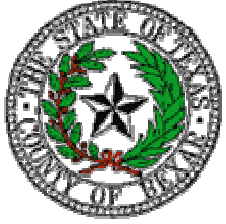




Bexar County Storm Water Quality Program

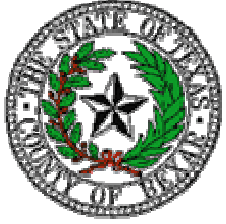
Phase II MS4 Permit

***Bexar County Environmental Services
February 2009***



Difference Between Phase I and Phase II MS4s

- **Phase I MS4s – “Medium” and “Large”**
 - Municipal Population 100,000+ (1990 Census)
 - e.g. City of El Paso
 - EPA Issued Individual NPDES Permits
 - TCEQ Renewing as TPDES Permits
- **Phase II MS4s – “Small”**
 - MS4s Serving a Population <100,000 (1990 Census)
 - Phase II General Permit (TXR040000)



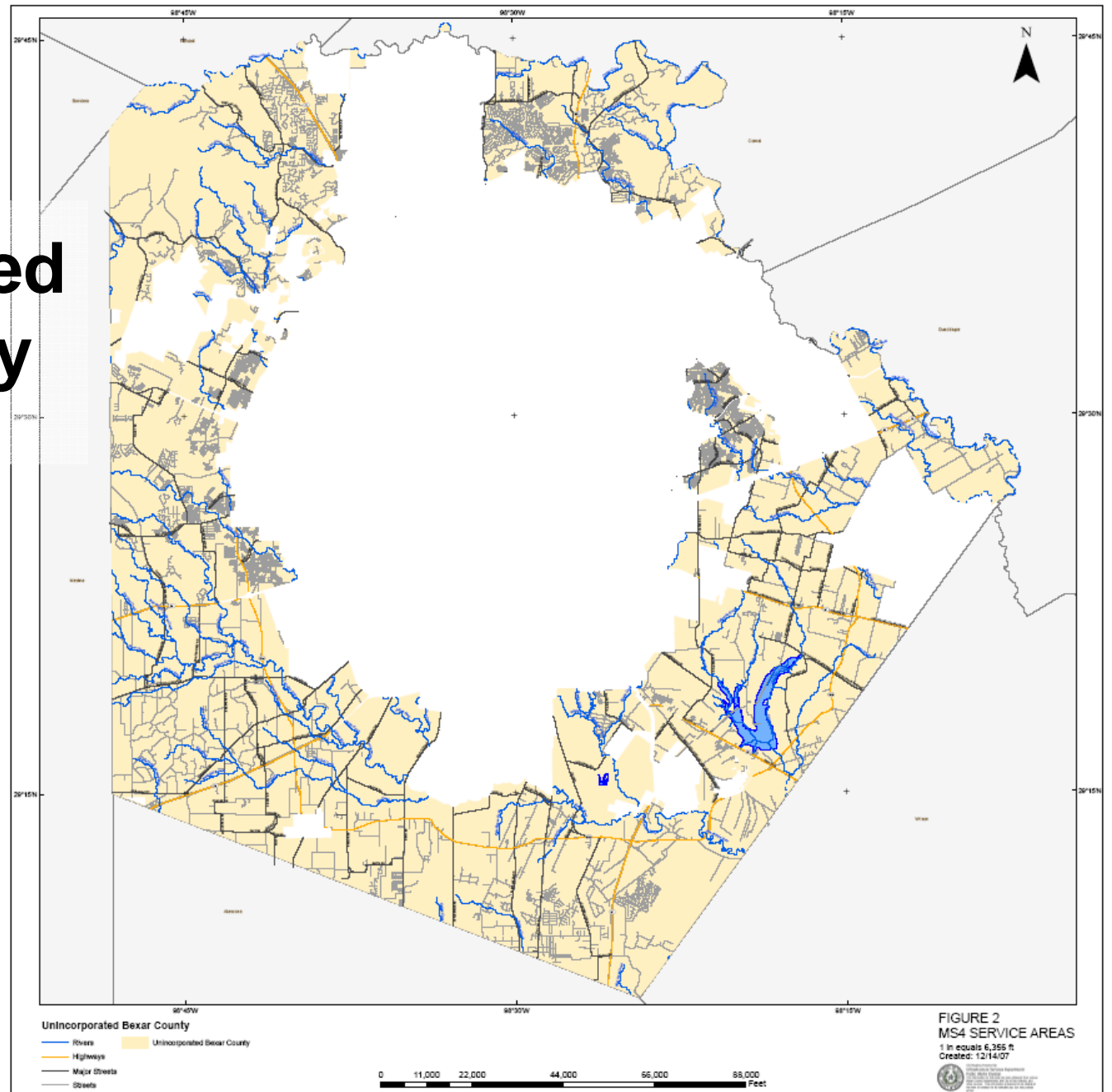
What is an Urbanized Area

- Defined by the U.S. Census Bureau
- A central locations where:
 - there is a minimum population of 50,000
 - with a population density of 1000 people per square miles
 - may include areas of 500 people per square miles at the boundary of the defined area



Unincorporated Bexar County

(as of 2007)





History to date

- June 2003 - HB 2031 granted Bexar Co. the authority to implement a Storm Water Program
- December 2003 - Commissioners Court approved the Bexar County's SWMP

Federal challenges delayed Phase II Program Implementation

- July 2005 - The District Attorney's Office determined that current authority granted by HB 2031 was not sufficient to move forward and develop a funding mechanism to cover the program
- June 2007 - SB 1932 was passed allowing entities flexibility in developing a funding mechanism.
- 13 Aug 07 - TCEQ finally approved a general permit
- 23 Oct 07 - Commissioner Court approved the Bexar County's updated SWMP
- 16 Jan 08 - Submitted Initial permit request (NOI & SWMP) to TCEQ
- 27 Feb 08 - Received TCEQ's first round of comment on our NOI
- 28 Feb 08 - Submitted an updated NOI check list addressing TCEQ comments
- March 08 – July 08 Developed updated 5 year Implementation schedule and program cost, Coordinated program costs, created and proposed budget, Coordinate funding mechanism
- 1 Oct 08 - Commissioners Court approved Bexar County Regulations for Storm Water Quality Program
- 1 Oct 08 - Commissioners Court approved assessing a Federal Storm water Fee in the unincorporated area
- Oct 08 through Feb 09 - Addressed complaints and challenges to Storm Water fee
- 22 Jan 09 - Received TCEQ's second round of comments, these were on the SWMP
- 22 Jan 09 - Application for coverage under TCEQ's Phase II MS4 General Permit TXR040000, for Bexar County granted
- Permit Number TXR040031.



Federal Stormwater Program Cost for Bexar County, Texas					
Unincorporated Area of Bexar County Only			Square Footage		Annual Collection Rate w/ Maintenance Program
			Lo	High	
Residential					
Tier 1	RT1	0	4,999	\$	9.95
Tier 2	RT2	5,000	+	\$	13.14
Multifamily					
Tier 1	MT1	0	21,999	\$	22.22
Tier 2	MT2	22,000	43,999	\$	69.20
Tier 3	MT3	44,000	131,999	\$	209.85
Tier 4	MT4	132,000	+	\$	998.56
Commercial/General					
Tier 1	CT1	0	21,999	\$	56.62
Tier 2	CT2	22,000	43,999	\$	154.90
Tier 3	CT3	44,000	86,999	\$	277.60
Tier 4	CT4	87,000	131,999	\$	478.46
Tier 5	CT5	132,000	+	\$	1,057.09
Site Development Permit Fee					
Site Disturbance			Greater than 1 Acre		(One Time Only)
					\$ 500.00



6 Requirements of Phase II to be implemented over a 5 year period

Permit Period - August 13, 2007 until August 13, 2012

- ***MCM 1 - Public Education and Outreach***
- ***MCM 2 - Public Involvement/Participation***
- ***MCM 3 - "Illicit Discharge" Detection and Elimination***
- ***MCM 4 - Construction Site Runoff Control***
- ***MCM 5 - Post Construction BMP's (Runoff control)***
- ***MCM 6 - Good Housekeeping: Pollution Prevention Program***



MCM 1 - Public Education and Outreach

Watershed Signs

Identify and inventory significant sub-watersheds and roadway crossing points for placement of watershed signs. Select 10 sites for sign placement.

Provide oversight and confirm selection.

Produce signs in county sign shop.

Using County forces, install and maintain signs.

Annual Storm Water Report to Commissioner's Court

Make formal presentation to Commissioner's Court on status of SWMP. Accept and respond to public comments.

Speaker's Bureau for Existing Community Groups

1. Submit at least four proposals to present storm water quality education materials at existing community group meetings.

2. Give presentation to all groups accepting a submitted proposal.



MCM 1 - Public Education and Outreach

Public Anti-Littering and Dumping Brochure

Review existing 3rd party brochures. Determine subjects to include in brochure.
Write Text.

Design brochure.

Print brochure (~1000/yr).

Distribute at County facilities with routine public access. Distribute at County and community events.

OSSF Brochure

"Review existing 3rd party brochures. Determine subjects to include in brochure.
Write Text."

Design brochure.

Print brochure (~1000/yr).

"Distribute at County facilities and OSSF customers. Distribute at County and community events."



MCM 1 - Public Education and Outreach

Construction Site Brochure

"Review existing 3rd party brochures. Determine subjects to include in brochure. Write Text."

Design brochure.

Print brochure (~1000/yr).

Distribute at County facilities, construction sites, and at County and community events.

Educational Content on Cable Channel 21

"Select storm water subject and write message to be posted during Commissioner's Court broadcast coverage."

"Submit message semi-annually and manage necessary paperwork."

Educational Content on Bexar County Website

1. Update website with storm water quality information.

2. Post updated information semi-annually (forms & general materials).

Review and approve materials to be posted.



MCM 2 - Public Involvement/Participation

Bexar County Neighborhood Clean-ups

Identify and notify Home Owner's Associations (HOA) about program. Select and schedule at least six clean-ups per year.

Arrange to have clean-up advertised in HOA newsletter.

Pick up and dispose of non-hazardous waste materials.

Manage trash and dispose of materials properly.

Dedicated vehicle time.



MCM 2 - Public Involvement/Participation

Annual Storm Water Report to Commissioner's Court

Make formal presentation to Commissioner's Court on status of SWMP. Accept and respond to public comments.

Public Involvement in Storm Water Program Development

Develop list of proposed BMPs and provide appropriate introduction & instructions for public consideration.

Post list of proposed BMPs on website and solicit e-mail comments.

Track and gather e-mail responses for review.

Advertise in newspaper.

Place list of BMPs in courthouse for citizens to pull, review and complete comment cards.

Incorporate description of public involvement BMP into annual Commissioner's Court presentation. Solicit comments.

Review and generate response to comments.

Legal Public Notice

Provide required public notice regarding specific County actions requiring notice (adoption of new regulations, etc.).

Advertise in newspaper.



MCM 3 - "Illicit Discharge" Detection and Elimination

On Site Sewage Facilities Inspections

Conduct inspections of all new systems and existing systems as licenses are renewed.

Inspect/investigate and mitigate complaints within one workday on average.

Litter Abatement

Perform litter abatement activities.

Nuisance Abatement

Abate found nuisance conditions. Inspect known dumping areas monthly.

Illicit Discharge Regulation / Enforcement (Environmental Services)

Report persons observed dumping illegally or creating nuisance conditions to Sheriff's Office or TCEQ. Record all reports and follow up actions.

Identify Illicit Discharge Locations

Conduct drive by inspection of MS4 areas within County at least once annually. For any identified illicit discharges, notify the owner/operator of the discharge and contact the Sheriff and/or TCEQ.

Administration of existing BMP Programs

Administration of Existing Programs identified above.



MCM 3 - "Illicit Discharge" Detection and Elimination

Storm Sewer System and Outfalls Map

Develop Geographic Information System (GIS) layering system, base map, and information gathering approach. Gather infrastructure information to populate GIS and map system including major outfalls and receiving waters.

Illicit Discharge Regulation

1. Evaluate existing illicit discharge regulation and prepare revised regulation with enforcement provisions.
2. Adopt regulation.

Detection and Elimination Program (* some from other agencies)

1. Review and if necessary modify the existing illicit discharge detection and elimination program.
2. Purchase Equipment.
3. Conduct training.
4. Initiate program and tracking system.
5. Implement program.

OSSF Brochure

Develop, produce, and distribute an OSSF brochure.



MCM 3 - "Illicit Discharge" Detection and Elimination

* Programs derived from others
SARA, SAWS, CoSA, & EAA

- Sewage Overflow Elimination Program On Going
- Bexar Regional Watershed Management On Going
- EAA Water Quality Protection Program On Going
- Public Education Program On Going
- SAWS & SARA Monitoring Programs Jan-10
- Storm Water Construction Site Runoff Program Oct-10
- Industrial & High Risk Runoff Inspection Program Oct-11



Allowable Non-Storm Water Discharges

- Fire Fighting water
- Water Line / Fire Hydrant Flushing
- Potable Water sources
- Uncontaminated Groundwater
- A/C, Compressor, and Steam Condensation
- Individual Residential Car Washing
- Water used to Buildings Exteriors and Pavement (Street Wash Water) (Without detergents or soaps - ONLY)
- De-chlorinated Swimming Pool Water
- Dust Suppression water
- Lawn Watering and similar irrigation drainage
- Foundation and/or Footing drains
- Similar, occasional, incidental, non-storm water discharges



MCM 4 - Construction Site Runoff Control

County Customer Service Phone Intake

Review record-keeping and follow-up procedures and modify if necessary

Operate customer service phone line.

Publicize existing hotline on website, brochures, Cable Channel 21, and during speaking events.

Driveway and Utility Site Inspections

Inspect construction sites requesting driveway or utility permits. - Prorated fraction of existing costs to be included as SWMP costs.



MCM 4 - Construction Site Runoff Control

Driveway and Utility Site Inspections

Inspect construction sites requesting driveway or utility permits. Additional Hours to inspect SWPPP compliance & non-compliant sites to TCEQ or to City of San Antonio.

Construction Site Brochure

Develop and distribute construction site brochure informing operators of their duty to control waste and implement E&S controls.

Internet Service Request Form

Establish storm water public reporting mechanism via the internet. Create page summarizing purpose of Form, directions for use and establish reporting form.

Publicize Internet Request Form on brochures, Cable Channel 21, & during speaking events. Track inbound comments



MCM 4 - Construction Site Runoff Control

Construction & Demolition Site Maintenance & Erosion & Sediment Control

Develop and adopt regulations requiring erosion and sediment and on-site waste controls (as well as sanctions to ensure compliance if allowed)

Plan Review and Approval Procedures

Develop construction plan review procedures to address water quality and record-keeping system.

Conduct plan review training.

Initiate plan review process. Review 25% of regulated construction starts (>1 acre).

Review 50% of regulated construction starts (>1 acre).

Review 75% of regulated construction starts (>1 acre).

Review 100% of regulated construction starts (>1 acre).

Manage & Administer Program



MCM 4 - Construction Site Runoff Control

Site Inspections and Enforcement

Develop site inspection Checklists, inspection protocol, method of site prioritization, and record-keeping system.

Hire and train inspectors.

Implement site inspections and enforcement. 30% of sites with TCEQ general permit coverage inspected.

Conduct site inspections and enforcement. 60% of sites with TCEQ general permit coverage inspected.

Conduct site inspections and 100% of sites with enforcement. 100% of sites with TCEQ general permit coverage inspected.

Manage & Administer Program



MCM 5 - Post Construction BMP's (Runoff control)

Subdivision Regulations & Criteria Manual

Finalize interlocal agreement subdivision regulations and design manual in ETJ that requires structural BMPs.



MCM 5 - Post Construction BMP's (Runoff control)

Evaluate Subdivision & Platting Regulations for Non-ETJ areas.

Evaluate existing non ETJ-regulations and identify revisions necessary to require permanent storm water quality controls in new development and significant redevelopment, sanctions to ensure compliance, and long term O&M provisions.

Revise and adopt regulations relating to new development and redevelopment.

Criteria Manual

Adopt existing COSA criteria manual for usage within Bexar County.

Plan Review and Approval Procedures for Post-Construction BMPs

Develop post-construction BMP plan review procedures to address water quality and record-keeping system.

Conduct plan review training.

Review post-construction BMP Plans. (Review 25% in Y2, 50% in Y3, 75% in Y4, & 100% in Y5+)

Manage & Administer Program



MCM 5 - Post Construction BMP's (Runoff control)

Inspections and Long-Term O&M Provisions

Review and update inspection programs and long-term O&M.

Inventory County and private facilities.

Conduct O&M inspections and maintenance at BMPs

Conduct installation inspections at newly constructed privately maintained facilities.
(Inspect 25% in Y2, 50% in Y3, 75% in Y4, & 100% in Y5+)

Conduct O&M inspections at existing privately maintained facilities.
(Inspect 25 BMPs in Y2- Y3, 50 BMPs in Y4 & 100 BMPs in Y5)

Review annual O&M reports from privately owned BMPs.

(Review 20 reports in Y2, 50 in Y3, 100 in Y4 & 200 in Y5)

Manage & Administer Program

Flood Plain Maintenance

Mow and/or clean up flood plains



What are BMPs?

- Mechanisms to Prevent or Reduce the Discharge of Pollutants, such as:
 - *Schedules*
 - *Prohibitions*
 - *Maintenance Procedures*
 - *Structural Controls*
 - *Ordinances & Court Orders*



MCM 6 - Good Housekeeping: Pollution Prevention Program

Pesticide Herbicide Management

Train pesticide application staff.

Document number and name of trained employees.

Spill Response Kits

Maintain spill response kits at all County facilities with activities likely to contribute pollutants to storm water. Audit facilities to verify.

Spill Response and Safety Employee Training

Conduct training of all employees at County facilities with activities likely to contribute

pollutants to storm water. Document number and name of trained employees.



MCM 6 - Good Housekeeping: Pollution Prevention Program

Employee Training

Create employee training program for employees working in operations or maintenance.

Conduct and document annual employee training.



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