by Rockwall County Officials and prior to submittal to TCEQ, staff will post the draft SWMP on the County's website.

Responsible Department: County Secretary

Goal and Date: Post the Draft SWMP on the County Website at least 10 days prior to submitting the TCEQ permit application.

Status: Accomplished upon submittal

**c. BMP, Measurable Goal, and Date – Public Notice in Newspaper**

After reviewing Rockwall County's NOI and SWMP, TCEQ will issue "the Executive Director's Preliminary Determination". This is a public notice that must be published by Rockwall County at least once in the largest circulated newspaper in the County. In addition, this public notice must provide an opportunity for the public to:

- submit comments on the NOI and SWMP, and;
- request a public meeting. Upon request by the TCEQ, a public meeting for the County Unincorporated Area will be held if it is determined there is sufficient public comments and interest to warrant one.

Responsible Department: County Secretary

Goal and Date: Publish TCEQ Executive Director's Preliminary Determination in the Dallas Morning News, including information about public comment and public meeting request within thirty (30) days after being notified by the TCEQ Office of Chief Clerk.

Status: Not Started

**Section III.5. - Minimum Control Measure #3: Illicit Discharge Detection and Elimination (IDDE)**

The Environmental Health Coordinator (EHC) will develop surveillance and enforcement processes to implement an illicit discharge program, in accordance to State law, in the Unincorporated Urbanized Areas of Rockwall County. Illicit discharges that Rockwall County cannot enforce will be referred to the TCEQ Region 4 Office in Fort Worth, Texas. Improper disposal of sewage from malfunctioning On-Site Sewage Facilities (i.e. OSSF's, septic systems, aerobic systems, etc.) are subject to County corrective actions and enforcement, as necessary.

**a. BMP, Measurable Goal, and Date – Detection: Monitoring Drainage System**

Outfalls and/or other locations within drainage ditch systems in the Unincorporated Urbanized Areas of Rockwall County are visually monitored for indications of illicit discharges or water pollution. To confirm the presence of an illicit discharge, chemical and toxicity tests are performed if deemed necessary by the appropriate staff.

Responsible Department: Environmental Health Coordinator

Goal and Date: Visually monitor the roads for illicit discharges in the Unincorporated Urbanized Areas of the County on a periodic basis. This activity will begin in Permit Year 1 and will continue through Permit Year 5.

Status: Accomplished and Ongoing

**b. BMP, Measurable Goal, and Date – Detection & Correction: Citizen and Staff Reported Discharges**

Citizen reporting, of suspected illicit discharges in the Unincorporated Urbanized Areas of Rockwall County, is a reasonable means of detection. Illicit discharges are also identified by County staff performing various duties, such as County Road & Bridge Department maintenance crews, Sheriff's Department, and Environmental Health Coordinator staff. In the Unincorporated Urbanized Areas of Rockwall County, County staff will investigate citizen or staff reported illicit discharges within two (2) weeks, excluding any repeated, unsubstantiated illicit discharge reports at a specific site. Voluntary compliance will be encouraged, however, civil and criminal enforcement will be enacted as necessary. TCEQ's Regional Field Office shall be notified if Rockwall County is unable to compel compliance under State law.

Responsible Department: Environmental Health Coordinator

Goal and Date: County storm water staff contact phone numbers will be placed on the County website in Permit Year 1. Investigate 90% of citizen and County staff reported illicit discharges in Unincorporated Urbanized areas within two (2) weeks. Implement in Permit Year 1 and continue through Permit Year 5.

Status: Accomplished and ongoing

c. BMP, Measurable Goal, and Date – Detection and Correction: On Site Sewage Facilities (OSSF)

The Environmental Health Coordinator will maintain records, for storm water program benefit, of actions taken regarding malfunctioning On-Site Sewage Facilities in the Unincorporated Areas of Rockwall County as an Authorized Agent of the State (TCEQ) to enforce rules regarding the installation and operation of On Site Sewage Facilities (OSSF).

Responsible Department: Environmental Health Coordinator

Goal and Date: Track all inspections and corrective actions taken regarding OSSF's beginning Permit Year 1 through Permit Year 5. Rockwall County shall evaluate the need for additional resources, such as new software, to enhance tracking corrective actions of same beginning in Permit Year 2 and continuing through Permit Year 5.

Status: In Progress

d. BMP, Measurable Goal, and Date – Detection & Correction: Illegal Dumping Team

The Rockwall County Environmental Health Coordinator will investigate illegal dumping in the Unincorporated Urbanized Areas of the County. As a member of the storm water staff, this position reports annual activities (number of illegal dumping sites reported, cases investigated, violations, remediation, and enforcement actions, etc.) that affect the County storm water drainage system.

Responsible Department: Environmental Health Coordinator

Goal and Date: Investigate and document illegal dumping activities, including periodic reports, beginning in Permit Year 1 and continuing through Permit Year 5.

Status: Accomplished & Ongoing

e. BMP, Measurable Goal, and Date – Detection and Correction: NCTCOG Illegal Dumping Hotline

Rockwall County will continue current activities with the North Central Texas Council of Governments to provide the residents of the Unincorporated Urbanized Areas of the County the opportunity to report illegal dumping to the regional Stop Illegal Dumping Hotline, 1-888-335-DUMP. The County will continue to publicize and follow-up on reports from this hotline. An alternate means of reporting will be reviewed, developed and possibly implemented by Rockwall County should the existing hotline access be discontinued.

Responsible Department: Environmental Health Coordinator

Goal and Date: Participate as a member in regional storm water management groups (NCTCOG sponsored and others) beginning in Permit Year 1, continuing through Permit Year 5.

Status: Accomplished & Ongoing

f. BMP, Measurable Goal, and Date – Detection: Storm Drainage System Map

Rockwall County will prepare a storm drainage system map of the Unincorporated Urbanized Areas locating outfalls contained in those areas that discharge directly into waters of the State. The County will use the best available resources such as EPA Urbanized Areas maps, NCTCOG developed land maps, TCEQ website, 7.5 minute USGS Quadrant topographic maps, private vendor maps, Atlas of Texas Surface Waters: [www.tceq.state.tx.us/comm\\_exec/forms\\_pubs/pubs/gi/gi-316/](http://www.tceq.state.tx.us/comm_exec/forms_pubs/pubs/gi/gi-316/), or other resources in map preparation. This Storm Drainage Map will also contain existing street names, outfall locations, culverts, bridges, and other features that will be useful in identifying illicit discharges. Rockwall County will update this map as land development occurs and/or as conditions warrant.

Responsible Department: Road and Bridge Department

Goal and Date: Prepare a storm drainage system map beginning Permit Year 3. The County's GIS software will be used to map outfalls through Permit Year 5. Rockwall County shall evaluate the need for additional resources, such as new software, to enhance mapping and asset management capabilities beginning in Permit Year 2 and continuing through Permit Year 3. Field locating and mapping outfalls is projected beginning in Year 2 and continuing through Year 3.

Status: In Progress

**Section III.6. – Minimum Control Measure #4: Construction Site Storm Water Runoff Control**

Rockwall County's standards, consisting of adopted Commissioners Court Orders, state regulations, County policy, and engineering / construction plan requirements, will be revised and amended to provide Phase 2 MS4 compliance in the County's Unincorporated Urbanized Areas (UUA's). Construction BMP's will be utilized in the UUA's when at least one (1) acre or more of land is disturbed during construction. Those standards shall include the proper implementation of Erosion (and sediment) Control Plan, Storm Water Pollution Prevention Plan (SW3P), controlling construction site waste, and procedures for receiving and considering information submitted by the public.

Rockwall County will participate regionally in and coordinate with the NCTCOG on municipal storm water issues through the Regional Storm Water Management Coordinating Council. This body has established cooperative initiatives that are regional in nature and are developed through an annual work program. Construction Site Storm Water Runoff Control is achieved, regionally, by utilizing the NCTCOG website for informational support and access to Best Management Practices (BMP's). Coordination meetings, with Program updates including watershed roundtable discussions for the multiple municipalities, counties, and governmental agencies, are facilitated by the NCTCOG quarterly. Rockwall County's participation is dependent upon new budget allocation.

**a. BMP, Measurable Goal, and Date – Regional Participation: *iSWM Design Manual for Construction***

Rockwall County participates regionally in, and coordinates with, the NCTCOG, and will initiate further coordination through proposed participation in adopting and applying the *integrated Storm Water Management* (iSWM) , which establishes regional guidelines for the development of comprehensive storm water management systems. The *integrated Storm Water Management* program is based on addressing the quality of storm water runoff in conjunction with traditional storm water quantity methods while minimizing and mitigating the downstream impacts from increased flows due to land development upstream. Construction Site Storm Water Runoff Control is achieved regionally by utilizing the NCTCOG website for informational support and access to the key elements which include the iSWM Policy Guidebook, Design Manual for Development / Redevelopment, and Design Manual for Construction, 1st Edition. Coordination meetings with Program updates including iSWM training for multiple municipalities, counties, and governmental agencies are facilitated by the NCTCOG. Rockwall County's annual participation will be dependent upon new budget allocations.

Responsible Department: Environmental Health Coordinator

Goal and Date: Adopt the *iSWM Design Manual for Construction* that has been promulgated by the NCTCOG Regional Storm Water Management Coordinating Council. Rockwall County's regulations, consisting of adoption and enforcement of the policy, manual, and construction BMP's is programmed for Permit Year 5.

Status: Not Started

**b. BMP, Measurable Goal, and Date - Tracking: Notice of Intent (NOI)/Construction Site Notice (CSN) File for Construction**

Since the TCEQ requires NOI's and CSN's from the construction site operators to be submitted directly to the MS4's, Rockwall County will establish a NOI / CSN File for compliance reference prior to commencing construction MCM activities. Small construction sites are not required to submit NOI's to the TCEQ; however, they are required to submit CSN's to their respective MS4.

Responsible Department: Environmental Health Coordinator

Goal and Date: Establish an NOI/CSN File for Construction during Permit Year 3.

Status: In Progress

c. BMP, Measurable Goal, and Date – Current Commissioners Court Order Regulations: Subdivision and Floodplain Management Regulations

Rockwall County will regulate Construction Site Storm Water Runoff through enforcement of amendments to the current Subdivision and Floodplain Management Standards. Approved Engineering / Construction Plans with proper Erosion Control and Storm Water Pollution Prevention Plans (SW3P) and a Development Permit will be required prior to the issuance of a Permit/ Release for Construction of any private land development projects. Since the Unincorporated Urbanized Areas are within an adjacent municipality's ETJ, compliance with the respective municipality's regulations for platting and engineering is also required by Rockwall County.

Responsible Department: Environmental Health Coordinator

Goal and Date: Amend current standards to include regional storm water regulations in Permit Year 3.

Status: Not Started

d. BMP, Measurable Goal, and Date – Proposed Commissioners Court Order Regulations: Updated Subdivision Regulations

Rockwall County intends to update adopted Subdivision Regulations to jointly regulate and monitor Construction Site Storm Water Runoff and land development within the adjacent municipalities' ETJ in our Unincorporated Urbanized Areas. These updated Subdivision Regulations shall also be in compliance with Texas House Bill 1445. Since the Unincorporated Areas are within an adjacent municipality's ETJ, the respective municipality's regulations for platting and engineering shall continue to be required by Rockwall County.

Responsible Department: Environmental Health Coordinator

Goal and Date: Review and amend standards "to the extent allowable under state and local law" cooperative storm water regulations with adjacent cities in Permit Year 4.

Status: Not Started

e. BMP, Measurable Goal, and Date – Proposed Commissioners Court Order Regulations: iSWM Policy Guidebook Design Manual for Construction

Rockwall County intends to review the iSWM Policy Guidebook, Design Manual for Development / Redevelopment, and Design Manual for Construction, 1st Edition. County will encourage adjacent municipalities whose ETJ is in our Unincorporated Urbanized Areas to jointly review/adopt/enforce the iSWM Policy, Design, and Construction Manuals to better regulate / monitor Construction Site Storm Water Runoff.

Responsible Department: Environmental Health Coordinator

Goal and Date: Review of proposed joint County/city regional regulations will begin in Permit Year 3 with consideration for adoption "to the extent allowable under state and local law" in Permit Year 4.

Status: Not Started

**Section III.7. - Minimum Control Measure #5: Post-Construction Storm Water Management on New or Redeveloped Sites**

The intent of this MCM is to lessen storm water quality impacts after construction has been completed on new and/or redeveloped sites of one (1) acre or greater of disturbed earth. Rockwall County's adopted standards, consisting of adopted Commissioners Court Orders, state regulations, County policy, and engineering / construction plan requirements, presently does not provide for full Storm Water Phase 2 and MS4 compliance in the Unincorporated Urbanized Areas (UUA's).

"To the extent allowable under state and local law", Rockwall County will develop and implement a Post-Construction MCM for the Unincorporated Urbanized Areas. Like most Texas Counties, under this MCM Rockwall County presently allows the use of unlined or pervious drainage ditches in lieu of impervious concrete curb and gutter pavement sections in combination with underground storm sewer / drain pipe systems and / or concrete lined channels (which Cities typically require).

Compared to standard impervious underground storm sewer / drain pipe systems, at grade open / unlined grassy ditch systems allow more storm water runoff to soak or percolate into the ground. This type of drainage system thereby reduces downstream runoff velocities and erosion, and provides a means of detaining and treating, to some degree, pollutants such as sediments, fertilizers, nutrients, and detergents. It also allows illicit discharges to pond and collect in surface pools, making them easier to detect, locate, and consequently to investigate the probable source to expedite the IDDE's elimination.

Such grassy drainage ditch systems are the least expensive to construct, are compatible with larger lots (greater than 1½ acres in land area) that are required for maintaining OSSF's. This type of rural land development is popular among residents of the Unincorporated Areas providing an incentive for their continued installation beyond this permit period. Like most Texas Counties, Rockwall County presently maintains these at grade open / unlined grassy drainage ditch systems located within the County Road Right-Of-Way (R.O.W.), easement, or prescriptive rights easement, and shall continue to do so throughout the permit period.

Rockwall County will begin participation in and coordination with the NCTCOG on municipal storm water issues through the Regional Storm Water Management Coordinating Council. That Program includes cooperative initiatives that are regional in nature and developed through the annual work program. Construction Site Storm Water Runoff Control is achieved regionally by utilizing the NCTCOG website for informational support and access to Best Management Practices (BMP's). Coordination meetings with Program updates, including watershed roundtable discussions for the multiple municipalities, counties, and governmental agencies, are facilitated by the NCTCOG quarterly. Rockwall County's participation is dependent upon new budget allocations.

a. BMP, Measurable Goal, and Date – Strategy: Allow Pervious Drainage Systems

In lieu of requiring impervious concrete curb and gutter pavement sections in combination with underground storm sewer / drain pipe systems and / or concrete lined channels, Rockwall County will generally allow developers, home builders, and residents in the Unincorporated Areas to use at grade open / unlined grassy drainage ditches adjacent to the privately or County owned and maintained roads. This is both cost effective to the construction community and environmentally based for the County's compliance with the State storm water permit. Specific legal agreements with some adjacent municipalities may supersede this County policy, but overall this strategy and policy will continue for the duration of the permit period.

Responsible Department: Environmental Health Coordinator

Goal and Date: Rockwall County will allow open / unlined grassy drainage ditches and channels to receive and transport storm water runoff generated offsite (i.e. on adjacent private land) from impervious surfaces such as roofs, driveways, sidewalks, and private and public roads and streets. This existing standard will remain in effect for the duration of the permit period.

Status: Accomplished and Ongoing

b. BMP, Measurable Goal, and Date – Tracking: Additional Pervious Drainage Systems

Rockwall County Road and Bridge Department forces will maintain the open / unlined grassy drainage ditches located within the County Road Right-Of-Way (R.O.W.), easement, or prescriptive rights easement in the Unincorporated Areas. This will allow the drainage system to operate properly and produce storm water quality benefits as stated previously.

Responsible Department: Road and Bridge Department

Goal and Date: Document and map pervious drainage system additions and/or extensions as a result of recent land development in the Unincorporated Areas. Updates will be provided in the annual report beginning in Permit Year 3 and continuing for the duration of the permit period.

Status: In Progress

**Section III.8. - Minimum Control Measure # 6: Pollution Prevention / Good Housekeeping**

Rockwall County roads and bridges in the Unincorporated Urbanized Areas (UUA's) are the ownership and maintenance responsibility of the Rockwall County Road & Bridge Department's forces. The County will establish a program to conduct its general operations in a manner that prevents or reduces pollution in storm water runoff to the maximum extent practicable. This MCM requires a local government to examine multiple internal operations to see if they can be maintained or modified to prevent or minimize storm water pollution or illicit discharges. As stated by the TCEQ, examples of local government operations include, but are not limited to:

- park and open space maintenance;
- street, road, or highway maintenance;
- fleet and building maintenance;
- storm water system maintenance;
- new construction and land disturbances;
- parking lots;
- vehicle and equipment maintenance and storage yards;
- waste transfer stations, and;
- salt / sand storage locations.

Roads in these Unincorporated Urbanized Areas are typically rural in section with asphalt pavement (various width with or, most typically, without shoulders) overlaid on a flexible crushed stone or rock base, with unlined grassy drainage ditches. These highly pervious drainage ditches collect the minor storm water runoff flows from the adjacent land, undeveloped or developed, and convey them downstream to an underground crossing culvert. The smaller culverts consist of a Corrugated Metal Pipe (CMP), Reinforced Concrete Pipe (RCP), or a Reinforced Box Culvert. The larger flow crossings consist of multiple paralleled culverts, or as a reinforced concrete or steel bridge.

**a. BMP, Measurable Goal, and Date – Strategy: Maintenance of Pervious Drainage Systems**

Rockwall County Road and Bridge Department forces inspect County roads and bridges during and after significant rainfall events, and periodically during dry weather periods. System inspections may result in work orders with tasks of:

- Barricading traffic from entering high water overtopping roadways;
- Removal of debris blocking the roadway's travel lanes;
- Pavement section condition and safety status due to wash out or scouring;
- Shoulder and ditch slope stability;
- Excavation to re-establish grade or direction of flow, and;
- Removal of debris blocking the unlined grassy drainage ditch and / or the underground crossing drainage culvert which could ultimately impede proper conveyance to the Waters of the United States.

Responsible Department: Road and Bridge Department

Goal and Date: Continue maintenance of County road open grassy drainage ditches, channels and culverts. This type of drainage system typically allows more storm water runoff to soak or percolate into the ground, and reduces downstream runoff velocities and erosion. County forces maintenance of the underground crossing drainage culverts and bridges will continue for proper storm water runoff conveyance. County staff will regularly review new BMP's which, upon implementation, could improve overall maintenance and environmental effectiveness for the duration of the permit period.

Status: Accomplished and Ongoing

b. BMP, Measurable Goal, and Date – Strategy: Good Housekeeping

Rockwall County's building facilities, construction equipment and fuel storage, and maintenance yards are all located within the Incorporated Areas of various Cities in Rockwall County. Being physically located within those Cities jurisdictions, and their respective MS4 permits, these facilities must comply with the regulatory requirements of those Cities.

Goal and Date: Continue to comply with incorporated municipality requirements Permit Year 1 through 5.

Status: Accomplished and Ongoing

## **Section IV – Recordkeeping and Reporting**

### **Section IV.1. - Recordkeeping**

Rockwall County shall maintain all records, a copy of the TPDES general permit, and all data used to complete the application (NOI) for this permit, for a period of at least three years, or for the term of this permit, whichever is longer. A current / updated copy of the SWMP, NOI, and a copy of the permit language / requirements shall be maintained in offices of both the Environmental Health Coordinator and the Road and Bridge Administrator.

Rockwall County shall make the records, including the SWMP and NOI, available to the public, if requested to do so in writing. The SWMP shall be available through the County website, or in the offices listed above within two (2) working days following the request from the public. Other records shall be provided in accordance with the Texas state law regarding the Public Information Act.

### **Section IV.2. - Annual Report**

Rockwall County shall submit a concise annual report to the Executive Director of the TCEQ within ninety (90) days of the end of the permit year. The annual report shall address the requirements listed in the TPDES Phase 2 MS4 general permit rules. The County shall also maintain copies of annual reports at offices of both the Environmental Health Coordinator and the Road and Bridge Administrator. See the aforementioned SWMP for the respective department's office and location.

## **Section V – Adoption by Rockwall County Commissioners Court**

The Storm Water Management Program was considered and adopted by the County of Rockwall Commissioners' Court on May 25, 2010 by Court Order. Attachment A is a copy of the adopting Court Order.