



City of Nolanville Storm Water Management Plan



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APPENDIX A – Minimum Control Measures

ACRONYMS

BMP	Best Management Practice
CWA	Clean Water Act
EPA	Environmental Protection Agency
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MHWM	Mean High Water Mark
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Works
SWMP	Storm Water Management Program
SWP3, SWPPP	Storm Water Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code
UA	Urbanized Area

DEFINITIONS

Arid Areas – *Areas with an average rainfall of less than ten (10) inches.*

Benchmarks – *A benchmark pollutant value is a guidance level indicator that helps determine the effectiveness of chosen best management practices (BMPs). This type of monitoring differs from “compliance monitoring” in that exceedances of the indicator or benchmark level are not permit violations, but rather indicators that can help identify problems at the MS4 with exposed or unidentified pollutant sources; or control measures that are either not working correctly, whose effectiveness need to be re-considered, or that need to be supplemented with additional BMP(s).*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(b) For individual lots in a residential construction site by either:

(1) The homebuilder completing final stabilization as specified in condition (a) above; or

(2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.

(c) For construction activities on land used for agricultural purposes (for example pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

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

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

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

proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

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

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

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

Impaired Water - *A surface water body that is identified as impaired on the latest approved CWA §303(d) List or waters with an EPA approved or established TMDL that are found on the latest EPA approved Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d) which lists the category 4 and 5 water bodies.*

Implementation Plan (I-Plan) – *A detailed plan of action that describes the measures or activities necessary to achieve the pollutant reductions identified in the total maximum daily load (TMDL).*

Indian Country - *Defined in 18 USC § 1151 as: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.*

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

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

Infeasible - *For the purpose of this permit, infeasible means not technologically possible, or not economically practicable and achievable in light of best industry practices. The TCEQ notes that it does not intend for any small MS4 permit requirement to conflict with state water right laws.*

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

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

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

(a) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA §208 that discharges to surface water in the state;

(b) That is designed or used for collecting or conveying stormwater;

(c) That is not a combined sewer; and

(d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2.

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

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

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

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

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

Permittee - *The MS4 operator authorized under this general permit.*

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

Pollutant(s) of Concern – For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4. (Definition from 40 CFR § 122.32(e)(3)).

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

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

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

(a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA § 208;

(b) Designed or used for collecting or conveying stormwater;

(c) Which is not a combined sewer;

(d) Which is not part of a POTW as defined in 40 CFR § 122.2; and

(e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7).

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

a system, and where the buildings are not physically interconnected to a small MS4 that is also operated by that public entity.

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

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

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

Structural Control (or Practice) - *A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.*

Surface Water in the State - *Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (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.*

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

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

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

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

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

I. INTRODUCTION

1.01 Storm Water Regulatory Requirement

Growing public awareness and concern for controlling water pollution into the waters of the United States led to the enactment of the Federal Water Pollution Control Act Amendments of 1972, more commonly known as the Clean Water Act (CWA). The CWA became the catalyst for regulating the discharges of pollutants into the waters of United States. The 1972 amendment created the National Pollutant Discharge Elimination System (NPDES) permit program requiring permits to be submitted by point source water pollution entities such as municipal sewage and industrial process wastewater and was successful in improving the overall water quality and was administered by the Environmental Protection Agency (EPA). Although the NPDES program improved the overall water quality, it did not address other significant sources of water pollution such as agricultural and storm water runoff.

In 1987 Congress amended the CWA and required the EPA to establish NPDES requirements for storm water discharges. As a result of this amendment a two phase storm water pollution program was established and in 1990 the EPA published the Phase I Municipal Storm Water Program. The Phase I program uses the NPDES permit coverage to address storm water runoff from medium and large Municipal Separate Storm Sewer Systems (MS4's), serving a population of 100,000 or greater.

In 1999 the Phase II Municipal Storm Water Program rule was published by the EPA for MS4's with less than a population of 100,000 to address storm water runoff and in August 2007 this program was adopted requiring MS4's affected by Phase II to submit a Notice of Intent (NOI) and a Storm Water Management Plan (SWMP) by February 11, 2008. This program is being administered by the Texas Commission on Environmental Quality (TCEQ) and all NOI's and SWMP's are submitted to them. Phase II requires all small MS4's to implement programs and practices to control polluted storm water runoff through the Texas Pollution Discharge Elimination System (TPDES) permit program. This program requires that the City of Nolanville:

- Specify Best Management Practices (BMPs) for five (5) minimum control measures (MCMs) and implement them to the maximum extent practicable (MEP)
- Identify measurable goals for the BMP control measures
- Implement these BMPs over a period of five (5) years
- Manage storm water quality activities through a SWMP

1.02 Storm Water Management Plan

The City of Nolanville has developed a SWMP in accordance with the requirements set forth by the TPDES General Permit TXR040000 dated January 24, 2019 for discharging storm water directly into waters of the United States. The SWMP is the instrument the City of Nolanville will use in order to reduce the amount of pollutants in storm water to the maximum extent practicable as required by the TPDES General Permit.

The SWMP that was developed for the City of Nolanville describes specific activities that will be instituted over a five (5) year period in order to reduce the amount of pollutants in storm water discharges to the maximum extent practicable. The activities listed in the SWMP are known as BMP. The SWMP must set measurable goals and provide a schedule for the implementation of each BMP. The BMP are specifically developed for five (5) minimum control measures (MCMs) that are required by the Phase II program. The five MCMs are as follows:

- ❖ ***Public Education, Outreach, and Involvement*** – Develop and Implement a Public Education Program, or equivalent outreach activities, to distribute information to the community about impacts of storm water discharges on water bodies and steps the public can take to reduce pollutants in storm water runoff. Comply with all State & Local notice requirements and is recommended to include the public in developing, implementing & reviewing the SWMP and engage all economic and ethnic groups.
- ❖ ***Illicit Discharge Detection and Elimination (IDDE)*** – Develop, implement and enforce a program to detect and eliminate illicit discharges. As part of this program a storm sewer system map with locations of all outfalls must be developed, an ordinance prohibiting illicit discharges must be established, establish enforcement procedures and actions, detect and address illicit discharges and inform employees, businesses and the general public of the program.
- ❖ ***Construction Site Stormwater Runoff Control*** – Develop, implement and enforce a program to reduce the pollutants in runoff from construction activities disturbing an area greater than or equal to one (1) acre in size. This includes sites smaller than one (1) acre that are part of a greater common plan of development, such as residential lots located in a development. Construction site operators will be required to implement erosion and sediment control BMP and to control waste products.
- ❖ ***Post-Construction Stormwater Management in New Development and Redevelopment*** – Develop, implement and enforce a program for storm water runoff from new and redevelopment projects that disturb greater than or equal to one (1) acre in size with an ordinance, structural and non-structural BMP and adequate long-term operation and maintenance. This includes sites smaller than one (1) acre that are part of a greater common plan of development, such as residential lots located in a development.
- ❖ ***Pollution Prevention and Good Housekeeping for Municipal Operations*** – Develop and implement an operation and maintenance program that has the goal of preventing and reducing storm water pollutants from municipal operations; this includes employee training seminars on storm water management and BMP.

II. CITY OF NOLANVILLE BACKGROUND

2.01 Background

The City of Nolanville is located in Central Texas and is situated between the City of Belton to the east and the City of Harker Heights to the west. Nolanville is situated on U.S. Highway 190 (I-14) and covers approximately 2.5 square miles and the 2010 census has the City's population at 4,259. Estimation of current population is 5,000. Nolanville is adjacent to Nolan Creek.

2.02 Watershed

The City of Nolanville has one (1) primary watershed. The sole watershed the City's storm water runoff contributes to is the Nolan Creek Watershed.

Nolan Creek is located to the south of US Highway 190 (I-14) and the downtown area of Nolanville. The majority of the developed residential and commercial properties is to the north of Nolan Creek and US Highway 190 (I-14). Nolan Creek is currently undeveloped along its banks through the City. The Nolan Creek Watershed consists largely of residential housing, but is also influenced by some commercial properties as well as U.S. Highway 190 (I-14).

Nolan Creek segment 1218_02 is the portion of South Nolan Creek from confluence with North Nolan / Nolan Creek fork upstream to confluence with Liberty Ditch in city of Killeen in Bell County. It is listed on the 2014 Texas Integrated Report - Texas 303(d) List (Category 5) for impaired waters. It is labeled as a Category 5b meaning additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected. The pollutant identified is bacteria and this segment was first identified as impaired in 1996. Potential contaminants to the watershed have been identified as parks, residential properties and manholes.

III. STORM WATER MANAGEMENT PLAN DEVELOPMENT

3.01 General

The specific hydrology and water quality concerns for the City of Nolanville were considered when preparing this Storm Water Management Plan. This plan was prepared under the guidance of the City Staff, TCEQ and the EPA. The BMP that have been identified will not only have a significant impact on the way the City currently operates, but will also impact industrial and commercial businesses, construction companies, developers, Killeen Independent School District (which includes the City of Nolanville), Bell County and residents of the City of Nolanville. Some areas of operations where the City of Nolanville will be affected are as follows:

- Drainage Systems
- Street Services
- Equipment Maintenance
- City Inspections
- Code Enforcement
- Police Department
- Planning & Development

3.02 Minimum Control Measures

The minimum control measures (MCMs) required by the Phase II rule describes BMPs developed to address the storm water pollutants that were identified as problematic within the City of Nolanville watersheds. The five (5) required MCMs are listed below along with each BMP developed for the MCMs:

Public Education, Involvement, & Participation:

- *Education of Nolanville residents regarding the importance of water quality in storm water discharges.*
- *Educate visitors to the City of Nolanville on the importance of water quality in storm water discharges.*
- *Educate City of Nolanville Employees on best management practices in municipal work.*
- *Educate industrial, commercial and automotive businesses on the importance of water quality in storm water discharges.*
- *Educate local businesses on the importance of water quality in storm water discharges.*
- *Educate area developers and home builders on the importance of water quality in storm water discharges.*
- *Educate local school children on the importance of water quality in storm water discharges.*
- *Comply with all federal, state and local public notice requirements when implementing the SWMP.*
- *Develop a city-wide storm water ordinance.*
- *Setup an illegal dumping hotline.*
- *Promote an annual waterway cleanup program.*

Illicit Discharge Detection & Elimination:

- *Develop a storm water ordinance specifically for illicit discharges.*
- *Develop a program that will allow the reporting of illicit discharges into the storm sewer system and put in place a plan for investigating the illicit discharge report.*
- *Develop protocol to identify, investigate and eliminate illicit discharges. Review this protocol annually to update based of new rules and regulations and protocol's effectiveness to identify, investigate and eliminate illicit discharges.*
- *Develop protocol to identify, investigate and eliminate illicit discharges (Non-Stormwater). Review this protocol annually to update based of new rules and regulations and protocol's effectiveness to identify, investigate and eliminate illicit discharges.*
- *Create a Storm Sewer System Map which includes:*
 1. *Location of all outfalls operated by the City which discharge into waters of the U.S.*
 2. *Location and name of all surface waters receiving discharge from the City's outfalls.*

Construction Site Stormwater Runoff Control:

- *Develop a storm water ordinance specifically for construction site runoff control.*
- *Require designers to include erosion control measures and approved BMP on plans and specifications in all projects and requiring compliance with the TPDES General Storm Water Permit as well as all other local and State regulations.*
- *For sites 1 acre and greater (including larger common plan), require the submittal of a Stormwater Pollution Prevention Plan (SW3P) in accordance with TPDES Construction General Permit TXR150000 by the project Developer for review and approval as part of the final construction plan submittal. Ensure SW3P includes site soil stabilization measures such as temporary grass seeding, permanent grass seeding, silt fence, rock berm, and other approved BMP Measures.*
- *Perform construction site inspection on erosion control measures.*
- *Develop a reporting link on the City's Website for construction site erosion control and BMP violations.*
- *Educate Construction Site Operators on the importance of erosion control measures and BMP.*
- *Attend pre-construction conferences on private development projects within the City Limits.*

Post-Construction Stormwater Management in New Development and Redevelopment:

- *Develop a storm water ordinance for post-construction management.*
- *Perform plan review on proposed developments.*
- *Require the submittal of a Stormwater Pollution Prevention Plan (SW3P) by the project Developer for review and approval as part of the final construction plan submittal.*
- *Perform post-construction site inspections on erosion control measures.*
- *Develop an operation and maintenance plan for long term O&M of permanent stormwater control measures for developments. Develop a inspection report form that can be filled out for monthly inspections that identifies required maintenance needed.*
- *Encourage low impact designs on developments regarding storm water runoff.*

Pollution Prevention/Good Housekeeping for Municipal Operations:

- *Develop a storm sewer & drainage way maintenance program.*
- *Develop standard operating procedure for the disposal of waste.*

- *Provide employee training to prevent and reduce storm water pollution from municipal activities.*
- *Implement storm water pollution prevention guidelines to be used in everyday municipal activities.*
- *Develop an evaluation for the potential discharge of pollutants in stormwater as a result of operation and maintenance activities at MS4 owned facilities, such as, roadways, parking lots, bridges, right-of-way maintenance, etc...*
- *Promote the protection and preservation of buffer areas around natural floodways.*
- *Develop procedures to remove and properly dispose of waste from the MS4.*
- *Develop and maintain an inventory of MS4 and stormwater facilities within the City of Nolanville.*

The five (5) required MCMs along with each BMP and BMP goal is in Appendix A.

3.03 Public Review

The City of Nolanville's Storm Water Management Plan will be available for public review in accordance with the TPDES General Permit TXR040000 at City Hall located at 100 North Main Street; Nolanville, TX 76559. It will also be available for review on the City's website at www.ci.nolanville.tx.us no later than 30 days after the approval date.

3.04 Record Keeping

As required by the TPDES General Permit TXR040000 the City of Nolanville will retain a copy of all records, a copy of this TPDES general permit and records of all data used to complete the application (NOI) for this general permit and make this information available to the public if requested to do so in writing.

3.05 Reporting

The City of Nolanville will submit a concise annual report to TCEQ within 90 days of the end of each permit year. The first permit year for annual reporting will begin on the date of the permit issuance. The annual report will address the previous permit year and will include the following:

- Status of compliance with the permit conditions;
- Assessment of the appropriateness of the identified BMPs;
- Progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP;
- The measurable goals of the MCMs;
- Evaluation of the success of the implementation of the measurable goals;

Other areas the annual report will address are:

- Status of any additional control measures implemented by the City, if applicable;
- Any MCM activities initiated before the permit issuance may be included;
- Summary of the results of information, including monitoring data, collected and analyzed, if any;
- Summary of the storm water activities the City operator plans to undertake during the next reporting cycle;
- The number of municipal construction activities authorized under this general permit and the total number of acres disturbed;
- The number of non-municipal construction activities that occurred within the jurisdiction of the City;
- Notice that the City operator is relying on another government entity to satisfy some of its permit obligations, if applicable.

The SWMP will be posted on the City's website no later than 30 days after the approval date. The annual report will be posted on the City's website no later than 30 days after the due date.

MCM 1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

BMP	BMP Description	Target Audience	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
1.1: Residents	Develop & distribute materials to City of Nolanville Residents on lawn and garden management, proper handling of household hazardous waste, pet waste, littering, waste management and other stormwater quality issues. Include alternatives to more toxic household items as well as coordinate with the Central Texas Council of Government on their annual Hazardous Waste Collection Day.	Residents	<p>1. Distribute public education materials regarding residential impacts on water quality. Target one municipal event per year to pass out materials in addition to daily availability on City website and at City Hall.</p> <p>2. Coordinate Annual Hazardous Waste Collection Day with Central Texas Council of Government</p>	Central Texas Council of Governments	May-18	Dec. 2019- Dec. 2023
1.2: Educate Visitors to the Nolanville Area	Develop & distribute materials to visitors to the City on the importance of water quality and efforts being made by the City of Nolanville to bring awareness to water quality.	Visitors to Nolanville	1. Distribute public education materials to visitors of the area detailing the importance of water quality and what the City of Nolanville is doing to promote the importance of water quality in the community. Target one municipal event per year to pass out materials in addition to daily availability on City website and at City Hall.		May-18	Dec. 2019- Dec. 2023
1.3: Municipal Employees	Develop & implement policies to be utilized by City of Nolanville Employees that will promote best management practices.	Municipal Employees	<p>1. Implement policies that will promote best management practices to be utilized by City of Nolanville Employees.</p> <p>2. Hold an annual workshop for employees in order to educate the importance of best management practices and water quality. Target 100% workshop participation by field personnel.</p>		May-18	Dec. 2019- Dec. 2023

MCM 1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

BMP	BMP Description	Target Audience	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
1.4: Educate Commercial & Industrial Facilities	Develop & distribute BMP literature detailing the importance of water quality focusing primarily on industrial, commercial and automotive businesses. Develop recognition program to business that promote and implement BMPs.	Commercial & Industrial Facilities Operators	<p>1. Distribute literature to businesses that educate the importance of BMPs focusing on industrial, commercial and automotive business. Target distribution to 20% of businesses annually.</p> <p>2. Develop of recognition program that rewards businesses who lead by example in water quality efforts. Target 1 award annually for leading business in this category.</p>		May-20	Dec. 2019- Dec. 2023
1.5: Educate Local Businesses	Develop & distribute BMP literature detailing the importance of water quality to local businesses.	Local Business Owners	<p>1. Distribute literature to businesses emphasizing the importance of BMPs for local business. Target distribution to 20% of businesses annually.</p> <p>2. Formalize recognition program that rewards businesses who lead by example in water quality efforts. Target 1 award annually for leading business in this category.</p>		May-20	Dec. 2019- Dec. 2023
1.6: Educate New Developers/Home Builders	Develop & distribute BMP literature detailing the importance of water quality to area developers and home builders. Evaluate and modify design standards and construction notes to require stricter BMPs during construction of new homes and home redevelopments, new homes and home improvements.	New Developers/Home Builders	<p>1. Distribute literature to developers and home builders through the Central Texas Home Builders Association Newsletter that educate the importance of BMPs on construction sites. Insert literature in 1 monthly newsletter per year.</p> <p>2. Evaluate and modify design standards and construction notes that promote better BMPs. Conduct review of standards annually.</p>		Nov-17	Dec. 2019- Dec. 2023
1.7: Educate Future Leaders	Develop & distribute BMP literature detailing the importance of water quality for local elementary school students attending school within Nolanville City Limits.	Students	<p>1. Distribute literature, pencils and other materials promoting the importance of water quality. Target distribution to local schools once per school year.</p> <p>2. Promote an Art Contest promoting BMPs and water quality among students. Target 1 contest annually.</p>	Killeen Independent School District	May-18	Dec. 2019- Dec. 2023

MCM 1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

BMP	BMP Description	Target Audience	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
1.8: Development of SWMP	Comply with all federal, state and local public notice requirements when implementing the SWMP	Nolanville Residents	<ol style="list-style-type: none"> 1. Make the SWMP available for review and comments on the city website 2. Make annual presentation to city council to report on progress of BMP implementations. 		Nov-16	Dec. 2019- Dec. 2023
1.9: Stormwater Ordinance	Hold public hearing regarding the development of a stormwater Ordinance. Public comments will be incorporated in the finalization of the ordinance if applicable.	Nolanville Residents	<ol style="list-style-type: none"> 1. Develop a draft ordinance. 2. Hold public hearing on ordinance and incorporate public hearing comments into ordinance, if applicable. Document receipt of all comments from public hearing. 3. Implement ordinance. 		May-20	Dec. 2020
1.10: Illegal Dumping Website Notification	Provide an illegal dumping notification link on the City of Nolanville's website where citizens can report illegal dumping.	Nolanville Residents	<ol style="list-style-type: none"> 1. Develop an illegal dumping notification 2. Collate and analyze annual report 		Nov-18	Dec. 2019- Dec. 2023
1.11: Stream Cleaning Program	Host annual waterway cleanup with students	Nolanville Residents	<ol style="list-style-type: none"> 1. Develop and promote community involvement through annual cleanup of waterways within City limits. Target 50% of waterways per cleanup event. 	Killeen Independent School District	Dec-19	Dec. 2019- Dec. 2023

MCM 2: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

BMP	BMP Description	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
2.1: Stormwater Ordinance for Illicit Discharges	Develop a stormwater ordinance that prohibits non-stormwater discharges into the storm sewer system and implement enforcement procedures and actions.	<ol style="list-style-type: none"> 1. Develop a draft ordinance. 2. Hold public hearings on ordinance and incorporate public hearing comments into ordinance if applicable. Document receipt of all comments from public hearing. 3. Implement ordinance. 		May-20	Dec. 2020
2.2: Illicit Discharge Awareness Campaign	Develop & distribute training materials in order to educate municipal employees, businesses, school district, and the general public on the hazards associated with illicit discharges and improper disposal of waste. Include the definition of illicit discharges in stormwater and examples of illicit discharges, as well as contact information of the MS4 responsible party.	<ol style="list-style-type: none"> 1. Develop training materials that detail the hazards associated with illicit discharges and improper disposal of waste. 2. Hold a workshop for municipal employees and distribute training materials to other entities within the City, local businesses and the general public. Target is 50% annual participation by municipal employees and distribution to 20% of businesses and schools annually. 	Central Texas Council of Government, Bell County, Central Texas Home Builders Association, Killeen Independent School District	May-18	Dec. 2019- Dec. 2023
2.3: Illicit Discharge Detection & Program Response	Develop a program that will allow the reporting of illicit discharges into the storm sewer system. Investigate the complaint and prepare a summary memo identifying the location, type of discharge and plan of action for clean up.	<ol style="list-style-type: none"> 1. Set up a website notification link for the public to report the possibility of an illicit discharge into the storm sewer system is occurring. 2. Investigate and detail findings in a summary memo identifying the location and type of discharge and recommendation of clean up. 3. Set up "one-click" reporting on website 		May-18	Dec. 2019- Dec. 2023

MCM 2: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

BMP	BMP Description	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
2.4: Illicit Discharge Detection and Elimination (Stormwater)	Develop protocol to identify, investigate and eliminate illicit discharges. Review this protocol annually to update based of new rules and regulations and protocol's effectiveness to identify, investigate and eliminate illicit discharges.	<ol style="list-style-type: none"> 1. Develop a monthly inspection of identified discharge sites within the City's jurisdiction. Target 100% of identified discharge sites. 2. Identify the type of illicit discharge via visual inspections and/or sampling. Identify discharge source. 3. If the source of the discharge is identified, provide documentation and support in a violation letter to the identified source property owner and recommend a course of action for eliminating future illicit discharges. Target is 100% response to all violations. 	Central Texas Council of Government, Bell County, Central Texas Home Builders Association, Killeen Independent School District	May-18	Dec. 2019- Dec. 2023
2.5: Illicit Discharge Detection and Elimination (Non- Stormwater)	Develop protocol to identify, investigate and eliminate illicit discharges (Non-Stormwater). Review this protocol annually to update based of new rules and regulations and protocol's effectiveness to identify, investigate and eliminate illicit discharges.	<ol style="list-style-type: none"> 1. Develop a monthly inspection of identified discharge sites within the City's jurisdiction. Target 100% of identified discharge sites. 2. Identify the type of illicit discharge via visual inspections and/or sampling. Identify discharge source. 3. If the source of the discharge is identified, provide documentation and support in a violation letter to the identified source property owner and recommend a course of action for eliminating future illicit discharges. 	Central Texas Council of Government, Bell County, Central Texas Home Builders Association, Killeen Independent School District	May-18	Dec. 2019- Dec. 2023
2.6: MS4 Mapping	Create a map of the locations of all the outfalls of the existing storm sewer system and the names of the waters of the US receiving the stormwater discharges.	<ol style="list-style-type: none"> 1. Create a map and include the map in the City's GIS system. 2. Develop a plan for updating the map as new development occurs. 		Sep-20	Dec. 2020- Dec. 2023

MCM 3: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

BMP	BMP Description	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
3.1: Stormwater Ordinance Construction Site Runoff Control	Develop a stormwater ordinance that outlines the necessary requirements for Construction Site Operators to comply with permit requirements for Construction Site stormwater runoff control, prohibiting of illicit discharges, and minimization of pollutant discharges from spills and leaks.	<ol style="list-style-type: none"> 1. Develop a draft ordinance. 2. Hold public hearings on ordinance and incorporate public hearing comments into ordinance if applicable. Document receipt of all comments from public hearing. 3. Implement ordinance. 	Central Texas Home Builders Association	May-20	Dec. 2020
3.2: Plan Review	Continue to require designers to include erosion control measures and approved BMPs on plans and specifications in all projects and requiring compliance with the TPDES General stormwater Permit as well as all other local and State regulations.	<ol style="list-style-type: none"> 1. Continue to require erosion control plans and BMP details on construction plan submittals. Target is 100% compliance by designers. 		Jan-16	Dec. 2019 - Dec. 2023
3.3: Construction Site Stormwater Runoff Control from All Construction on Sites, including Greater Than 1 Acre	Require the submittal of a Stormwater Pollution Prevention Plan (SW3P) by the project Developer for review and approval as part of the final construction plan submittal. Ensure SW3P includes site soil stabilization measures such as temporary grass seeding, permanent grass seeding, silt fence, rock berm, and other approved BMP Measures.	<ol style="list-style-type: none"> 1. Review SW3P to ensure the proposed plan is in accordance with the TPDES Construction General Permit. Target 100% of submitted SW3Ps. 2. If SW3P meets the TPDES Construction General Permit, issue approval to begin Construction. 3. Review 100% of active project site once SW3P BMP Measures are in place to ensure the SW3P is being implemented correctly. 	Central Texas Home Builders Association	Jan-18	Prior to Construction, Bi-Monthly and after each rain event During Construction, Dec. 2019 - Dec. 2023
3.4: Site Inspection	Develop procedures for construction site inspection and enforcement of non-compliant erosion control measures to be incorporated into the existing site inspection program.	<ol style="list-style-type: none"> 1. Develop a workshop for applicable employees to attend detailing an inspection program for erosion control measures/BMPs. 2. Develop a erosion control checklist to be utilized by an Inspector & Construction Site Operator. 3. Document any violations and provide follow-up inspections of permit provisions. Target is 100% of active project sites. 	Central Texas Home Builders Association	Mar-18	Bi-Monthly and after each rain event, Dec. 2019 - Dec. 2023

MCM 3: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

BMP	BMP Description	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
3.5: Reporting Link on Website	Develop a reporting link on the City's Website for construction site erosion control and BMP violations.	<ol style="list-style-type: none"> 1. Setup a website reporting link for reporting violations 2. Develop a plan of action for responding to violations. 	Central Texas Home Builders Association	Dec-18	Dec. 2019 - Dec. 2023
3.6: Construction Site Operator Education	Develop educational materials and workshop that can be hosted by the City to educate the Construction Site Operator on the importance of erosion control measures and BMPs and the consequences for not complying with the regulations set forth by the permit.	<ol style="list-style-type: none"> 1. Develop educational materials geared to Construction Site Operators. 2. Develop checklist for Construction Site Operators to adhere to during construction. 	Central Texas Home Builders Association	Jul-19	Dec. 2019 - Dec. 2023
3.7: Pre-Construction Conference Attendance	Attend pre-construction conferences on development projects within the City Limits to educate what the City expects and will be inspecting regarding BMPs, stormwater Pollution Prevention Plan and erosion control methods	<ol style="list-style-type: none"> 1. Coordinate with local Developer's and other area entities to be included in the pre-construction conference 2. Develop a checklist to be distributed at the pre-construction conference detailing areas of inspection regarding BMPs and erosion control methods and what is expected on the SWPPP 	Central Texas Home Builders Association	Jan-18	Dec. 2019 - Dec. 2023

MCM 4: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

BMP	BMP Description	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
4.1: Stormwater Ordinance for Post-Construction Management	Develop a stormwater ordinance that outlines the necessary requirements for Post-Construction Management in new and redevelopment projects.	<ol style="list-style-type: none"> 1. Develop a draft ordinance. 2. Hold public hearings on ordinance and incorporate public hearing comments into ordinance if applicable. Document receipt of all comments from public hearing. 3. Implement ordinance. 	Central Texas Home Builders Association	May-20	Dec. 2020
4.2: Development Plan Review	Continue to review all development plans for compliance with drainage design, floodplain requirements and use of detention ponds.	<ol style="list-style-type: none"> 1. Review all development plans for compliance. Target is 100% compliance. 		May-16	Ongoing, Dec. 2019- Dec. 2023
4.3: New Development and Redevelopment Construction Site Stormwater Runoff Control from Construction on All Sites, including Greater Than 1 Acre	Require the submittal of a Stormwater Pollution Prevention Plan (SW3P) by the project Developer for review and approval as part of the final construction plan submittal.	<ol style="list-style-type: none"> 1. Review SW3P to ensure the proposed plan is in accordance with the TPDES Construction General Permit. 2. If SW3P meets the TPDES Construction General Permit, issue approval to begin Construction. Target 100% of submitted SW3Ps. 3. Review project site once SW3P BMP Measures are in place to ensure the SW3P is being implemented correctly. Target is 80% vegetative cover on project sites; 100% completion of other BMP measures (rock riprap, etc.) 	Central Texas Home Builders Association	Jan-20	Prior to Construction, Bi-Monthly and after each rain event During Construction, Dec. 2020 - Dec. 2023
4.4: Post-Site Inspection	Develop procedures for post-construction site inspection and enforcement of controls of erosion control measures to be incorporated into the existing site inspection program.	<ol style="list-style-type: none"> 1. Develop a workshop for applicable employees to attend detailing an inspection program for erosion control measures/BMPs. 2. Develop a erosion control checklist to be utilized by an Inspector & Construction Site Operator. 3. Document any violations and provide follow-up inspections ensuring enforcement of permit provisions. Target is 100% of all active project sites. 		Nov-18	Ongoing, Dec. 2019- Dec. 2023

MCM 4: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

BMP	BMP Description	Measurable Goals	Public/Private Partner's	Implementation Date	Deadline
<p>4.5: Post Construction and Operation Maintenance of Stormwater Control Measures</p>	<p>Develop an operation and maintenance plan for long term O&M of permanent stormwater control measures for developments. Develop a inspection report form that can be filled out for monthly inspections that identifies required maintenance needed.</p>	<p>1. Perform inspections of the permanent stormwater control measures prior to accepting the project from the developer. Target 100% of newly constructed projects to be inspected.</p> <p>2. Once the project has been accepted by the City, include the permanent stormwater control measures in the monthly inspections. Target 25% of all permanent stormwater control measures to be inspected each month, rotating throughout the year.</p> <p>3. Include the permanent stormwater control measures in the City's regularly scheduled maintenance rotation. Target 25% of all permanent stormwater control measures to be inspected each month, rotating throughout the year.</p>		<p>Nov-18</p>	<p>Monthly, Dec. 2019- Dec. 2023</p>
<p>4.6: Encourage Low Impact/Green Designs</p>	<p>Promote low impact stormwater designs.</p>	<p>1. Review and modify existing design criteria to encourage low impact stormwater designs. Target 30% of designs to incorporate LID.</p>	<p>Central Texas Home Builders Association</p>	<p>May-16</p>	<p>Ongoing, Dec. 2019- Dec. 2023</p>

MCM 5: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

BMP	BMP Description	Measurable Goals	Public/Private Partners	Implementation Date	Deadline
5.1: Storm Sewer & Drainage Way Operation & Maintenance Program	Conduct maintenance along inlets, ditches, pipes and drainage channels for structural and other improvements when noted through citizen complaints and through field observations.	1. Respond to citizen complaints and field observations. Target is to investigate 80% of all complaints within 48 hours of receipt. 2. Record storm sewer and drainage way maintenance. Target is to inspect and maintain 25% of facilities monthly.		Jul-18	Dec. 2019- Dec. 2023
5.2: Disposal of Waste Removed from the MS4	Develop a standard operating procedure for the disposal of waste removed from the MS4, including dredged soil, accumulated sediments and floatable.	1. Develop and implement a standard policy for waste disposal. Target 100% compliance with adopted policy.		Jul-20	Dec. 2020
5.3: MS4 Employee Training	Develop and provide employee training to prevent and reduce stormwater pollution from activities such as park maintenance, fleet and building maintenance, new construction, land disturbance and stormwater system management.	1. Develop materials to promote the reduction and prevention of stormwater pollution from municipal activities for employees. 2. Set up workshop to educate employees on the importance of stormwater pollution prevention. Target 100% of field employees annually for (re)training.		Sep-18	Dec. 2019- Dec. 2023
5.4: Stormwater Pollution Prevention Guidelines for all MS4 Activities	Develop and Implement stormwater pollution prevention guidelines and operating procedures to be used in everyday MS4 activities such as waste disposal, fleet and building maintenance, vehicle and equipment washing, outdoor storage and other activities.	1. Develop SWPPP guidelines for each MS4 activity and implement BMPs for each. 2. Develop oversight procedures to ensure MS4 hired contractors adhere to the MS4's SWPPP guidelines and operating procedures. Target is 100% participation by MS4 hired contractors.		Dec-18	Dec. 2019- Dec. 2023

MCM 5: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

BMP	BMP Description	Measurable Goals	Public/Private Partners	Implementation Date	Deadline
5.5: Evaluation of O&M Activities at MS4 Owned Facilities	Develop an evaluation for the potential discharge of pollutants in stormwater as a result of operation and maintenance activities at MS4 owned facilities, such as, roadways, parking lots, bridges, right-of-way maintenance, etc...	<ol style="list-style-type: none"> MS4 identifies potential pollutants of concern that could be discharged from O&M activities. MS4 develops and implements pollution prevention measures that will reduce discharge of pollutants from O&M activities. MS4 inspects pollution prevention measures at MS4 facilities. Target is to inspect and maintain 25% of facilities monthly. 		Dec-18	Dec. 2019- Dec. 2023
5.6: Floodway Management	Promote the protection and preservation of buffer areas around natural floodways.	<ol style="list-style-type: none"> Identify buffer areas to promote vegetation and install signs that define the management area. Target is to identify 1 buffer area annually. Identify future areas suitable for promotion of vegetation as the city continues to develop. Target is to review list annually for potential new sites. 		May-21	Dec. 2021- Dec. 2023
5.7: MS4 Facilities and Stormwater Controls	Develop and maintain an inventory of MS4 and stormwater facilities within the City of Nolanville.	<ol style="list-style-type: none"> Prepare a database or worksheet that identifies the location of MS4 and stormwater facilities. Identify the location by address and GPS Coordinates. MS4 performs and maintains log of inspections, maintenance and repairs to existing structural controls. Target is to inspect and maintain 25% of structural controls monthly (mowing, sedimentation removal, etc.) 		Aug-16	Dec. 2019- Dec. 2023