TEXAS STATE UNIVERSITY

The rising STAR *of Texas*

Stormwater Management Program

For MS4 General Permit TXR040000

May 2014

Updated November 2015

EXECUTIVE SUMMARY

In response to the 1987 amendments to the Clean Water Act (CWA), the U.S. Environmental Protection Agency (EPA) initiated a comprehensive, two-phase approach to stormwater quality. On November 15, 1990, the EPA published Phase I of the National Pollutant Discharge Elimination System (NPDES) program. Phase I required permit coverage for stormwater discharges from medium and large municipal separate storm sewer systems (MS4s) with populations of 100,000 or more and several categories of industrial activities, including construction sites that disturb five or more acres of land. Phase I of the NPDES program addressed sources of stormwater runoff with the greatest potential to impact water quality. On December 8, 1999, the EPA published Phase II of the NPDES program requiring that small +MS4s with populations less than 100,000 and construction activities disturbing between one and five acres of land obtain permit coverage.

In 1998, the EPA delegated regulatory authority to the Texas Commission on Environmental Quality (TCEQ) to issue MS4 stormwater permits. As a regulatory entity, the TCEQ developed the Texas Pollutant Discharge Elimination System (TPDES) program, a program patterned after the federal NPDES stormwater program.

On August 13, 2007, the TCEQ issued TPDES General Permit No. TXR040000 for stormwater discharges from Phase II cities in Texas. The renewed permit was adopted by the Commission on December 13, 2013. In accordance with the permit requirements, Phase II regulated entities have 180 days to file for coverage under the General Permit by filing a Notice of Intent (NOI) and submitting a Stormwater Management Program (SWMP) for review and approval. Permittees have five years to fully implement all elements of the SWMP (December 2018). Permittees are required to submit annual reports to the TCEQ during the permit period.

Based on increased population measured in the City of San Marcos with the 2010 census, San Marcos was designated to be an urbanized area. Since Texas State University is located within the urbanized area, both entities are now regulated as small MS4s under the TPDES program.

The University, as a small MS4 operator, will be required to reduce the discharge of pollutants to waters of the United States to the "maximum extent practicable" (MEP) in order to protect water quality. At a minimum, the permit will require a SWMP that addresses the following issues:

- Identify and implement Best Management Practices (BMPs) for applicable minimum control measures (MCMs);
- Identify measurable goals for the control measures;
- Develop an implementation schedule for the control measures; and
- Define the responsible entity to implement the control measures.

To qualify for permit coverage, the MS4 must develop a SWMP that describes the BMPs they will develop and implement to minimize the discharge of pollutants from the MS4 to the maximum extent practicable. The five applicable MCMs as defined by the TCEQ are as follows:

- Public Education, Outreach and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention and Good Housekeeping for Municipal Operations
- Industrial Stormwater Sources (not applicable to Level 2 MS4s including Texas State University)

In order to fulfill permit requirements, several University departments will play a vital role in the implementation of the SWMP, including the Facilities Department which includes Utilities Operations, Grounds Operations, Facilities Operations, and Facilities Planning, Design and Construction and Community Relations, the Environmental Health Safety and Risk Management Department, Auxiliary Services, Department of Housing and Residential Life (DHRL), Transportation Services, Campus Recreation and the Athletics Department.

TABLE OF CONTENTS

List of Tables

SECTION 1 – OVERVIEW

1.1 BACKGROUND, SETTING, AND OBJECTIVES

Texas State University (Texas State) is a four-year accredited university located at 601 University Drive in San Marcos, Texas (see Area Map in **Figure 1**). The University serves a student population of greater than 34,000 and has seen continuous growth each year. The campus encompasses over 450 acres and lies within the drainage basin of the San Marcos River with ground elevation changes of 230 feet. Stormwater drains into nearby Sessom Creek, the San Marcos River and the City of San Marcos' MS4.

Figure 2 shows the location of the facility relative to waterways, roads, and inhabited areas. It also shows the general direction of stormwater surface flow. The headwater of the San Marcos River is at Aquarena Springs, located at Spring Lake on the northeast side of the campus.

Sessom Creek is an intermittent spring fed creek that flows along Sessom Drive from west of North LBJ to the confluence with the San Marcos River. Several ponds are located near University Drive as remnants of an inactive Fish Hatchery. The ponds are now used in research and for aesthetics. Most of the campus is located on a hill and the flow is to Sessom Creek or University Drive and then to the San Marcos River.

Surface water flow from the west side of campus is primarily along Ranch Road 12 (Texas 80) into the City's MS4 of drainage channels and storm sewer piping then to Purgatory Creek. The flow enters Purgatory Creek about 2 miles south of the campus near Guadalupe Street and the railroad tracks. The north and northeast side of campus drain toward Sessom Creek into a stormwater detention pond constructed jointly by Texas State and the City of San Marcos and then to the San Marcos River. Sessom Creek enters the river near the intersection of Sessom Drive and Aquarena Springs Drive, just upstream of Sewell Park.

The central portion of the campus drains to stormwater inlets that carry the water to a large outfall in the San Marcos River downstream of Sewell Park and across from City Park (known locally as Dog Beach).

Figure 3 shows the drainage basins on campus and the locations of the main outfalls to the San Marcos River. Stormwater drainage pipe is shown in blue on the Figure. The portion of the San Marcos River from Spring Lake to its confluence with the Blanco River is designated as Segment 1814 of the Guadalupe River Basin, described as the Upper San Marcos River. Areas of campus on the Edwards Aquifer Recharge are shown in **Figure 4** and include a small area at Spring Lake and the University Press/West Warehouse on Ranch Road 12 (Texas 80). A Water Pollution Abatement Plan (WPAP) as required by the Edwards Aquifer Rule (30 TAC Chapter 213) will be prepared and approved by the Edwards Aquifer Authority prior to any construction over these areas. There are no areas of campus on the Contributing Zone.

The objective of this stormwater management program is to put measures in place to allow sustainable campus growth while minimizing the impact the stormwater has on the receiving water bodies.

1.2 KEY PERSONNEL

In order to fulfill permit requirements, several University departments will play a vital role in the implementation of the Stormwater Management Program (SWMP), including the Facilities Department, Utilities Operations, Grounds Operations, Facilities Operations, Facilities Planning Design and Construction (FPDC), Community Relations, the Environmental Health, Safety and Risk Management (EHSRM) office, Auxiliary Services, Department of Housing and Residential Life (DHRL), Transportation Services, Campus Recreation and Athletics. These departments have the ability to perform many of the elements comprising a comprehensive stormwater program.

The Texas State University Finance and Support Services (FSS) Division has the primary responsibility to implement the Stormwater Management Program under the MS4 permit. The Student Affairs, Marketing and Athletics Divisions will provide support and resources to the FSS Division to meet the requirements of this program.

1.3 STORMWATER REGULATION

On August 13, 2007, the TCEQ issued TPDES General Permit No. TXR040000 for stormwater discharges from Phase II cities in Texas. This permit was renewed on December 13, 2013 and covers cities designated to be within urbanized areas by the 2000 and 2010 census. The San Marcos urbanized area is shown in **Figure 1** with the bold black line and the campus properties are shown in red. The Print

Shop is located inside the urbanized area, while the Distribution Center, STAR Park Campus, Freeman Ranch, Rattle Snake Cave and University Distribution Center are outside the urbanized area and not covered by this permit. The 2013 General Permit renewal designates different levels of coverage based on population and type of regulated entity (traditional or nontraditional). The University is considered a Level 2 MS4 as this category includes all nontraditional MS4s such as counties, drainage utilities, transportation entities, universities and colleges (Part II Section B.5.(b)). In accordance with the permit requirements, Phase II cities are required to obtain permit coverage within 180 days of the permit issuance date and will be given five years to fully implement a SWMP. The University will also be required to submit annual reports to the TCEQ during the permit period.

1.4 AUTHORITY OF THE UNIVERSITY TO IMPLEMENT AND ENFORCE MCMs AND BMPs

As required in the TPDES General Permit TXR040000 (Part III. A. 2. and 3), within two (2) years of the permit issuance, the University will develop relevant policy and procedures that give adequate legal authority to control pollutant discharges into the MS4 in order to meet the requirements of the General Permit. The permit clearly specifies that the permittees have the legal authority to:

1. Prohibit illicit discharges and illicit connections;
2. Respond to and contain other releases. Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the MS4;
3. Require compliance with conditions of the University's Policy and Procedures Statement (UPPS), permits, contracts or orders;
4. Require installation, implementation and maintenance of control measures;
5. Receive and collect information such as stormwater plans, inspection reports and other information deemed necessary to assess compliance with this permit from operators of construction sites, new or redeveloped land, and industrial and commercial facilities;
6. To enter and inspect university property including facilities, equipment, practices, or operations related to stormwater discharges to the MS4
7. Respond to noncompliance with Best Management Practices (BMPs) required by the MS4 consistent with the University's UPPS
8. Assess penalties, including monetary; and
9. To enter into interagency or interlocal agreements or other maintenance agreements, as necessary.

1.5 EXISTING STORMWATER MANAGEMENT PROGRAM

Texas State University has in place many components of the SWMP through other active program areas such as hazardous waste management, oil storage under the Spill Prevention Countermeasures and Control (SPCC) program and standard industrial practices. The following sections describe the elements already in place at Texas State for each of the five minimum control measures required by the MS4 General Permit

1.5.1 Public Education, Outreach and Involvement

Texas State has several public involvement programs in place for protection of the San Marcos River. The 'Texas Watch' water quality monitoring program has an active group called the "Texas Stream Team" that is based at Texas State and includes volunteers trained in sample collection and analysis. Other volunteers provide training and data input. Sampling is performed along the San Marcos River monthly by students, staff and local citizens. The university faculty, staff and students also participate in semiannual river cleanups organized by the City of San Marcos and the "River Foundation." Many Texas State organizations participate in the City sponsored program "Keep San Marcos Beautiful" (KSMB) by volunteering quarterly in "Adopt-a-Spot" locations.

Public Education, Outreach and Involvement will be developed through the permitting process over the 5-year permit cycle. Texas State has contacted other universities, small MS4 cities and reviewed materials available on the TCEQ and EPA websites to gain knowledge of the tools available for this minimum control measure.

1.5.2 Illicit Discharge, Detection and Elimination

Current Illicit Discharge, Detection and Elimination (IDDE) activities at Texas State include conducting recent studies of the sanitary sewer system and stormwater drainage system. In 2011, the Facilities department contracted with Burgess & Niple, Inc. to perform smoke testing of the sanitary sewer system on the campus ("Texas State Smoke Test Results", July 2011). Facilities staff made necessary repairs to the system as recommended by the report which included capping an abandoned line, replacing broken manhole covers or frames, and running camera through lines with apparent blockage.

The Facilities department also initiated "The Stormwater Drainage Study and Plan" for the storm sewer system that was completed in December 2013. This study evaluated the existing storm sewer system, structural controls currently in place, and erosion areas. The plan recommended projects that will improve drainage, reduce flooding and alleviate water quality issues associated with uncontrolled flow to the creek and river.

The Facilities department uses dye tests and video inspection of lines to respond to case-by-case sanitary sewer blockage issues and make repairs. These repairs include unstopping wastewater transmission lines, investigating stoppages on building feeder sewer lines, inspection and maintenance of lift stations and manhole repairs. In addition, Facilities department assesses the operation and maintenance of grease traps at dining halls and food services locations at least twice a year. The EHSRM department also inspects all grease traps for overflow conditions monthly. The EHSRM office conducts semiannual sampling of wastewater ports as part of the "Industrial Pretreatment Permit" with the City of San Marcos, and responds to all noncompliance issues with corrective action. EHSRM also conducts monthly inspections of all grease traps, food oil storage units and drum storage areas in accordance with the university's SPCC plan.

1.5.3 Construction Site Stormwater Runoff Control

The Facilities Planning, Design and Construction office and the EHSRM office have an active site inspection program in place for construction sites one acre or larger and that are regulated by TPDES Construction General Permit (CGP) TXR 150000. The University notifies construction contractors of the requirement to apply for the CGP TXR150000 and a WPAP if work is over the Edwards Aquifer Recharge Zone. Inspections are performed regularly with written reports and follow-up actions identified and transmitted to the contractor by Texas State's Facilities Planning, Design and Construction office. The Facilities Department and EHSRM office review construction site plans for compliance with best management practice for erosion control and review site Stormwater Pollution Prevention Plans (SWPPP). The Facilities Planning, Design and Construction office and EHSRM office conduct a preconstruction site visit and complete a checklist signed by both owners and operators prior to contractors breaking ground on sites one acre or larger.

1.5.4 Post-construction Stormwater Management in New Development and Redevelopment

The EHSRM office along with the Facilities department have developed a list of structural engineering controls across campus and mapped these onto a drawing that includes GPS coordinates and photographs of each unit. These units have been evaluated with the "Stormwater Drainage Study and Plan" (2013) to evaluate their effectiveness under particular storm events (25-year storm). Recommendations for improvement were identified in the plan to improve performance as necessary.

A preliminary maintenance schedule has been developed for these units by the EHSRM department and Facilities department. Facilities Operations and Utilities Operations crews currently inspect drainage areas (curb inlets, drainage pipe inlets, and channels) after rainfall events to remove debris. Additional maintenance activities will be developed and scoped out for in-house or contract services as part of the MS4 permit.

1.5.5 Pollution Prevention and Good Housekeeping for Municipal Operations

Existing programs for pollution prevention and good housekeeping are in place at the Facilities vehicle maintenance garage for the fleet of university vehicles. All new and used oil is stored on secondary containment trays and oil storage areas are inspected regularly by the EHSRM office. Spill response supplies are located in the garage and the staff is trained in emergency response of oil spills. The university SPCC plan contains these procedures to prevent oil spills to the waters of the state.

The garage floor drains lead to an oil/water separator and are cleaned annually by a permitted contractor and disposal/recycle facility. All vehicles are washed in the wash bay that drains to a grit trap prior to the sanitary sewer. The grit trap is pumped out as required and the solids are taken for offsite disposal.

Used oil collection and recycling is in place at the Facilities Garage and the Central Utility Plant. Oil is stored in a double walled tank at each facility and is inspected regularly by the EHSRM office. The used oil is picked up for recycle by a permitted facility on a regularly scheduled basis. Oil from the AC shop, Golf Course Maintenance Shop and UPD Garage are stored in drums on containment trays. The oil is either picked up for recycle or by the EHSRM department for disposal. Oily rags from all areas are collected in 30-gallon metal drums and picked up for offsite disposal by EHSRM. These wastes are sent to a permitted offsite facility through the university's contracted hazardous waste disposal company. Used antifreeze from the garage and Central Plant is recycled by a permitted offsite facility.

Parking garages are cleaned by Parking Services utilizing a power wash to minimize the volume of rinsewater generated. Booms are put in place to absorb the rinsewater and then collected for offsite disposal at a permitted facility.

The Facilities Grounds Operations crews collect litter on campus and maintain landscaping. Native plants are used to minimize the need for irrigation. Other departments that maintain turf include the Golf Course, Campus Recreation and Athletics. All of the departments employ licensed pesticide applicators and follow the Texas Department of Agriculture requirements for application rates, storage of products, and record keeping. Best management practices currently followed by the departments include; 1) not applying product prior to rain events or high winds, 2) aerating the soils, 3) conducting soil tests to determine the amount of fertilizer needed, 4) use of low toxicity and organic products, 5) applying only the proper amount of water to stimulate deep root growth (i.e. not overwatering).

The EHSRM office administers the Hazardous Waste Management program for the university and provides service for all laboratories and shops on campus. The office provides regular pickups of hazardous waste and nonhazardous industrial waste that cannot be discharged to the sanitary sewer (i.e. they exceed wastewater permit limits). Waste is transported to a Central Accumulation Area (CAA) building designed for hazardous waste storage. The CAA has secondary containment and a fire suppression system and is inspected weekly by EHSRM. The waste is segregated by hazard class, inventoried and picked up every 60 to 90 days for offsite disposal by a permitted hazardous waste management contractor.

1.6 STORMWATER MANAGEMENT PROGRAM OVERVIEW

1.6.1 Development of the SWMP

The TPDES permit requires the permittee to select appropriate BMPs for each of five MCMs. A sixth MCM is not required by Level 2 MS4s (Industrial Stormwater Sources) and a seventh MCM is optional. The University is considered a Level 2 MS4 and will include the five required MCMs in the SWMP:

1. Public Education, Outreach and Involvement
2. Illicit Discharge Detection and Elimination (IDDE)
3. Construction Site Stormwater Runoff Control
4. Post-construction Stormwater Management in New Development and Redevelopment
5. Pollution Prevention and Good Housekeeping for Municipal Operations

In order to achieve permit requirements, the University has developed a SWMP detailing a series of selected BMPs for each of the five minimum control measures. As outlined throughout the SWMP, each of the BMPs utilize a series of measurable goals and evaluation techniques to ensure appropriate program implementation throughout the five year permit period.

1.6.2 Clean Water Act 303d Impairment

The Upper San Marcos River (Section 1814) of the Guadalupe Blanco River Basin was listed in 2010 as impaired on the 303d list of the Texas Integrated Report for the Clean Water Act (CWA). The impairment was for elevated Total Dissolved Solids (TDS). TDS was a concern prior to 2010, but exceeded the limit in 2010. Corrective action for this listing can be through a regulatory driven Total Maximum Daily Load (TMDL) determination followed by an Implementation Period, or by a voluntary Watershed Protection Plan (WPP). The University along with the City of San Marcos and Hays County are following the WPP approach using grant funding through TCEQ and the EPA CWA 319 grant funding. WPPs are generally more widely accepted by the community and offer a more holistic approach to watershed protection. In addition, this WPP is an opportunity for the community to be proactive in managing other non-point source pollution as the watershed faces pressures from urbanization.

In accordance with Part II.D.4.(b)(1) of the General Permit, Texas State will determine within the first year of the permit whether the permitted discharges from the University may be a source of the impairment of TDS. Existing studies will

be reviewed from the Aquatic Biology Department and the Meadows Center staff on the correlation of TDS and conductivity measurements. The assessment will be included in the Year 1 Annual Report. If it is determined that the campus discharges are a contributing source, no later than two years from the permit effective date (December 13, 2015), the University will modify the SWMP, if applicable, to include focused BMPs to reduce the discharge of the impairment. In addition, no later than 3 years following the permit effective date, the University will submit a Notice of Change (NOC) to amend the SWMP to include any additional BMPs to address TDS.

1.6.3 List of Allowable Non-Stormwater Discharges

The following non-stormwater sources may be discharged from the small MS4 and are not required to be addressed in the small MS4's Illicit Discharge Detection and Elimination program or other minimum control measures, unless they are determined by the MS4 Operator or the TCEQ to be significant contributors of pollutants to the small MS4 (Part II.C.):

1. Water line flushing (except for hyperchlorinated water unless the water is first dechlorinated);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that do not violate Texas Surface water quality standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;
8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle washing;
12. Flows from wetlands and riparian habitats;
13. Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. Street wash water excluding street sweeper wash water;

15. Discharges or flows from emergency firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
16. Other allowable non-stormwater discharges listed in 40 CFR 122.26(d)(2)(iv)(B)(1);
17. Non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) or the TPDES Construction General permit (CGP) TXR 150000;
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-storm water discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

SECTION 2 – MCM 1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

Public education and outreach is a key component to the success of a SWMP. Through public education, students, faculty and staff will gain an understanding of how their actions affect stormwater quality, and they will become more informed about water quality issues in their community. When students, faculty and staff understand that water quality can by impacted by common everyday activities, a major source of stormwater pollutants can be voluntarily eliminated. Perhaps more importantly, an educated public can be a broad base of support for a SWMP. The objective of a public education program is to promote a clear identification and understanding of the issues associated with stormwater pollution and to promote community and university ownership.

The University is dedicated to educating the campus community on the impacts stormwater can have on water quality, the hazards associated with illegal discharges, and the steps that can be taken to reduce pollutants in stormwater runoff. Texas State will determine and then coordinate education and outreach efforts as appropriate with the City of San Marcos to maximize the program and cost effectiveness of the required outreach as allowed by Part III Section B.(a).(4).

2.1 REGULATORY REQUIREMENTS

Part III Section B MCM 1: Public Education, Outreach and Involvement

(a) Public Education and Outreach

(1) All permittees shall develop, implement and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses and the general public of hazards associated with the illegal discharges and improper disposal of wastes and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements as necessary, to continue reducing the discharge of pollutants

from the MS4 to the MEP [Maximum Extent Practicable]. New elements must be fully implemented by the end of this permit and newly regulated permittees shall have the program fully implemented by the end of this permit term. The program must, at a minimum:

a. Define the goals and objectives of the program based on high priority community-wide issues (for example, reduction of nitrogen in discharges from the small MS4, promoting previous techniques used in the small MS4, or improving the quality of discharges to the Edwards Aquifer);
b. Identify the target audience(s);
c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites;
d. Determine cost effective and practical methods and procedures for distribution of materials.

(2) Throughout the permit term, all permittees shall make the educational materials available to convey the program's message to the target audience(s) at least annually.
(3) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.
(4) MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

(b) Public Involvement

All permittees shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP, except that correctional facilities are not required to implement this portion of the MCM.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. At a minimum, all permittees shall:

(1) If feasible, consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program;
(2) If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs and educational activities;
(3) Ensure the public can easily find information about the SWMP.

2.2 SELECTED BEST MANAGEMENT PRACTICES

The University has selected the following BMPs to implement over the five year permit period for this minimum control measure.

2.2.1 Comprehensive Stormwater Education and Outreach Program

BMP Description: A Comprehensive Stormwater Education and Outreach Program will be developed by the University to include the following items required by the permit:

- Define the goals and objectives of the program based on high priority campus-wide issues
- Identify the target audiences (students, faculty, staff, contractors, and campus visitors)
- Develop appropriate educational materials such as brochures, fliers and door hangers, signage at select locations, radio and T.V. advertisements, websites and social network sites.

- Develop cost effective and practical methods of delivering the materials such as new employee or new student orientation packets, newsletters, and social media.

- By the end of the permit cycle, the methods found to be most cost effective and practical will be included in the program as written procedures so they can be followed during the subsequent permit cycles.

Measurable Goals	*Time Line*
1. Develop the Comprehensive Stormwater Education and Outreach Program.	**Year 1**
2. Implement program and update as needed.	**Years 2-5**

Evaluation: The Comprehensive Stormwater Education and Outreach Program is written, accepted, and implemented by Texas State within the first year.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Students, faculty, staff and campus visitors

2.2.2 Stormwater Quality Education Materials

BMP Description: Texas State staff will acquire and distribute informational stormwater educational materials such as brochures, fliers, door hangers, magnets, inserts, etc. for the purpose of educating the campus community on stormwater quality issues. The informational material will cover topics including but not limited to:

- ✓ Water quality impacts of stormwater runoff to local water bodies
- ✓ Steps the campus community can take to reduce stormwater pollution
- ✓ Information about specific types of common pollution such as pet waste, pesticides herbicides and fertilizer, oil, litter, household chemicals and cigarette butts.

Texas State operates a cable television station to provide information and access to services and programs for students, staff, and faculty. This station will be utilized to highlight public service announcements (PSAs) obtained from free sources with messages of simple methods a student can take to prevent common stormwater pollution from entering the river. The City's municipal cable station may also be used as another free source of advertising.

Measurable Goals	*Time Line*
1. Acquire stormwater educational materials from EPA, TCEQ and other MS4s. Customize materials with local logos and contact information.	**Year 1-2**
2. Distribute educational materials such as brochures, fliers, door hangers, magnets at university and city sponsored environmental events or other appropriate activities.	**Year 2-5**
3. Post or broadcast digital promotional materials onto free media outputs such as Texas State radio, Texas State and City cable stations, social media and various websites and list serves as appropriate.	**Year 3-5**

Evaluation: Maintain an electronic copy of the stormwater educational materials and provide examples in the Annual Report. Meet the goals of developing the materials by the deadline. Document the number of materials distributed each year. Document the number of broadcasts or digital postings of educational materials each year.

Responsible Parties:

- EHSRM
- Community Relations

Target Audience: Students, faculty, staff and campus visitors.

2.2.3 Education/Training for Construction Personnel

BMP Description: Texas State has seen increased construction activity due to tremendous growth in student population and resulting new building construction and utility upgrades.

This training material will focus on the construction industry and best management practices that are required to meet the TCEQ General Construction permit and that are considered industry standards.

Measurable Goals	*Time Line*
1. Acquire stormwater educational materials from sources listed in 2.2.2 as well other appropriate sources. Customize materials with local logos and contact information.	**Year 2**
2. Provide training for Texas State construction staff (FPDC) such as "lunch and learns", vendor demonstrations, links to webinars or podcasts, classroom training or online training. Update training annually.	**Year 3-5**
3. Provide orientation training to contractor and subcontractor superintendents on basic SWPPP inspection expectations and site controls upon initial startup at a jobsite.	**Year 4-5**

Evaluation: Maintain an electronic copy of the stormwater educational materials and provide examples in the Annual Report. Meet the goals of developing the materials by the deadline. Document attendance at all educational promotional events and training sessions.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State construction project managers, inspectors and construction contractors.

2.2.4 Awareness Outreach for Employees and Students

BMP Description: This training is focused for employees (new and existing) of Texas State and students. The campus has a digital platform that can reach all students, staff and faculty in the form of e-mail, website, and social media. Other all-encompassing media include biannual publications from the University president, newsletters, and seminars. Freshman and transfer students take general orientation (Texas State 101) and new employees take a New Employee Orientation (NEO) when joining Texas State. Stormwater-specific information will be added to these general orientations to educate and bring awareness to incoming students and employees.

Many students live off campus or in campus-owned offsite facilities. A campaign for pet waste management will be focused for these students and through the Campus Association of Student Organizations, or CASO. Educational efforts will also include information regarding concerns associated with the release of aquarium pets to local aquatic resources.

Measurable Goals	*Time Line*
1. Provide basic stormwater pollution prevention awareness input into new employee and new student orientation.	**Year 1**
2. Include pollution prevention and MS4 permit awareness messages in regularly published media such as newsletters, campus wide e-mail, web postings and electronic marques.	**Year 2-5**
3. Implement pet waste awareness campaign, including information on concerns associated with the release of aquarium pets to local aquatic resources, for University-owned or managed apartments.	**Year 3-5**

Evaluation: Meet the requirement of adding content for awareness training for new employees and students by the first year of permit issuance. Maintain a record of the number of new employees and new students that receive training annually. Maintain a record of the number of newsletters, campus wide e-mails, web postings and electronic marquee postings occur each year.

Responsible Parties:

- EHSRM
- Human Resources
- Undergraduate Admissions
- University News Service
- CASO

Target Audience: Students, faculty, staff.

2.2.5 Web Page and Community Hotlines

BMP Description: Texas State will enhance its stormwater webpage to add content to educate the campus on stormwater issues. The information added may include the adopted Stormwater Management Program, contact information, event schedules for public involvement, educational materials, and annual reports. Hotlines will be added on the webpage for the campus to report illicit discharges, illegal dumping, construction site violations, and additional environmental issues that may affect the campus community.

Measurable Goals	*Time Line*
1. Enhance the University webpage to include stormwater educational materials, contact information and other appropriate materials.	**Year 2**
2. Expand the website to include hotline numbers, Annual Reports, and event dates and schedules.	**Year 2-5**

Evaluation: Maintain a record of the number of hits the website receives each year. Address hotline concerns; document them and the outcomes.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Students, faculty, staff and campus visitors.

2.2.6 Public Notice Requirements

BMP Description: The University will comply with public notice requirements specified in the permit (Part II E. 12.) Once Texas State receives written notice from the TCEQ Chief Clerk, Texas State will publish notice of the Executive Director's preliminary decision of the NOI and SWMP. The notice will be published in a newspaper of general circulation in Hays County and will allow the public to submit comments on the NOI and SWMP for up to 30 days. The availability of the NOI and SWMP for review will be stated in the notice and will be in a publicly accessible location on campus. A public meeting will be held following MS4 permit procedures if enough interest is expressed by the public. An affidavit of publication and a copy of the public notice will be filed with the TCEQ Office of the Chief Clerk within 60 days of receiving the initial written instructions.

Measurable Goals	*Time Line*
1. Comply with Public Notice legal requirements for NOI and SWMP implementation.	**Year 1**
2. Publish the executive Director's preliminary determination in a newspaper of general circulation within the county within 30 days after being notified by TCEQ Office of Chief Clerk.	**Year 1**

Evaluation: Maintain a copy of the letter from TCEQ and a copy of the Public Notice published in the newspaper.

Responsible Parties:
- EHSRM
- University News Service

Target Audience: Students, faculty, staff and campus visitors

2.2.7 Storm Drain Stenciling or Marker Program

BMP Description: A new storm drain cover design will be created by an art competition to educate the campus community and general public about the connection between the storm drains and the river. The competition will serve as a free public involvement activity and will reach all San Marcos residents including school children and Texas State students and employees. The winning design will be used on new storm sewer manhole covers.

Volunteer groups will be utilized as much as possible to install curb inlet markers to increase public awareness. Texas State staff will install the inlet markers in selected appropriate areas.

Measurable Goals	*Time Line*
1. Select a new design for storm drain manhole covers.	**Year 1**
2. Incorporate new design on new and replacement storm drain covers.	**Year 2-5**
3. Decide on a design and product (i.e. stenciling and/or marker) for storm inlets. Determine number of inlets needing signage and order.	**Year 2**
4. Install inlet markers on at least 10 curb inlets annually.	**Year 2-5**

Evaluation: Complete the art competition and report the number and types of press releases and public announcements used in the on the annual report. Maintain an electronic copy of the manhole cover art design and inlet marker design and order information. Maintain a record of the number of storm drains marked and volunteers that participated and report on the annual report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Students, faculty, staff and campus visitors

2.2.8 Community Events

BMP Description: There are numerous existing campus and community events that the university staff, faculty and students participate in. These include river cleanups, household hazardous waste collection events, Arbor Day, Electronics Recycling day and Texas Wildrice Festival. Bobcat Build is an annual event in the Spring where several thousand Texas State students volunteer their time to complete up to 200 community service projects. These activities and events are examples of opportunities for the campus community to learn about the effects of common pollutants on the storm drain system and the local creeks and River.

Over 70 Texas State organizations participate in the Keep San Marcos Beautiful (KSMB) initiative. Education is through participation in quarterly volunteer projects at "Adopt-a-Spot" locations designated by the program. Additional locations on campus tied to stormwater protection may be added to this program to increase awareness and outreach volunteer opportunities.

Measurable Goals	*Time Line*
1. Participate in at least one San Marcos River cleanup each year.	**Year 1-5**
2. Work with Bobcat Build (a one-day student service event) volunteers on stormwater cleanup, maintenance or other related projects.	**Year 1-5**
3. Continue with Texas State volunteer groups for Keep San Marcos Beautiful (KSMB) "Adopt-a-Spot" projects.	**Year 1-5**

Evaluation: Maintain a record of the number of events and volunteer hours. Record the number of educational handouts or demonstrations given at each event.

Responsible Parties:

- EHSRM
- CASO

Target Audience: Students, faculty, staff

2.3 FIVE YEAR PROGRAM SUMMARY

Table 2-1 presents a five year summary of MCM-1 BMPs and schedule of implementation.

Table 2 - 1 PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec to Dec.)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Comprehensive Stormwater Education and Outreach Program	Develop the Comprehensive Stormwater Education and Outreach Program to include required components of the MS4 permit.	X					EHSRM Facilities
	Implement program and update as needed.		X	X	X	X	
Stormwater Quality Education Materials	Acquire stormwater educational materials from EPA, TCEQ and other MS4s. Customize materials with local logos and contact information.	X	X				EHSRM Community Relations
	Distribute educational materials such as brochures, fliers, door hangers, magnets at university and city sponsored environmental events or other appropriate activities.		X	X	X	X	
	Post or broadcast digital promotional materials onto free media outputs such as Texas State radio, Texas State and City cable stations, social media and various websites and list serves as appropriate.			X	X	X	
Education/Training for Construction Personnel	Acquire stormwater educational materials from sources listed in 2.2.2 as well other appropriate sources. Customize materials with local logos and contact information.		X				EHSRM Facilities
	Provide training for Texas State construction staff (FPDC) such as “lunch and learns”, vendor demonstrations, links to webinars or podcasts, classroom training or online training. Update training annually.			X	X	X	
	Provide orientation training to contractor and subcontractor superintendents on basic SWPPP inspection expectations and site controls upon initial startup at a jobsite.				X	X	
Awareness Outreach for Employees and Students	Provide basic stormwater pollution prevention awareness input into new employee and new student orientation.	X					EHSRM Human Resources Undergraduate Admissions University News Service CASO
	Include pollution prevention and MS4 permit awareness messages in regularly published media such as newsletters, campus wide e-mails, web postings and electronic marquees.		X	X	X	X	
	Implement pet waste awareness campaign, including information on concerns associated with the release of aquarium pets to local aquatic resources, for University-owned or managed apartments.			X	X	X	
Web Page and Community Hotlines	Enhance the University webpage to include stormwater educational materials, contact information and other appropriate materials.		X				EHSRM Facilities
	Expand the websites to include hotline numbers, Annual Reports, and event dates and schedules.		X	X	X	X	

Table 2 - 1 PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec to Dec.)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Public Notice Requirements	Comply with all Public Notice legal requirements for NOI and SWMP implementation.	**X**					EHSRM University News Service
	Publish the executive Director's preliminary determination in a newspaper of general circulation in Hays County within 30 days after being notified by TCEQ Office of Chief Clerk.	**X**					
Storm Drain Stenciling or Marker Program	Select a new design for storm drain manhole covers.	**X**					
	Incorporate new design on new and replacement storm drain covers.		**X**	**X**	**X**	**X**	EHSRM Facilities
	Decide on a design and product (i.e. stenciling and/or marker) for storm inlets. Determine number of inlets needing signage and order.		**X**				
	Install inlet markers on at least 10 curb inlets annually.		**X**	**X**	**X**	**X**	EHSRM CASO Facilities
Community Events	Participate in at least one San Marcos River cleanup each year.	**X**	**X**	**X**	**X**	**X**	EHSRM
	Work with Bobcat Build volunteers on stormwater cleanup, maintenance or other related projects.	**X**	**X**	**X**	**X**	**X**	EHSRM CASO
	Continue with Texas State volunteer groups for Keep San Marcos Beautiful (KSMB) "Adopt-a-Spot" projects.	**X**	**X**	**X**	**X**	**X**	EHSRM

SECTION 3 – MCM 2: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The illicit discharge detection and elimination MCM is intended to detect and eliminate discharges to the MS4 system that are not entirely composed of stormwater. As identified in the Phase II TPDES permit, MS4 operators are required to develop a strategy to detect and eliminate illicit discharges to the storm drain system. An illicit discharge has been defined by the EPA as "any discharge into a separate storm sewer system that is not composed entirely of stormwater." Texas State is considered a Level 2 MS4, therefore, Level 3 and Level 4 requirements will not apply.

3.1 REGULATORY REQUIREMENTS

Part III Section B MCM2: Illicit Discharge Detection and Elimination (IDDE)

(a) Program Development

(1) All permittees shall develop, implement and enforce a program to detect, investigate, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1(c). The Illicit Discharge Detection and Elimination (IDDE) program must include the following:

a. An up-to-date MS4 map (see Part III.B.3.(c)(1));
b. Methods for informing and training MS4 field staff (see Part III.B.2.(c)(2));
c. Procedures for tracing the source of an illicit discharge (see Part III.B.2.(c)(5));

d. Procedures for removing the source of the illicit discharge (see Part III.B.2.(c)(5));
e. For Level 2, 3 and 4 small MS4s, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;Procedures for removing the
f. For Level 4 small MS4s, procedures for identifying priority areas within the small MS4 likely to have illicit discharges, and a list of all such areas identified in the small MS4 (See Part III.B.2.(g)(1));
g. For Level 4 small MS4s, field screening to detect illicit discharges (See Part III.B.2(g)(2)).

(2) For non-traditional small MS4s, if illicit connections or illicit discharges are observed related to another operator's MS4, the permittee shall notify the other MS4 operator within 48 hours of discovery. If notification to the other MS4 operator is not practicable, then the permittee shall notify the appropriate TCEQ regional office of the possible illicit connection.

(3) If another MS4 operator notifies the permittee of an illegal connection or illicit discharge to the small MS4, then the permittee shall follow the requirements specified in Part III.B.2.(c)(3).

(4) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, ether on site or in the SWMP and made available for inspection by the TCEQ.

(b) Allowable Non-Storm Water Discharges

Non-stormwater flows listed in Part II.C do not need to be considered by the permittee as an illicit discharge requiring elimination unless the permittee or the TCEQ identifies the flow as a significant source of pollutants to the small MS4.

(c) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.2.(c)(1)-(6)

(1) MS4 mapping

All permittees shall maintain an up-to-date MS4 map, which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information:

a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S;
b. The location and name of all surface waters receiving discharges from the small MS4 outfalls;
c. Priority areas identified under Part III.B.2.(e)(1) if applicable.

(2) Education and Training

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.

(3) Public Reporting of Illicit Discharges and Spills

To the extent feasible, all permittees shall publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4. The permittee shall provide a central contact point to receive reports; for example by including a phone number for complaints and spill reporting.

(4) All permittees shall develop and maintain on site procedures for responding to illicit discharges and spills.

(5) Source Investigation and Elimination

a. Minimum Investigation Requirements – Upon becoming aware of an illicit discharge, all permittees shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable.

(i) All permittees shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge.
(ii) All permittees shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.
(iii) All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

b. Identification and Investigation of the Source of the Illicit Discharge –All permittees shall investigate and document the source of illicit discharges where the permittees have jurisdiction to complete such an investigation. If the source of illicit discharge extends outside the permittee's boundary, all permittees shall notify the adjacent permitted MS4 operator or TCEQ's Field Operation Support Division according to Part III.A.3.b.

c. Corrective Action to Eliminate Illicit Discharge

(i) If and when the source of the illicit discharge has been determined, all permittees shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.

(d) Additional Requirements for Level 3 and 4 small MS4s

In addition to the requirements described in Parts III.B.2(c)(1)-(6) above, permittees who operate level 3 and 4 small MS4s shall meet the following requirements:

(1) Source Investigation and Elimination

Permittees who operate level 3 and 4 small MS4 shall upon being notified that the discharge has been eliminated, conduct a follow-up investigation or field screening, consistent with Part III.B.2.(e)(2), to verify that the discharge has been eliminated. The permittee shall document its follow-up investigation. The permittee may seek recovery and remediation costs from responsible parties consistent with Part III.A.3., and require compensation related costs. Resulting enforcement actions must follow the procedures for enforcement action in Part III.A.3. If the suspected source of the illicit discharge is authorized under an NPDES/TPDES permit or the discharge is listed as an authorized non-stormwater discharge, as described in Part III.C, no further action is required.

(e) Additional Requirements for Level 4 small MS4s

In addition to the requirements described in Parts III.B.2(c)-(d) above, permittees who operate level 4 small MS4s shall meet the following requirements:

(1) Identification of Priority Areas

Permittees who operate level 4 small MS4s shall identify priority areas and shall document the basis for the selection of each priority area and shall create a list of all priority areas identified. This priority area list must be available for review by the TCEQ.

(2) Dry Weather Field Screening

By the end of the permit term, permittees who operate level 4 small MS4s shall develop and implement a written dry weather field screening program to assist in detecting and eliminating illicit discharges to the small MS4. Dry weather field screening must consist of (1) field observations; and (2) as needed, field screening.

If dry weather field screening is necessary, at a minimum, the permittee shall:

a. Conduct dry weather field screening in priority areas as identified by the permittee in Part III.B.2(e)(1). By the end of the permit term, all of those priority areas, although not necessarily all individual outfalls must be screened.
b. Field observation requirements – The permittee shall develop written procedures for observing flows from outfalls when there has been at least 72 hours of dry weather. The written procedures should include the basis used to determine which outfalls would be observed. The permittee shall record visual observations such as odor, color, clarity, floatables, deposits or stains.
c. Field screening requirements – The permittee shall develop written procedures to determine which dry weather flows will be screened, based on results of field observations or complaint from the public or the permittee's trained field staff. At a minimum, when visual observations indicate a potential problem, such as discolored flows, foam, surface sheen, and other similar indicators of contamination, the permittee shall conduct a field screening analysis for selected indicator

pollutants as determined by the permittee. Screening methodology may be modified based on experience gained during the actual field screening activities. The permittee shall document the method used.

3.2 SELECTED BEST MANAGEMENT PRACTICES

In addition to the programs currently in place, the University has selected the following BMPs to implement over the five year permit period for this minimum control measure.

3.2.1 Illicit Discharge Elimination UPPS

BMP Description: The University will include in the General MS4 Authority UPPS (see Section 1.4) statements prohibiting and eliminating illicit discharges to the MS4. The EHSRM and Facilities Departments will work together to ensure UPPS compliance throughout the campus community. The UPPS will prohibit illicit discharges and connections, all non-stormwater discharges that significantly contribute pollutants to the MS4 and illegal dumping. Illegal dumping refers to the intentional placement of chemicals, solid or liquid wastes, tires, trash or carcasses into a storm drain or MS4 system. The UPPS will include inspection procedures in response to complaints and monitoring provisions as well as appropriate enforcement procedures and actions for subcontractors.

Measurable Goals	*Time Line*
1. Draft language to include in the General MS4 Authority UPPS prohibiting illicit connections to the storm sewer and waters of the state.	**Year 1-2**
2. Circulate for internal review.	**Year 1-2**
3. Finalize and include in employee training for shops, the garage, FPDC, Utilities Operations DHRL, Auxiliary Services and Grounds Operations.	**Year 2-5**
4. Include policy in subcontracts as applicable.	**Year 2-5**

Evaluation: Develop and adopt the UPPS according to schedule. Track all violations and enforcement actions associated with the illicit discharge elimination policy.

Responsible Parties:

- EHSRM
- Facilities
- Finance and Support Services

Target Audience: Texas State staff, Texas State contractors, construction personnel.

3.2.2 Storm Sewer Mapping

BMP Description: The existing storm sewer MS4 map will be updated as new outfalls are identified and new storm sewer lines are added or modified. The map includes outfalls to the waters of the state, the names of receiving waters, sources of information used to create and update the map and the storm sewer piping and inlet system. This map will be increase the effectiveness and efficiency of responses to illicit discharges entering the storm sewer system.

Measurable Goals	*Time Line*
1. Continue to update the MS4 map showing new outfalls and modified or new storm sewer lines and inlets.	**Year 1-5**
2. Annually review project closeout documents received by contractors to ensure they provide GIS compatible as-builts of the storm sewer and sanitary sewer systems.	**Year 2-5**

Evaluation: Update the existing MS4 map according to schedule. Make a record of the number of new outfalls added to the MS4 map and GIS database each year and include in the Annual Report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff.

3.2.3 Develop IDDE Program

BMP Description: An IDDE program will be developed to include all of the required components specified in Part III.B.2 of the TPDES General Permit TXR040000 for Level 2 permittees. The program will utilize a combination of complaint-driven investigations and proactive inspection procedures to identify and eliminate illicit discharges to the storm sewer. The 2011 Smoke Test Report and 2013 Stormwater Drainage Study and Plan verified no cross connections exist. Monitoring will continue to check for cross connections in the storm sewer and sanitary sewer systems. The current practice of inspecting grease traps and lift stations as well as replacing broken manhole covers will continue.

Procedures for tracing the source of an illicit discharge include the use of dye or smoke testing. Assessments may be done to identify possible cross connects between the two sewer systems (storm and sanitary). Procedures to eliminate any cross connects will be included. The IDDE program will include verification of no cross connections in new construction and remodel projects.

Procedures will continue to be followed by the EHSRM office and FPDC to properly discharge through testing and City discharge approval all construction related pipe cleaning solutions (e.g. hyperchlorination, iron cleaning, passivation, etc.) to the sanitary sewer or offsite disposal only and not inadvertently to the storm sewer. The EHSRM office will conduct semiannual dry weather flow screenings of all outfalls identified on the MS4 map and will investigate illicit discharges.

Measurable Goals	*Time Line*
1. **Continue inspection of grease traps and lift stations and replace broken manhole covers with Texas State salamander covers.**	**Year 1-5**
2. **Prepare the IDDE plan and circulate for review. Include testing procedures for drains determined to be potentially high risk for the MS4. Conduct dry weather flow semiannually**	**Year 2**
3. **Include procedures for verification of no cross connects between the storm and sanitary sewers in new development and remodel projects.**	**Year 2**
4. **Finalize plan and implement.**	**Year 3-5**

Evaluation: Prepare and finalize the IDDE plan according to schedule. Record the number of field tests conducted to test for storm sewer/sanitary sewer cross connects. Track the number of illicit discharges reported and investigated. Record the number of outfalls inspected annually for dry weather flow and corrective actions taken.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff, construction contractors.

3.2.4 Training on IDDE and Outfall Monitoring

BMP Description: Training will be developed and given to Shops, Garage staff, Grounds Operations, Utility Operations, Auxiliary Services, DHRL and FPDC construction project managers to bring awareness of the IDDE program and how to report and respond to illicit discharges.

Measurable Goals	*Time Line*
1. Develop training for field personnel and shops to educate what illicit discharges are and how to report and respond to them.	**Year 2**
2. Implement training with workshops for the staff in the Shops, Grounds Operations, Garage, Auxiliary Services, DHRL, FPDC and Utility Operations follow by annual refresher training.	**Year 3-5**

Evaluation: Develop training according to schedule. Make a record of the number of staff trained each year.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff.

3.2.5 IDDE Hotline Number and Follow-up Procedures

BMP Description: A hotline number will be established for the public to call and report illicit discharges or illegal dumping and to receive information concerning corrective actions taken. The number will be posted to the University website and other forms of educational and outreach materials. Procedures will be included in the IDDE plan (see 3.2.3) to respond to reports and take appropriate actions to investigate, eliminate and report the discharge. Follow-up inspections will be conducted and recorded of any corrective action taken. The procedures will satisfy the TPDES General Permit TXR040000 Part III.B.2(c)(3-6).

Measurable Goals	*Time Line*
1. Establish a hotline number for the public to report illicit discharge or illegal dumping.	**Year 2**
2. Develop procedures within the IDDE plan for responding to reports of illicit discharges and illegal dumping.	**Year 2**
3. Implement the program and document the types of complaints and corrective actions taken for the annual report.	**Year 3-5**

Evaluation: Complete the tasks according to schedule. Keep a record of the complaints received, investigation that occurred and corrective action taken. Report the findings on the annual report.

Responsible Parties:

- EHSRM
- Facilities
- Auxiliary Services

Target Audience: Texas State staff.

3.2.6 Hazardous Waste and Recycle Material Collection Programs

BMP Description: Continue current program of hazardous waste collection from all labs and shops for offsite disposal at EPA permitted facilities. Continue used oil and antifreeze collection and recycle at the Garage and Central Utility Plant. Provide monthly pickup and recycle of all used batteries, fluorescent bulbs, ink jet cartridges, laser cartridges and paint waste for recycle. Continue with regular pickup of aluminum, plastic, glass, paper and cardboard from all buildings for recycle. These services are available to the Texas State generators of waste and help prevent the wastes from being poured down the sink, applied to the land or poured to the storm sewer.

Measurable Goals	*Time Line*
1. Continue hazardous waste and industrial waste collection program.	**Year 1-5**
2. Continue collection of batteries, fluorescent bulbs, ink jet and laser cartridges, paint waste and used oil and antifreeze. Continue with annual electronic waste collection.	**Year 1-5**
3. Continue collection of aluminum, plastic, glass, paper and cardboard from all buildings.	**Year 1-5**
4. Report volume of wastes picked up and report to management and TCEQ as applicable.	**Year 1-5**

Evaluation: Record pounds of each waste picked up annually and report to management and TCEQ (for hazardous and Class 1 industrial waste).

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State student, faculty and staff.

3.3 Five Year Program Summary

Table 3-1 presents a five year summary of MCM-2 BMPs and schedule of implementation.

Table 3 – 1 ILLICIT DISCHARGE DETECTION AND ELIMINATION							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Develop UPPS for Illicit Discharge Prohibition and Construction and Post Construction Enforcement	Draft language to include in the General MS4 Authority UPPS prohibiting illicit connections to the storm sewer and waters of the state.	**X**	**X**				EHSRM Facilities Finance and Support Services
	Circulate for internal review	**X**	**X**				
	Finalize and include in employee training for shops, the garage, FPDC, Utilities Operations DHRL, Auxiliary Services and Grounds Operations.		**X**	**X**	**X**	**X**	
	Include policy in subcontracts as applicable		**X**	**X**	**X**	**X**	
Storm Sewer Mapping	Continue to update the MS4 map showing new outfalls and modified or new storm sewer lines and inlets.	**X**	**X**	**X**	**X**	**X**	**EHSRM Facilities**
	Annually review project closeout documents received by contractors to ensure they provide GIS compatible as-built's of the storm and sanitary sewer systems.		**X**	**X**	**X**	**X**	
Develop the Illicit Discharge Detection and Elimination (IDDE)Program for Storm Sewer	Continue inspection of grease traps and lift stations and replace broken manhole covers with Texas State salamander covers.	**X**	**X**	**X**	**X**	**X**	**EHSRM Facilities**
	Prepare the IDDE plan and circulate for review. Include testing procedures for drains determined to be potentially high risk for the MS4. Conduct dry weather flow semiannually.		**X**				
	Include procedures for verification of no cross connects between the storm and sanitary sewers in new development and remodel projects.		**X**				
	Finalize plan and implement.			**X**	**X**	**X**	

Table 3 - 1 ILLICIT DISCHARGE DETECTION AND ELIMINATION							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Training on IDDE and Outfall Monitoring	Develop training for field personnel and shops to educate what illicit discharges are and how to report and respond to them.		**X**				**EHSRM** **Facilities**
	Implement training with workshops for the Shops, Grounds Operations, Garage, Auxiliary Services, DHRL, FPDC and Utility Operations followed by annual refresher training.			**X**	**X**	**X**	**EHSRM** **Facilities** **Auxiliary Services**
IDDE Hotline Number and Follow-Up Procedures	Establish a hotline number for the public to report illicit discharge or illegal dumping.		**X**				**EHSRM**
	Develop procedures within the IDDE plan for responding to reports of illicit discharges and illegal dumping.		**X**				**EHSRM** **Facilities** **Auxiliary Services**
	Implement the program and document the types of complaints and corrective actions taken for the annual report.			**X**	**X**	**X**	**EHSRM** **Facilities** **Auxiliary Services**
Hazardous Waste and Recycle Material Collection Programs	Continue to provide weekly waste pickups on campus to shops and labs.	**X**	**X**	**X**	**X**	**X**	**EHSRM**
	Continue to offer monthly battery pickup and annual electronic waste recycling.	**X**	**X**	**X**	**X**	**X**	**EHSRM**
	Continue to collect recycle materials from all academic buildings, shops and dorms on a scheduled basis.	**X**	**X**	**X**	**X**	**X**	**Facilities**
	Continue to record the volume of waste and recyclable materials picked up and report to management annually.	**X**	**X**	**X**	**X**	**X**	**EHSRM** **Facilities**

SECTION 4 – MCM 3: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Construction site stormwater runoff control measures are designed to prevent soil and construction debris from entering the MS4 system from construction sites. During construction activities, vegetation and topsoil are stripped away, making the area especially vulnerable to erosion. This MCM consists of BMPs that focus on the reduction of pollutants in stormwater from construction sites that are one acre or larger in size. The BMPs describe the University's Policies and Procedures (UPPS) for construction sites, procedures for site plan review, project acceptance and inspection.

4.1 REGULATORY REQUIREMENTS

Part III Section B MCM 3: Construction Site Stormwater Runoff Control

(a) Requirements and Control Measures

(1) All permittees shall develop, implement and enforce a program requiring operators of small and large construction activities, as defined in Part I of this general permit, to select, install, implement and maintain stormwater control measures that prevent illicit discharges to the maximum extent practicable (MEP). The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal and local law, to require erosion and sediment control.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term.

If TCEQ waives requirements for stormwater discharges associated with small construction from a specific site(s), the permittee is not required to enforce the program to reduce pollutant discharges from such site(s).

(b) Requirements for all Permittees

All permittees shall include the requirements described below in Parts III.B.3(b)(1)-(7)

(1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part IIIA.2. Any changes must be included in the annual report. Such written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.

(2) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure that the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4.

a. Erosion and Sediment Controls – Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.
b. Soil Stabilization – Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee. In arid, semiarid and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.
c. BMPs – Design, install, implement and maintain effective BMPs to minimize the discharge of pollutants to the small MS4. At a minimum, such BMPs must be designed, installed, implemented and maintained to:

(i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters;

(ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

(iii) Minimize the discharge of pollutants from spills and leaks.

d. As an alternative to (a) through (c) above, all permittees shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) in accordance with the TPDES CGP TXR150000. In arid, semiarid and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee. As an alternative, vegetative stabilization measures may be implemented as soon as practicable.

(3) Prohibited Discharges – The following discharges are prohibited:

a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
b. Wastewater from washout and cleanup of stucco, paint, from release oils, and other construction materials;
c. Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance; and
d. Soaps or solvents used in vehicle and equipment washing;
e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

(4) Construction Plan Review Procedures

To the extent allowable by state, federal and local law, all permittees shall maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this

requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:

a. The site plan review procedures must incorporate consideration of potential water quality impacts.
b. The permittee may not approve any plans unless the plans contain appropriate site specific construction site control measures that, at a minimum, meet the requirements described in Part III.B.3.(a) or the TPDES CGP, TXR150000.

The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the CGP, TXR150000.

(5) Construction Site Inspections and Enforcement

To the extent allowable by state, federal and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall, at a minimum, conduct inspections of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.

a. Inspections must occur at a frequency determined by the permittee, based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site.
b. Inspections must occur during the active construction phase.

(i) All permittees shall develop, implement and revise as necessary, written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on site or in the SWMP and be made available to TCEQ.
(ii) Inspections of construction sites must, at a minimum:

1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage.
2. Conduct a site inspection to determine if control measures have been selected, installed, implemented and maintained according to the small MS4's requirements.
3. Assess compliance with the permittee's ordinances and other regulations.
4. Provide a written or electronic inspection report.

c. Based on site inspection finding, all permittees shall take all necessary follow-up actions (for example, follow-up inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and maintained for review by the TCEQ.

   For non-traditional small MS4s with no enforcement powers, the permittee shall notify the adjacent MS4 operator with enforcement authority or the TCEQ's Field Operations Support Division according to Part III.A.3(b).

(6) Information submitted by the Public

All permittees shall develop, implement and maintain procedures for receipt and consideration of information submitted by the public.

(7) MS4 Staff Training

All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers.

(c) Additional Requirements for Level 3 and 4 small MS4s

In addition to the requirements described in Parts III.B.3(b)(1)-(7) above, permittees who operate level 3 and 4 small MS4s shall meet the following requirements:

(1) Construction Site Inventory

Permittees who operate level 3 and 4 small MS4s shall maintain an inventory of all permitted active public and private construction sites, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. Notification to the small MS4 should be made by submittal of a copy of an NOI or a small construction site notice. The permittee shall make this inventory available to the TCEQ upon request.

4.2 SELECTED BEST MANAGEMENT PRACTICES

4.2.1 Prepare a UPPS for Construction Site Runoff and Illicit Discharge Control

BMP Description: The University will include in the General MS4 Authority UPPS (see Section 1.1.4) statements requiring contractors to follow the TXR150000 Construction General Permit, and have a SWPPP that includes elements specified by the permit and the University. The UPPS will address the University's inspection process and enforcement requirements. The UPPS will follow procedures for inspection the SWPPP components and site BMPs prior to the operator initiating earth disturbing activities. The UPPS will require regular review and updates as necessary of the SWMP and MCM implementation procedures.

Measurable Goals	*Time Line*
1. Draft language to add to the General MS4 Authority UPPS for construction site runoff and illicit discharge.	**Year 1-2**
2. Circulate for internal review.	**Year 1-2**
3. Finalize and include in employee training for FPDC and contractor training.	**Year 3-5**
4. Update construction standards to comply with MS4 Permit.	**Year 5**

Evaluation: Develop and adopt the UPPS according to schedule. Track all violations and enforcement actions associated with the construction site runoff elimination policy and illicit discharge procedures.

Responsible Parties:

- EHSRM
- Facilities
- Finance and Support Services

Target Audience: Texas State staff, Texas State contractors, FPDC personnel.

4.2.2 Monitor Compliance with Stormwater Requirements for New Construction and Redevelopment Contracts

BMP Description: The University will continue to monitor compliance with its stormwater construction plan to ensure the required elements of MCM3 and MCM4 for new development and redevelopment for sites one acre or larger are met. The university will continue to require contractors to comply with the TPDES CGP TXR150000, the University's requirements for SWPPP plans and sediment and erosion control drawings, listing of prohibited discharges and start-up procedures for ensuring all SWPPP controls are in place prior to earth disturbing activities. The university's construction contracts and campus construction standards will describe the University's procedures for construction related activities. Provisions for water quality features in the design of the site will be included Construction contracts will describe which sediment and erosion control plans will be reviewed and the tracking procedures.

Measurable Goals	*Time Line*
1. Continue to monitor compliance with Stormwater Program for new construction and redevelopment.	**Year 1-5**
2. Modify construction standards and contract documents to include additional provisions required by the MS4 permit.	**Year 2**
3. Circulate for review, finalize and implement.	**Year 2-5**

Evaluation: Review current construction contracts and campus construction standards to determine compliance with MS4 requirements and make changes as necessary in accordance with the time schedule.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State and Texas State University System staff, Texas State contractors, FPDC personnel.

4.2.3 Site Plan Review Program

BMP Description: The University will continue to review design drawing and specifications for new construction and redevelopment to determine compliance with the MS4 UPPS, construction standards and the SWMP. A standard Table of Contents for SWPPP will be developed along with a checklist of items to review on sediment and erosion control drawings. The checklist will include additional MS4 permit requirements including: potential water quality impacts, proper use and placement of erosion controls, proper selection and sizing of post maintenance BMPs, incorporation of low impact development methods and determining if the site discharges to another MS4 or to the Edwards Aquifer.

Measurable Goals	*Time Line*
1. Continue with the process of reviewing erosion control plans, SWPPP drawings and post construction BMP selection on new construction and redevelopment site plans.	**Year 1-5**
2. Develop a checklist to follow for plan review.	**Year 2**
3. Review Construction contracts and campus standards to ensure compliance with TPDES Construction General Permit TXR 150000, and MS4 Permit TXR40000.	**Year 2**
4. Review site plans in terms of water quality impact including BMPs selection and design with emphasis on low impact development.	**Year 3-5**

Evaluation: Track the number of plans submitted each year to the EHSRM office for review. Record the number of plans reviewed each year and compare these data with the number of plans submitted. Goal of 75% review of projects 1 acre or larger.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State and Texas State University System staff, Texas State consultants and contractors, FPDC personnel.

4.2.4 Construction Site Inspection Program

BMP Description: The University will continue the program of inspecting University-owned construction sites that are 1 acre or larger. The sites are inspected in accordance with provisions in the TCEQ General Construction Permit (TXR150000). The inspection may include photographs and completion of a checklist based on the University's requirements and those of the TCEQ General Permit. Inspection results are submitted to the University project manager and project superintendent electronically the day of the inspection. If corrective action is required, it is expected to occur prior to the next rain event or next inspection, whichever occurs first.

Inspectors are trained through certified programs such as those offered by the Texas A&M Engineering and Extension Service (TEEXS) or the International Erosion Control Association (IECA). Other qualified program will also be used as applicable.

Measurable Goals	*Time Line*
1. Continue with existing program of routine SWPPP inspections and reporting for one acre and larger sites.	**Year 1-5**
2. Develop an electronic method of conducting inspections and reporting to streamline process.	**Year 2**
3. Continue attending conferences and training to increase skills and knowledge of construction inspectors.	**Year 1-5**
4. Resolve all noncompliance issues or pursue enforcement actions per UPPS.	**Year 2-5**

Evaluation: Record the number of inspections conducted each year. Record the number of hours of training or continuing education achieved by inspectors. Document the number of warnings/citations given each year for issues of noncompliance, and annually compare these data to assess UPPS effectiveness.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State and Texas State University System staff, Texas State consultants and contractors, FPDC personnel.

4.2.5 Education/Training for Construction Personnel

BMP Description: See Section 2.2.3

4.2.6 Stormwater Hotline for Construction Runoff Issues

BMP Description: See Section 2.2.5

4.3 Five Year Program Summary

Table 4-1 presents a five year summary of MCM-4 BMPs and schedule of implementation.

Table 4 - 1 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Prepare a University Policy and Procedures Statement (UPPS) for Construction Site Runoff and Illicit Discharge Control	Draft language to include in the General MS4 Authority UPPS for construction runoff control and illicit discharges.	X	X				EHSRM FPDC Financial Support Services Utility Operations
	Circulate for internal review.	X	X				
	Finalize and include in employee training for FPDC and contractor training.			X	X	X	EHSRM FPDC Utility Operations
	Update construction standards to comply with MS4 Permit.					X	
Monitor Compliance with Stormwater Requirements for New Construction and Redevelopment	Continue to monitor compliance with stormwater program for new construction and redevelopment.	X	X	X	X	X	EHSRM FPDC Utility Operations
	Modify construction standards and contract documents to include additional provisions required by the MS4 permit.		X				
	Circulate for review, finalize and implement.		X	X	X	X	
Site Plan Review Program	Continue with the process of reviewing erosion control plans, SWPPP drawings and post construction BMP selection on site plans for new construction and redevelopment.	X	X	X	X	X	EHSRM FPDC Utility Operations
	Develop a checklist of items to follow for plan review.		X				
	Review construction contracts and campus standards to ensure compliance with the TPDES General Construction Permit TXR150000 and MS4 Permit TXR40000.		X				
	Review site plans in terms of protection of water quality impact, including BMP selection and design with emphasis on low impact development.			X	X	X	

Table 4 - 1 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Construction Site Inspection Program	Continue with existing program of routine SWPPP site inspections and reporting for one acre and larger sites.	**X**	**X**	**X**	**X**	**X**	EHSRM FPDC Utilities Operations
	Develop an electronic method of conducting inspections and reporting to streamline process streamline reporting.		**X**				
	Continue attending conferences and training to increase skills and knowledge of construction inspectors.	**X**	**X**	**X**	**X**	**X**	
	Resolve all noncompliance issues or pursue enforcement actions per the UPPS.		**X**	**X**	**X**	**X**	
Education/Training for Construction Contractors	See Table 2 - 1 Public Education, Outreach and Involvement						
Stormwater Hotline for Construction Runoff Issues	See Table 2 - 1 Public Education, Outreach and Involvement						

SECTION 5 – MCM 4: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Post-construction stormwater management in new development and redevelopment focuses on the implementation of controls to maintain good water quality conditions after an area has been developed. New development can also have a significant effect on water quality because during the course of development, natural landscapes are often replaced by impermeable roads, parking lots, sidewalks and other paved surfaces that lead to increases in both the volume of stormwater runoff and the accompanying pollutants that reach local water bodies.

The MS4s are required to develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge to the small MS4. The program must ensure that controls are in place to prevent or minimize water quality impacts.

5.1 REGULATORY REQUIREMENTS

(a) Post-Construction Stormwater Management Program

(1) All permittees shall develop, implement, and enforce a program to the extent allowable under state, federal and local law to control stormwater discharges from new development and redevelopment sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of the permit term.

(2) All permittees shall use, to the extent allowable under state, federal and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement and enforce a requirement, that owners or operators of new development and redevelopment sites design, install, implement and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ. Newly regulated permittees shall have the program elements fully implemented by the end of the permit term.

(b) Requirement for All Permittees

All permittees shall include the requirements described below in Parts III.B.4(b)(1)-(3)

(1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection by the TCEQ.
(2) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.
(3) Long-Term Maintenance of Post-Construction Stormwater Control Measures

All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance or structural stormwater control measured installed through one or both of the following approaches:

a. Maintenance performed by the permittee. See Part III.B.5
b. Maintenance performed by the owner or operator of a new development or redevelopment site under a maintenance plan. The maintenance plan must be filed in the real

property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redevelopment site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.

(c) Additional Requirements for Level 4 small MS4s

In addition to the requirements described in Parts III.B.5(b)(1)-(3) above, permittees who operate level 4 small MS4s shall meet the following requirements:

(1) Inspections - Permittees who operate level 4 small MS4s shall develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance plan. For small MS4s with limited enforcement authority, this requirement applies to the structural controls owned and operated by the small MS4 or its contractors that perform these activities within the small MS4's regulated area.

a. Inspection Reports - The permittee shall document its inspection findings in an inspection report and make them available for review by the TCEQ.

5.2 SELECTED BEST MANAGEMENT PRACTICES

5.2.1 Prepare a UPPS for Post Construction Runoff

BMP Description: The University will include in the General MS4 Authority UPPS (See Section 1.4) statements requiring new construction and redevelopment (sites greater than or equal to one acre) to include management of stormwater runoff including a combination of structural and nonstructural BMPs intended to protect water quality and minimize any discharge of pollutants. Routine inspection, operation and maintenance of the BMPs will be covered by the UPPS.

Measurable Goals	*Time Line*
1. Include in the General MS4 Authority UPPS policies for post construction runoff control and O&M of structural BMPs to protect stormwater quality and minimize the discharge of pollutants.	**Year 1**
2. Circulate for review.	**Year 1-2**
3. Finalize UPPS.	**Year 2-5**

Evaluation: Develop and adopt the UPPS according to schedule.

Responsible Parties:

- EHSRM
- Finance and Support Services
- Facilities

Target Audience: Texas State staff, Texas State consultants and contractors, FPDC personnel.

5.2.2 Program for Runoff from New Development and Redevelopment

BMP Description: A program will be developed that addresses how stormwater runoff will be managed from new development and redevelopment of sites that are one acre or larger to include water quality considerations. The program will include a description of the procedures to follow if the outfall is to the City of San Marcos MS4 for new development. The University will design, install, implement and maintain structural BMPs that minimize the discharge of pollutants from new construction and campus redevelopment. The University will modify the Construction Standards and/or other regulatory mechanisms to require installation of these permanent, structural BMPs. If the construction of a permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the University may propose an alternative approach to TCEQ. As the owner of the BMPs and operator of the small MS4 the University will perform the maintenance of the post construction BMPs through the use of on-site staff or contractors (as allowed by Part III.B.4.(b)(3)a.). Enforcement actions will not be necessary as the University will *not* be relying on outside owners to complete work. The program will describe how maintenance records for the BMPs will be maintained on site and reported in the annual report to TCEQ.

Measurable Goals	*Time Line*
1. Develop program to manage runoff from new development and redevelopment to include implementation and enforcement procedures.	**Year 1-2**
2. Circulate for review.	**Year 1-2**

Evaluation: Develop and adopt the program according to schedule. Keep records of maintenance activities and report the number of units maintained each year in the annual report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff, Texas State consultants and contractors, FPDC personnel.

5.2.3 Inventory of Structural BMPs

BMP Description: The University will continue to compile an inventory of all existing structural BMPs on campus. The information will be presented in a map and table format with photographs. The table will list the expected maintenance schedule for each unit based on best practices. Both the map and the table will be updated as new units are added.

Measurable Goals	*Time Line*
1. Continue compiling information on the location and kinds of structural BMPs on campus.	**Year 1**
2. Prepare a maintenance schedule for the BMPs	**Year 1-2**
3. Update the table and map as new BMPs are added or discovered.	**Year 2-5**

Evaluation: Develop the map and table according to the schedule. Report on the annual report the number of BMPs located on campus and the number added each year.

Responsible Parties:

- EHSRM
- Facilities – GIS Technician

Target Audience: Texas State staff.

5.2.4 Review Design Packages for Post Construction BMPs

BMP Description: Construction design drawings and specifications for new development and redevelopment will be reviewed for proper selection, sizing and placement of runoff management BMPs. This will be implemented for projects greater than or equal to one acre in size. BMP selection will be evaluated in terms of their ability to minimize discharge of pollutants, aesthetics, incorporation of watershed drainage and potential certifications. Low impact development designs will potentially be incorporated if site conditions are favorable. Post construction BMP evaluation for water quality will be included in the erosion and sediment control plan checklist.

Measurable Goals	*Time Line*
1. Develop a checklist of items to include in the review of projects greater than one acre.	**Year 1**
2. Continue with plan review and project acceptance procedures.	**Year 2-5**

Evaluation: Develop checklist according to schedule. Track the number of new design plans offered for review and the percentage reviewed and report on the annual report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff, Texas State consultants and contractors, FPDC personnel.

5.2.5 Operation and Maintenance of Structural BMPs

BMP Description: The University will require operation and maintenance plans for structural BMPs from contractors prior to site acceptance. The plans will give a maintenance schedule for the units including rainwater collection cisterns. A maintenance schedule will be developed for all structural BMPs.

Measurable Goals	*Time Line*
1. Require contractors to submit operation and maintenance plans for structural BMPs.	**Year 2**
2. Perform O&M on structural BMPs according to the maintenance schedule.	**Year 2-5**

Evaluation: Information about project Post Construction BMPs will be maintained in the project file. Goal of 100% submittal rate for projects completed within the MS4 permit term. Maintenance records of BMPs will be kept electronically including the volume and disposition of materials removed.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff, Texas State consultants and contractors, FPDC personnel.

5.2.6 Inspection Program for Structural BMPs

BMP Description: The effectiveness of post-construction control measures depends upon the regular inspection and maintenance of the BMPs. Routine inspection and maintenance of stormwater structural controls assist in the identification and repair of items associated with the system. The University will develop a checklist of inspection items for the inventory of BMPs and will conduct these annually or more frequently (i.e. after large rain events) as necessary.

Measurable Goals	*Time Line*
1. Develop Structural BMP inspection forms. Include references and any special instructions for the inspectors.	**Year 1-2**
2. Enter the BMPs and checklists into an electronic inspection system such as CodePal.	**Year 2**
3. Develop BMP fact sheets and use to train employees to perform inspections	**Year 3**
4. Perform inspections annually or more frequently as necessary.	**Year 2-5**

Evaluation: Report the number of compliance inspections performed each year.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff.

5.2.7 Characterize BMP Waste for Disposal

BMP Description: Wastes from structural BMPs may consist of sediment, aqueous sludge, floatables, litter and water. It may contain heavy metals, petroleum hydrocarbons, coliform, oil and grease and solids. Disposal options may fall under 30 TAC 330.3, Municipal Solid Waste or 30 TAC 330.5 Special Waste. Regulation under 40 CFR 279 and 30 TAC 324 (oily waste) may also be applicable. Prior to disposal, the wastes will be characterized to determine the most appropriate disposal methods. Type V (wastewater treatment) and Type I (landfills) are possible disposal options. Texas State will also explore the possibility of recycling or reusing the water that is characterized as non-hazardous instead of disposal.

Measurable Goals	*Time Line*
1. Review TCEQ requirements for waste disposal.	**Year 1**
2. Update the campus Waste Analysis Plan to include this waste stream and procedures for characterization and disposal.	**Year 1**
3. Collect samples of wastes from campus BMPs as maintenance for each unit is pending.	**Year 2-5**
4. Document sampling results and volumes of waste removed annually.	**Year 2-5**

Evaluation: Report the number of samples collected for waste characterization and the volume and disposal destination of each BMP cleanout. Report on Annual Report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Texas State staff.

5.3 Five Year Program Summary

Table 5-1 presents a five year summary of MCM-4 BMPs and a schedule of implementation.

Table 5 - 1 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Prepare UPPS for Post Construction Runoff	Include in the General MS4 Authority UPPS policies for post construction runoff control and O&M of structural BMPs to protect stormwater quality and minimize the discharge of pollutants.	**X**					EHSRM FPDC FSS Utility Operations
	Circulate for review.	**X**	**X**				
	Finalize UPPS.		**X**	**X**	**X**	**X**	
Program for Runoff from New Development and Redevelopment	Develop program and determine whether to include Campus Storm water Drainage Study and Plan recommendations for new development. Circulate for review and finalize.	**X**	**X**				EHSRM FPDC Utility Operations
	Circulate for review.	**X**	**X**				
Inventory of Structural BMPs	Continue compiling information on the location and kinds of structural BMPs on campus.	**X**					EHSRM Facilities Dept. – GIS Technician Utility Operations
	Prepare a maintenance schedule for the BMPs.	**X**	**X**				EHSRM Utility Operations
	Update the table and map as new BMPs are added or discovered.		**X**	**X**	**X**	**X**	EHSRM Facilities Dept. – GIS Technician Utility Operations
Review Design Packages for Post Construction BMPs	Develop a checklist of items to include in the review of project plans greater than one acre.	**X**					EHSRM FPDC Utility Operations
	Continue with plan review and project acceptance procedures.		**X**	**X**	**X**	**X**	
Operation and Maintenance of Structural BMPs	Require contractors to submit operation and maintenance plans for structural BMPs.		**X**				EHSRM FPDC
	Perform O&M on structural BMPs according to the maintenance schedule.		**X**	**X**	**X**	**X**	EHSRM Utilities Operations Facilities

Table 5 - 1 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
BMP Inspection Program	Develop structural BMP inspection forms. Include references and special instructions for the inspectors.	**X**	**X**				EHSRM Utility Operations
	Enter the BMPs and checklists into an electronic inspection system such as CodePal.		**X**				
	Develop BMP fact sheets and use to train applicable employees to perform inspections. Document training.			**X**			
	Perform compliance inspections annually or more frequently to determine if maintenance is required.		**X**	**X**	**X**	**X**	
Characterize BMP Wastes for Disposal.	Review TCEQ requirements for Special Waste disposal.	**X**					EHSRM Utility Operations
	Update the campus Waste Analysis Plan to include this waste stream and procedures for characterization and disposal.	**X**					
	Collect samples of wastes from campus BMPs as maintenance for each unit is pending.		**X**	**X**	**X**	**X**	
	Document sampling results and volumes of waste removed annually.		**X**	**X**	**X**	**X**	

SECTION 6 – MCM 5: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The pollution prevention/good housekeeping minimum control measure consists of BMPs that focus on training and on the prevention or reduction of pollutant runoff from municipal operations or municipal-type operations, in terms of the university. A list of these locations is listed in the permit and below. The BMPs describe the specific maintenance activities, schedules and long term inspection procedures for controls to reduce floatables and other pollutants from these operations; employee training program to prevent and reduce stormwater pollution from these operations; procedures for the proper disposal of waste removed from the MS4; structural control maintenance program.

6.1 REGULATORY REQUIREMENTS

Pollution Prevention and Good Housekeeping for Municipal Operations

A section within the SWMP must be developed to establish an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

(a) Program Development

(1) All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1.(c).

(b) Requirements for All Permittees

All permittees shall include the requirements described below in parts III.B.5.(1)-(6) in the program:

(1) Permittee-owned Facilities and Control Inventory

All permittees shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. If feasible, the inventory may include all applicable permit numbers, registration number and authorizations for each facility or control. The inventory must be available for review by TCEQ and must include, but is not limited, to the following, as applicable:

a. Composting facilities;
b. Equipment storage and maintenance facilities;
c. Fuel storage facilities;
d. Hazardous waste disposal facilities;
e. Hazardous waste handling and transfer facilities;
f. Incinerators;
g. Landfills;
h. Material storage yards;
i. Pesticide storage facilities;
j. Buildings, including schools, libraries, police stations, fire stations, and office buildings;
k. Parking lots;
l. Golf courses;
m. Swimming pools;
n. Public work yards;
o. Recycling facilities;
p. Salt storage facilities;
q. Solid waste handling and transfer facilities;
r. Street repair and maintenance sites;
s. Vehicle storage and maintenance yards; and
t. Structural stormwater controls.

(2) Training and Education

All permittees shall inform or train appropriate employees

involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for inspection by TCEQ when requested.

(3) Disposal of Waste Material – Waste material removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335 as applicable.

(4) Contractor Requirements and Oversight

a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices and facility-specific stormwater management operating procedures described in Parts III.B.5.(2)-(6).
b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measure sand SOPs. Oversight procedures must be developed before the end of the permit term and maintained on site and made available for inspections by TCEQ. A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing stormwater pollution from municipal operations. A list of all personnel trained (signature list) must be maintained for inspection by TCEQ if requested.

(6) Municipal Operation and Maintenance Activities

a. Assessment of permit-owned operations

All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:

(i) Road and parking lot maintenance may include such areas as pothole repair, pavement marking, sealing and repaving;
(ii) Bridge maintenance may include such areas as re-chipping, grinding, and saw cutting;
(iii) Cold weather operations, including plowing, sanding and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and
(iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.

b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).
c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following examples:
d.

(i) Replacing materials and chemical with more environmentally benign materials or methods;
(ii) Changing operations to minimize the exposure or mobilization of pollutions to prevent them from entering surface waters; and
(iii) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.

f. Inspection of pollution prevention measures – All pollution prevention measures implemented at permit-owned facilities must be visually inspected at a frequency determined by the permittee to ensure they are working properly. A log of inspections must be maintained and made available for review by the TCEQ upon request.

(7) Structural and Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the permittee and consistent with maintaining the effectiveness of the BMP.

(c) Additional Requirements for Level 3 and 4 small MS4s

In addition to the requirements described in Parts.B.5.(b)(1)-(6) above, permittees who operate level 3 or 4 small MS4s shall meet the following requirements:

(1) Storm Sewer System Operation and Maintenance

a. Permittees who operate level 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the maximum extent practicable the collection of pollutants in catch basins and other surface drainage structures.
b. Permittees who operate level 3 or 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping).

(2) Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads

Permittees who operate level 3 or 4 small MS4s shall implement an O&M program that includes, if feasible and practicable, a street sweeping and cleaning program, or an equivalent BMP such as an inlet protection program, which must include an

implementation schedule and a waste disposal procedure. The basis for the decision must be included in the SWMP. If a street sweeping and cleaning program is implemented, the permittee shall evaluate the following permittee-owned and operated areas for the program: streets, road segments, and public parking lots including, but not limited to, high traffic zones, commercial and industrial districts, sport and event venues, and plazas, as well as areas that consistently accumulate high volumes of trash, debris, and other stormwater pollutants.

a. Implementation schedules – If a sweeping program is implemented, the permittee shall sweep the areas in the program (for example, the streets, roads, and public parking lots) in accordance with a frequency and schedule determined in the permittee's O&M program.
b. For areas where street sweeping is technically infeasible (for example, streets without curbs), the permittee shall focus implementation of other trash and litter control procedures, or provide inlet protection measures to minimize pollutant discharges to storm drains and creeks.
c. Sweeper Waste Material Disposal – If utilizing street sweepers, the permittee shall develop a procedure to dewater and dispose of street sweeper waste material and shall ensure that water and material will not reenter the small MS4.

(3) Mapping of Facilities

Permittees who operate level 3 or 4 small MS4s shall, on a map of the area regulated under this general permit, identify where the permittee-owned and operated facilities and stormwater controls are located.

(4) Facility Assessment

Permittees who operate level 3 or 4 small MS4s shall perform the following facility assessment in the regulated portion of the small MS4 operated by the permittee:

a. Assessment of Facilities' Pollutant Discharge Potential - The permittee shall review the facilities identified in Part III.B.5.(b) once per permit term for their potential to discharge pollutants into stormwater.
b. Identification of *high priority* facilities - Based on the Part III.B.5.(c)(4)a. assessment, the permittee shall identify as *high priority* those facilities that have a high potential to generate stormwater pollutants and shall document this in a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.
c. Documentation of Assessment Results - The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.

(5) Development of Facility Specific SOPs

Permittees who operate level 3 or 4 small MS4s shall develop facility specific stormwater management SOPs. The permittee may utilize existing plans or documents that may contain the following required information:

a. For each high priority facility identified in Part III.B.5.(c)(4)b., the permittee shall develop a SOP that identifies BMPs to be installed, implemented, and

maintained to minimize the discharge of pollutants in stormwater from each facility.

b. A hard or electronic copy of the facility-specific stormwater management SOP (or equivalent existing plan or document) must be maintained and be available for review by the TCEQ. The SOP must be kept on site when possible and must be updated as necessary.

(6) Stormwater Controls for High Priority Facilities

Permittees who operate level 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part III.B.5.(c)(4)b. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:

a. General good housekeeping – Material with a potential to contribute to stormwater pollution should be sheltered from exposure to stormwater when feasible.
b. De-icing and anti-icing material storage - The permittee shall ensure, to the MEP, that stormwater runoff from storage piles of salt and other de-icing and anti-icing materials is not discharged; or shall ensure that any discharges from the piles are authorized under a separate discharge permit.
c. Fueling operations and vehicle maintenance - The permittee shall develop SOPs (or equivalent existing plans or documents) which address spill prevention and spill control at permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities.
d. Equipment and vehicle washing - The permittee shall develop SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. The discharge of equipment and vehicle wash water to the small MS4 or directly to receiving waters from permittee-owned facilities is not authorized under this general permit. To ensure that wastewater is not discharged under this general permit, the permittee's SOP may include installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to

sanitary sewer (where applicable and approved by local authorities), ceasing the washing activity, or applying for and obtaining a separate TPDES permit.

(7) Inspections

Permittees who operate level 3 or 4 small Ms4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.

(d) Additional Requirements for Level 3 and 4 small MS4s

In addition to all the requirements described in Parts III.B.5(b) and III.B.5.(c) above, permittees who operate level 4 small MS4s shall meet the following requirements:

(1) Pesticide, Herbicide, and Fertilizer Application and Management

a. Landscape maintenance - The permittee shall evaluate the materials used and activities performed on public spaces owned and operated by the permittee such as parks, schools, golf courses, easements, public rights of way, and other open spaces for pollution prevention opportunities. Maintenance activities for the turf landscaped portions of these areas may include mowing, fertilization, pesticide application, and irrigation. Typical pollutants include sediment, nutrients, hydrocarbons, pesticides, herbicides, and organic debris.

b. The permittee shall implement the following practices to minimize landscaping-related pollutant generation with regard to public spaces owned and operated by the permittee:

    (i) Educational Activities, permits, certifications, and other measures for the permittee's applicators and distributors.
    (ii) Pest management measures that encourage non-chemical solutions where feasible. Examples may include:
        (a) Use of native plants or xeriscaping;
        (b) Keeping clippings and leaves out of the small MS4 and the street by encouraging mulching, composting, or landfilling;
        (c) Limiting application of pesticides and fertilizers if precipitation is forecasted within 24 hours, or as specified in label instructions;
        (d) Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing motorist safety.

c. The permittee shall develop schedules for chemical application in public spaces owned and operated by the permittee that minimize the discharge of pollutants from the application due to irrigation and expected precipitation.
d. The permittee shall ensure collection and proper disposal of the permittee's unused pesticides, herbicides, and fertilizers.

6.2 SELECTED BEST MANAGEMENT PRACTICES

6.2.1 Prepare an Operation and Maintenance Program

BMP Description: The University will develop a program describing procedures to use to cover operation and maintenance of municipal-type facilities and locations on campus. The program will include employee training for good housekeeping and pollution prevention for areas such as parks and open space maintenance, fleet maintenance, stormwater system maintenance, land disturbances, parking lots maintenance, vehicle and equipment maintenance and storage yards. The program will identify potential pollutants that can be released from each of these types of facilities and how these can be minimized through good housekeeping and pollution prevention measures. The program will also describe the inspection process including reporting and corrective actions.
Operation and Maintenance (O&M) activities identified in the permit from road and parking lot maintenance, bridge maintenance, cold weather operations and right-of-way maintenance do not occur frequently at the University but will be included in the program procedures.

Measurable Goals	*Time Line*
1. Prepare the Operation and Maintenance program to include good housekeeping and pollution prevention practices for municipal type facilities on campus.	**Year 1-2**
2. Circulate the program for internal review.	**Year 1-2**
3. Finalize the program.	**Year 1-2**

Evaluation: Program is developed, reviewed and finalized according to schedule.

Responsible Parties:

- EHSRM
- Pesticide applicators in the various departments. (Golf course, Campus Recreation, Athletics, Grounds Operations, DHRL)
- Other Departments to be identified

Target Audience: Contractors and employees using chemicals in outdoor settings.

6.2.2 Fleet and Equipment Maintenance

BMP Description: Existing practices of containment of used oil, new oil products and oily rags will continue at the garage and equipment maintenance areas. Monthly inspections of all used oil and new petroleum product storage areas will continue along with annual maintenance of the grit trap and oil/water separator in the facilities garage.

Measurable Goals	*Time Line*
1. Continue SPCC training program for all personnel working with oil and other petroleum products.	**Year 1**
2. Continue with grit trap and oil/water separator cleanout annually at the Facilities garage. Obtain or renew contractor for this service	**Year 1**

Evaluation: Maintain records of training including sign in sheets and also records of maintenance performed on the grit trap and oil water separator and report on the Annual Report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Mechanics, heavy equipment operators.

6.2.3 Golf Course, Intramural Fields and Grounds Operations

BMP Description: Existing best management practices that will continue include using licensed pesticide applicators, proper storage of materials, and application at periods of low wind and rainfall. Additional actions that will be taken for this measure include determining campus standards for turf management BMPs, inspection of product storage areas and update of management plans.

Measurable Goals	*Time Line*
1. Develop best management practices for a campus standard.	**Year 1-2**
2. Update individual department turf management plans to incorporate the standards.	**Year 2**
3. Inventory all product storage areas and update annually.	**Year 3**
4. Perform semiannual inspections of areas identified in the inventory.	**Year 4-5**
5. Continue with licensed applicator required training and records retention.	**Year 1-5**

Evaluation: Complete updates to plans per the schedule. Maintain records of inspections, corrective actions and training conducted annually and report on the Annual Report.

Responsible Parties:

- EHSRM
- Campus Recreation
- Athletics
- Golf Course
- Grounds Operations
- DHRL (use of contractors)

Target Audience: Pesticide/herbicide applicators, Grounds Operations staff, landscaping contractors, turf management staff.

6.2.4 Structural BMP Maintenance

BMP Description: Proper functioning of the various structural units on campus for stormwater quality management will depend on operation and maintenance according to the manufacturer's recommendation. A maintenance program will be developed that identifies the structural BMPs on campus, inspection of the units, and a maintenance schedule and scope. A description of these activities is included in MCM-4 Post Construction.

6.2.5 Inventory of Municipal-Type Operations

BMP Description: The campus has areas of operation that resemble municipal-type operations. These include parks, sports fields, garages, compost facilities, material storage for roads, warehouses, compactors and loading docks. These areas can potentially contribute to nonpoint sources of pollution to the MS4. An inventory of these areas will be compiled and then each will be surveyed to assess what BMPs may be effective to reduce pollution runoff.

Measurable Goals	*Time Line*
1. Create an inventory of all municipal-type operations on campus. See also 6.2.1 and 6.2.2. Update annually.	**Year 2**
2. Conduct an assessment of each area to determine what BMPs can be put in place for pollution prevention/spill prevention.	**Year 2**
3. Develop inspection checklists for municipal-type operations.	**Year 3**
4. Perform semiannual inspections of areas identified in the inventory.	**Year 4-5**

Evaluation: Record the number of operations identified and assessed. Record the number of inspections performed each year and report on the Annual Report.

Responsible Parties:

- EHSRM
- Facilities

Target Audience: Staff working in municipal-type operations identified.

6.2.6 Employee Training Program

BMP Description: Training for this component of the MS4 will include a wide variety of staff that may or may not be included in the SPCC training for oil storage and spill response. Training will focus on good housekeeping and pollution prevention methods for staff in parks and open space, streets and parking lots, fleet and building maintenance, stormwater drainage systems, equipment maintenance and storage yards, recycling and solid waste management, composting facilities and others identified during the inventory task. Licensed pesticide applicators will maintain their required annual training with the Department of Agriculture or Structural Pest Control Board.

Training materials will be obtained from available sources such as EPA, TCEQ, other MS4s, North Central Texas Council of Governments (NCTCOG), etc. Training will include information such as hazards associated with illicit discharges, improper disposal of waste, pollution prevention practices and good housekeeping procedures. The training will also cover the inspection process. This training will be offered initially to employees in the relevant areas, then annually to new employees. Refresher training will be accomplished through various methods identified to be effective by the departments.

Measurable Goals	*Time Line*
1. Continue with licensed applicator training and records retention.	**Year 1**
2. Identify staff at municipal-type operations that will need training for good housekeeping and pollution prevention practices.	**Year 2**
3. Acquire training materials from sources such as EPA, TCEQ, other MS4s and NCTCOG.	**Year 3**
4. Provide initial training and then annually for new employees.	**Year 4-5**

Evaluation: Maintain records of training, and sign in sheets conducted annually and report on the Annual Report.

Responsible Parties:

- EHSRM
- Pesticide applicators in the various departments. (Golf course, Campus Recreation, Athletics, Grounds Operations, DHRL)
- Other Departments to be identified in task 2 above.

Target Audience: Staff to working in municipal-type operations identified.

6.2.7 Contractor Oversight

BMP Description: Good housekeeping and spill prevention BMPs identified for municipal-type operations will be included in contract documents for contractors working for Texas State. For landscape contractors, campus BMPs identified in the turf management plans will be included in the subcontracts. Departments that hire contractors will spot check the contractors to ensure that these best management practices are being followed.

Measurable Goals	*Time Line*
1. Incorporate BMP language for good housekeeping and turf management into contract documents.	**Year 3**
2. Spot check contractors to ensure that BMPs are being followed.	**Year 4-5**

Evaluation: Maintain an electronic copy of the contract addendum that shows what BMPs contractors must follow to protect stormwater quality and the MS4.

Responsible Parties:

- EHSRM
- FPDC
- Facilities
- Grounds Operations in the various departments. (Golf course, Campus Recreation, Athletics, Grounds Operations, DHRL)
- Utilities Operations

Target Audience: Contractors using chemicals in outdoor settings.

6.3 Five Year Program Summary

Table 6-1 presents a five year summary of MCM-5 BMPs and schedule of implementation.

Table 6 - 1 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Prepare an Operation and Maintenance Program	Prepare the Operation and Maintenance program to include good housekeeping and pollution prevention practices for municipal type facilities on campus	**X**	**X**				Campus Recreation Golf course Athletics Grounds Operations DHRL EHSRM
	Circulate the program for internal review.	**X**	**X**				
	Finalize the program.	**X**	**X**				
Fleet and Equipment Maintenance	Continue SPCC training program for all personnel working with oil and other petroleum products.	**X**					EHSRM Facilities
	Continue with grit trap and oil/water separator cleanout annually at the Facilities garage. Obtain or renew contractor for these services.	**X**					
Golf Course, Intramural Fields and Grounds Operations	Develop best management practices for a campus standard.	**X**	**X**				Golf course Campus Recreation Athletics Grounds Operations DHRL EHSRM.
	Update individual turf management plans to incorporate the standards.		**X**				Golf course Campus Recreation Athletics Grounds Operations DHRL.
	Inventory all product storage areas and update annually.			**X**			EHSRM
	Perform semiannual inspections of areas identified in the inventory.				**X**	**X**	EHSRM
	Continue with licensed applicator required training and records retention.	**X**	**X**	**X**	**X**	**X**	Golf course Campus Recreation Athletics Grounds Operations DHRL EHSRM
Structural BMP Maintenance	See Table 5-1.						

Table 6 - 1 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS							
Best Management Practice	**Measurable Goals**	**Permit Year (Dec – Dec)**					**Key Departments/Divisions**
		1	**2**	**3**	**4**	**5**	
Inventory of Municipal-Type Operations	Create an inventory of all municipal-type operations on campus. See also 6.2.1 and 6.2.2. Update annually.		**X**				EHSRM Facilities
	Conduct an assessment of each area to determine what BMPs can be put in place for pollution prevention/spill prevention.		**X**				
	Develop inspection checklists for municipal-type operations.			**X**			
	Perform semiannual inspections of areas identified in the inventory.				**X**	**X**	EHSRM
Employee Training Program	Continue with licensed applicator required training and records retention.	**X**					Campus Recreation Golf course Athletics Grounds Operations DHRL EHSRM
	Identify staff at municipal-type operations that will need training for good housekeeping and pollution prevention practices.		**X**				EHSRM
	Acquire training materials from sources such as EPA, TCEQ, other MS4s, and NCTOG.			**X**			
	Provide initial training and then annually for new employees.				**X**	**X**	EHSRM Other departments identified
Contractor Oversight	Incorporate BMP language for good housekeeping and turk management into contract documents.			**X**			EHSRM FPDC Facilities Grounds Operations DHRL Utility Operations
	Spot check contractors to ensure that BMPs are being followed.				**X**	**X**	

SECTION 7 – RECORDKEEPING AND REPORTING

As detailed in TPDES General Permit TXR040000, the University must document and report the implementation of all stormwater BMPs throughout the course of the permit period, and the TCEQ will require that the University submit annual reports to document the development and implementation of the SWMP.

7.1 RECORDKEEPING

The University must comply with the following recordkeeping requirements:

1. Retain all records, a copy of the TPDES general permit, and records of all data used to complete the application (NOI) for the general permit and satisfy the public participation requirements, for a period of at least 3 years or the remainder of the term of this general permit, whichever is longer. This period may be extended by the executive director at any time.

2. Submit records to the executive director only when specifically asked to do so. The SWMP required by this general permit (including a copy of the general permit) must be retained at a location accessible to the TCEQ.

3. Make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP must be made available within ten (10) working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act.

4. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

As previously referenced, a copy of the SWMP and all annual reports will be accessible on the University's stormwater website. Individuals may also contact the University's Environmental Health Safety and Risk Management Department to request additional program documentation.

7.2 REPORTING

The University will submit an Annual Report to the TCEQ within ninety days (90) at the end of each fiscal year as allowed by TPDES General Permit TXR040000 Part IV.B.2. The University's fiscal year ends on August 31st so the annual report would be due to the TCEQ on November 30th each year. The first reporting year for any reporting purposes shall begin on the permit effective date, and shall last for a period of one year (the end of the "permit year"). Alternatively, if the permittee elects to report based on its fiscal year, the first reporting year will last until the end of the fiscal year following the end of the first permit year. For example year 1 for the University would cover December 13, 2013 through August 31, 2014. Subsequent calendar years will begin at the beginning of the second reporting year (September 1st) and last one (1) year. For the University the second, third, fourth and fifth annual reports would cover the fiscal year from September 1st through August 31st. The report must include:

Noncompliance Notification - According to 30 TAC 305.125 (9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ. The report must be made orally or electronically within 24 hours of the incident. A written report must be submitted to the regional TCEQ office and the TCEQ Enforcement Division (MC-224) within 5 working days of the noncompliance incident. The report must contain the five elements in Section IV.B.1.1 of the general permit.

Other Information – When the permittee becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, or NOC, or any other report, the permittee must promptly submit the facts or information to the executive director.

Annual Report – The annual report will include:

(a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutant to the maximum extent practicable and an evaluation of the success of the implantation of the measurable goals;

(b) A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable;

(c)) If applicable, a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4s BMPs used to address the pollutant of concern;

(d) A summary of the stormwater activities the MS4 operator plans to undertake during the next reporting year;

(e) Proposed changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;

(f) Description and schedule for implantation of the additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDSs and implementation plans;

(g) Notice that the MS4 operator is relying on another government entity to satisfy some of the permit obligation (if applicable);

(h) and (i) only apply if the permittee is including MCM-7 in the SWMP and the University is not.

An annual report must be prepared whether or not the NOI and SWMP have been approved by the TCEQ. If the permittee has either not implemented the SWMP or not begun to implement the SWMP because it has not received approval on the NOI and SWMP, then the annual report may include that information.

The annual report must be will be submitted on TCEQ approved forms (Small Business and Local Government Assistance MS4 Annual Report Template, or similar). The annual report will be submitted to the following TCEQ address as well as the Region 11 office:

Stormwater and Pretreatment Team Leader
TCEQ Water Quality Division
MC-148
P.O. Box 13087
Austin, Texas 78711-3087

TCEQ Region 11
MC R11
P.O. Box 13087
Austin, Texas 78711-3087

The TCEQ encourages the submittal of electronic submissions of annual reports to comply with the Federal Waste Reduction Act and the Government Paperwork Elimination Act for electronic submissions. The TCEQ website www.tceq.texas.gov has additional information and instructions.

APPENDIX A – FIGURES

FIGURE 1

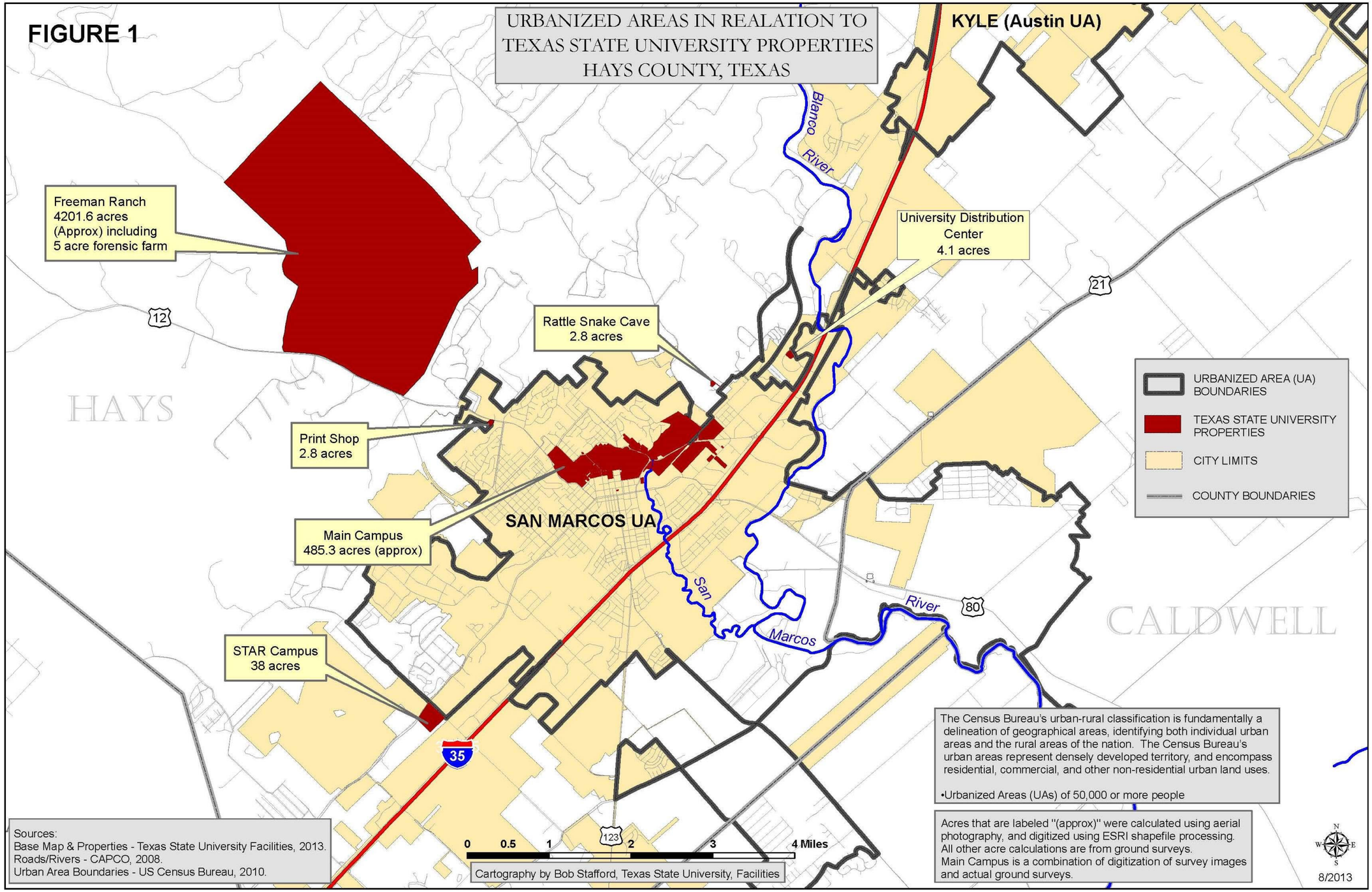
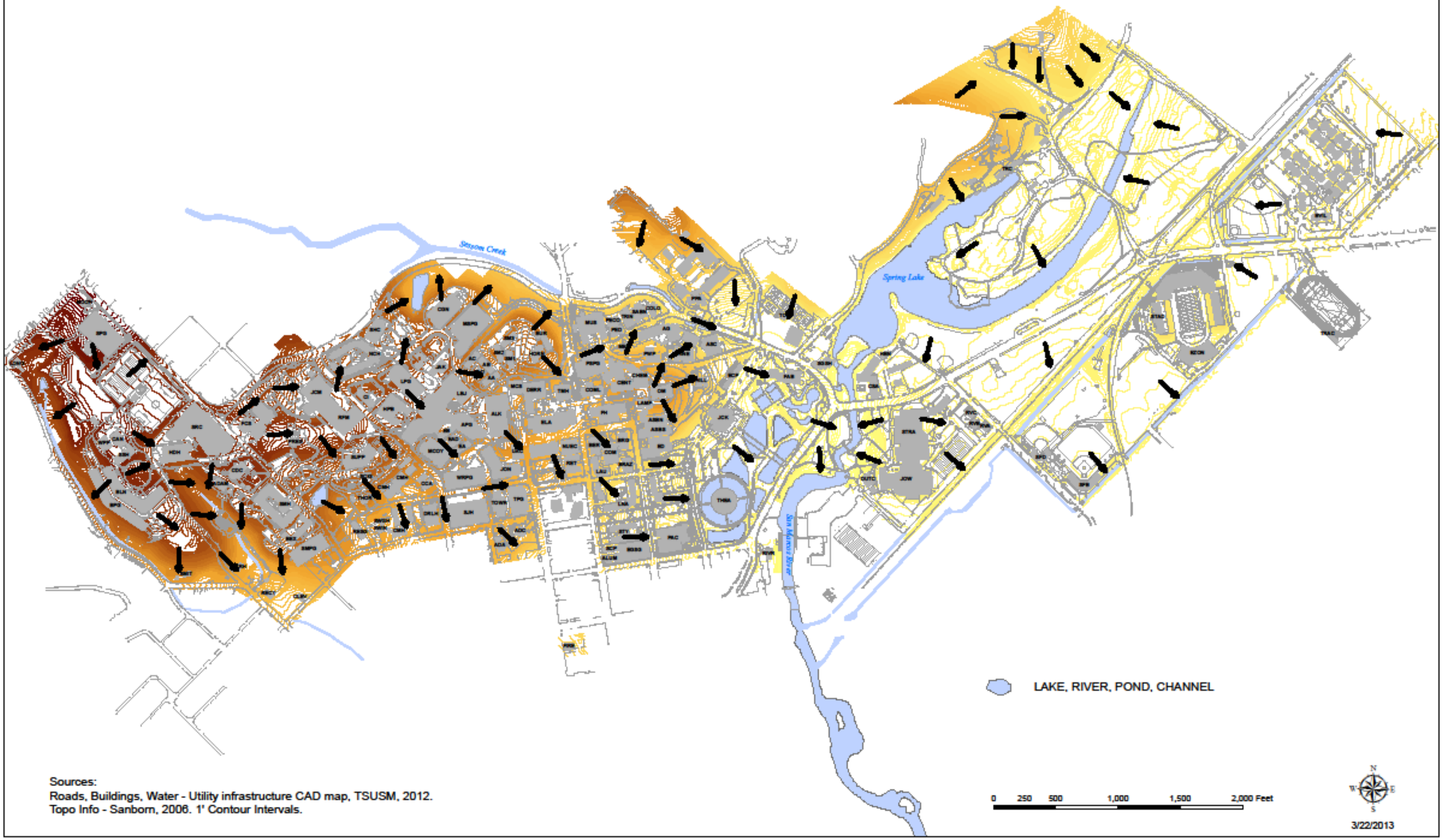

URBANIZED AREAS IN REALATION TO
TEXAS STATE UNIVERSITY PROPERTIES
HAYS COUNTY, TEXAS
KYLE (Austin UA)
Blanco River
Freeman Ranch
4201.6 acres
(Approx) including
5 acre forensic farm
University Distribution
Center
4.1 acres
12
21
Rattle Snake Cave
2.8 acres
HAYS
Print Shop
2.8 acres
SAN MARCOS UA
Main Campus
485.3 acres (approx)
San Marcos River
80
CALDWELL
STAR Campus
38 acres
35
123
0 0.5 1 2 3 4 Miles
URBANIZED AREA (UA) BOUNDARIES
TEXAS STATE UNIVERSITY PROPERTIES
CITY LIMITS
COUNTY BOUNDARIES
The Census Bureau's urban-rural classification is fundamentally a delineation of geographical areas, identifying both individual urban areas and the rural areas of the nation. The Census Bureau's urban areas represent densely developed territory, and encompass residential, commercial, and other non-residential urban land uses.
•Urbanized Areas (UAs) of 50,000 or more people
Sources:
Base Map & Properties - Texas State University Facilities, 2013.
Roads/Rivers - CAPCO, 2008.
Urban Area Boundaries - US Census Bureau, 2010.
Cartography by Bob Stafford, Texas State University, Facilities
Acres that are labeled "(approx)" were calculated using aerial photography, and digitized using ESRI shapefile processing.
All other acre calculations are from ground surveys.
Main Campus is a combination of digitization of survey images and actual ground surveys.
N W E S
8/2013

FIGURE 2

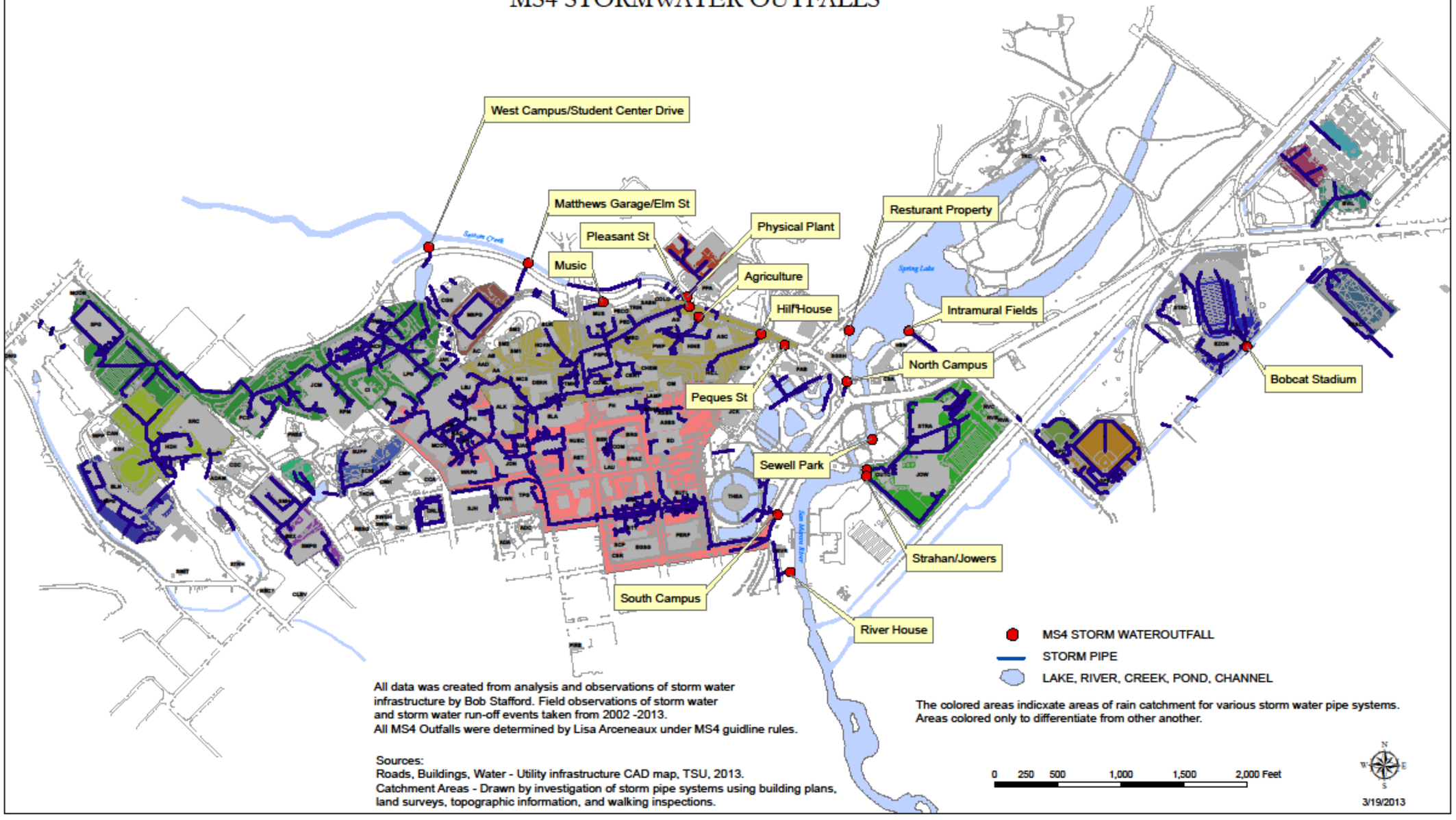
RAINWATER OVERLAND FLOW
TEXAS STATE UNIVERSITY-SAN MARCOS



Sources:
Roads, Buildings, Water - Utility infrastructure CAD map, TSUSM, 2012.
Topo Info - Sanborn, 2006. 1' Contour Intervals.

FIGURE 3

TEXAS STATE UNIVERSITY
CAMPUS RAIN CATCHMENT AREAS
AND
MS4 STORMWATER OUTFALLS

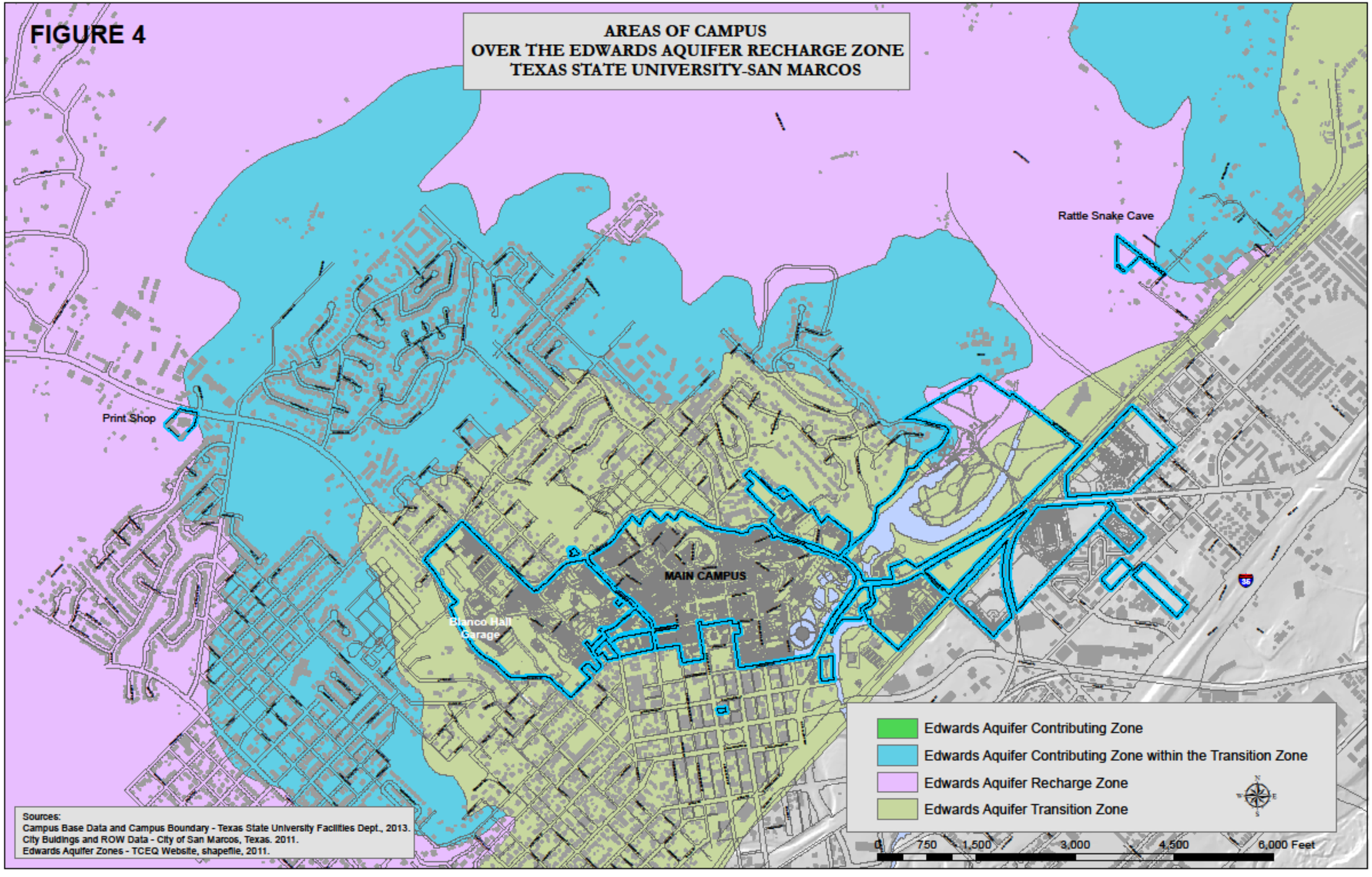


All data was created from analysis and observations of storm water infrastructure by Bob Stafford. Field observations of storm water and storm water run-off events taken from 2002 -2013.
All MS4 Outfalls were determined by Lisa Arceneaux under MS4 guidline rules.

Sources:
Roads, Buildings, Water - Utility infrastructure CAD map, TSU, 2013.
Catchment Areas - Drawn by investigation of storm pipe systems using building plans, land surveys, topographic information, and walking inspections.

FIGURE 4

AREAS OF CAMPUS
OVER THE EDWARDS AQUIFER RECHARGE ZONE
TEXAS STATE UNIVERSITY-SAN MARCOS



APPENDIX B – COMMONLY USED ACRONYMS

BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit, TXR150000
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EAA	Edwards Aquifer Authority
EPA	Environmental Protection Agency
FR	Federal Register
IDDE	Illicit Discharge Detection and Elimination
IP	Implementation Procedures
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MSGP	Multi-Sector General Permit, TXR050000
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOD	Notice of Deficiency NOI Notice of Intent
NOT	Notice of Termination (to terminate coverage under a general permit)
NPDES	National Pollutant Discharge Elimination System
SWMP	Storm Water Management Program
SWP3, SWPP	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TMDL	Total Maximum Daily Load
TDS	Total Dissolved Solids
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code
WPAP	Water Pollution Abatement Plan
WPP	Watershed Protection Plan

APPENDIX C – TPDES GENERAL PERMIT TXR040000

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR040000, issued August 13, 2007

Small Municipal Separate Storm Sewer Systems

located in the state of Texas

may discharge directly to surface water in the state

only according to requirements and conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, five years after the permit effective date.

EFFECTIVE DATE: DEC 13 2013

ISSUED DATE: DEC 13 2013

Bryan W. Shaw

For the Commission

APPENDIX D – ADDENDUMS

November 2015 – The River's upper 4.5-mile stretch has been designated as critical habitat for several endangered species. Texas State University is one of five signatories to the EAHCP and associated Incidental Take Permit under the Endangered Species Act.