

Municipal Separate Storm Sewer System (MS4)

What Is It?

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Overview

- Permitting
- SWMP – Storm Water Management Program
 - MCM – Minimum Control Measures
- Challenges
- Regulations
- Investigations
 - Common Violations

● Harlingen Region Office - Air, Water, Waste

- Water: Water Quality and Drinking Water

- Water Quality

- Wastewater

- Storm Water

- ● MS4 – Municipal Separate Storm Sewer System

- Industrial

- Construction

- On-site Sewage Facilities

- Sludge: Transporters and Application/Beneficial Use

- Surface Water Quality Monitoring

- Confined Animal Feeding Operations

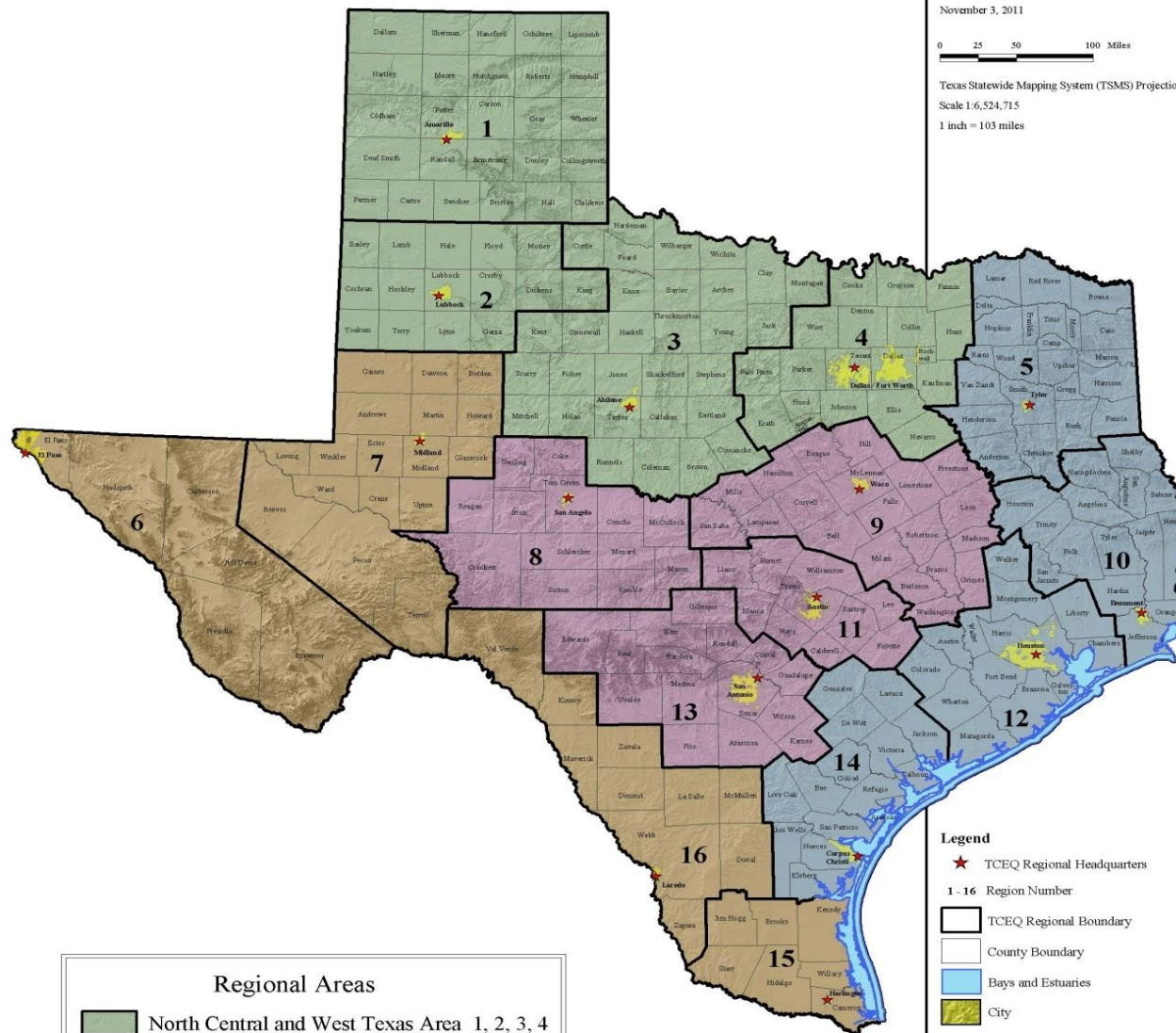
- Industrial Discharge General Permits

- **Questions At Any Time**

Investigative Presence and Complaint Response

- Conduct scheduled investigations
- Conduct on-demand investigations from complaints filed with the TCEQ
- Conduct periodic reconnaissance investigations in selected areas,
- Conduct monitoring when the situation requires





Source: The counties and coastline are U.S. Census Bureau 1992 TIGER/Line data (1:100,000). The cities are U.S. Census Bureau 1998 data (1:100,000).

[illegible]

?? MS4 ??

*Municipal Separate Storm Sewer System –
A conveyance or system of conveyances ... owned and
operated by a public agency (city, county, town, or other
public entity [universities, state and federal departments])
that discharges to water of the U.S. **and** is:*

- Designed / used to collect or convey storm water
- Not a combined sewer (storm AND wastewater)
- Not part of a POTW
- Includes publicly owned WSC and utility districts too – not just municipalities



MS4

- Phase I – Pop. 100,000 + in 1990
 - No New Phase I Designations
- Phase I MS4s in Texas
 - City of Abilene
 - City of Arlington
 - City of Austin
 - City of Beaumont
 - City of Corpus Christi
 - City of Dallas
 - City of El Paso
 - City of Fort Worth
 - City of Garland
 - City of Houston & Harris County
 - City of Irving
 - City of Laredo
 - City of Lubbock
 - City of Plano
 - City of Waco



Phase II MS4s

- Phase II – Any other within UA
 - NEW PERMIT – issued on December 13, 2013
 - Operators of small MS4s that are fully or partly located within an urbanized area, as determined by the 2000 or the 2010 Decennial Census
 - Level 1 - <10,000 within UA
 - Level 2 – 10,000 to <40,000 within UA
 - Level 3 – 40,000 to <100,000 within UA
 - Level 4 – >100,000 within UA



What is the permit for?

The MS4 permit is for local governments to be involved to the *maximum extent practicable* in the reduction of pollution in storm water runoff and protection of water quality.

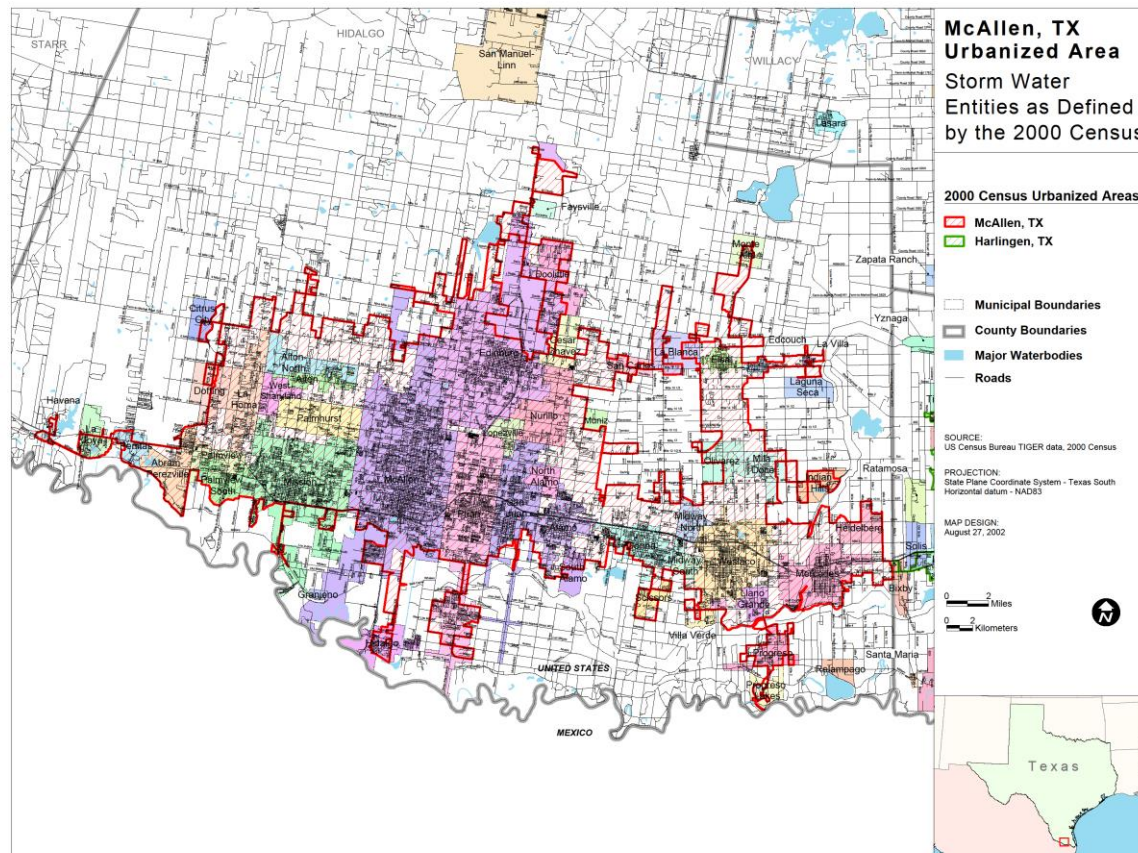


Who Needs the MS4 Permit?

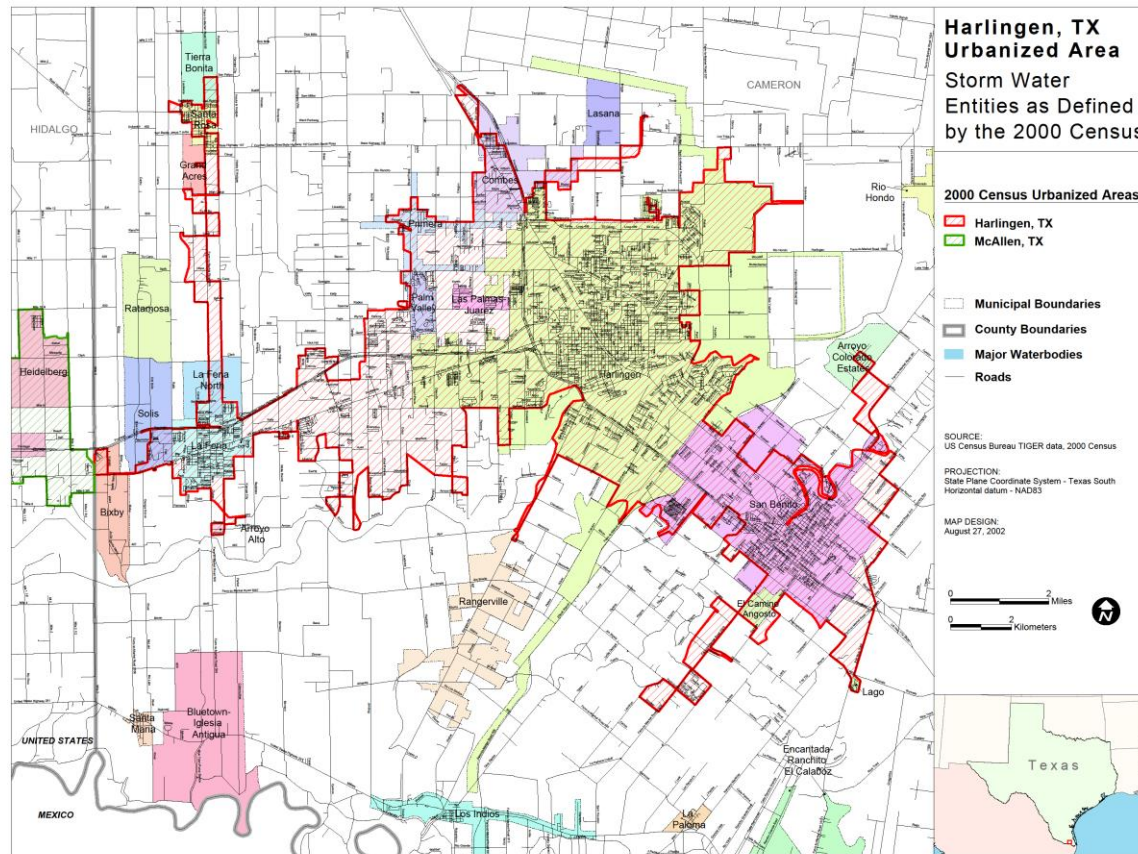
- MS4 within an UA –
- Urbanized Area - Maps detailing UAs is available at:
<http://www.census.gov/geo/www/ua/2010urbanruralclass.html>
- Urbanized Area
 - Residential populations of:
 - 1,000 to 50,000 people /square mile
 - 500 people/square mile at boundaries
 - Determination based on:
 - 2000 or 2010 U. S. Census
 - Federal Maps and List of Texas UAs



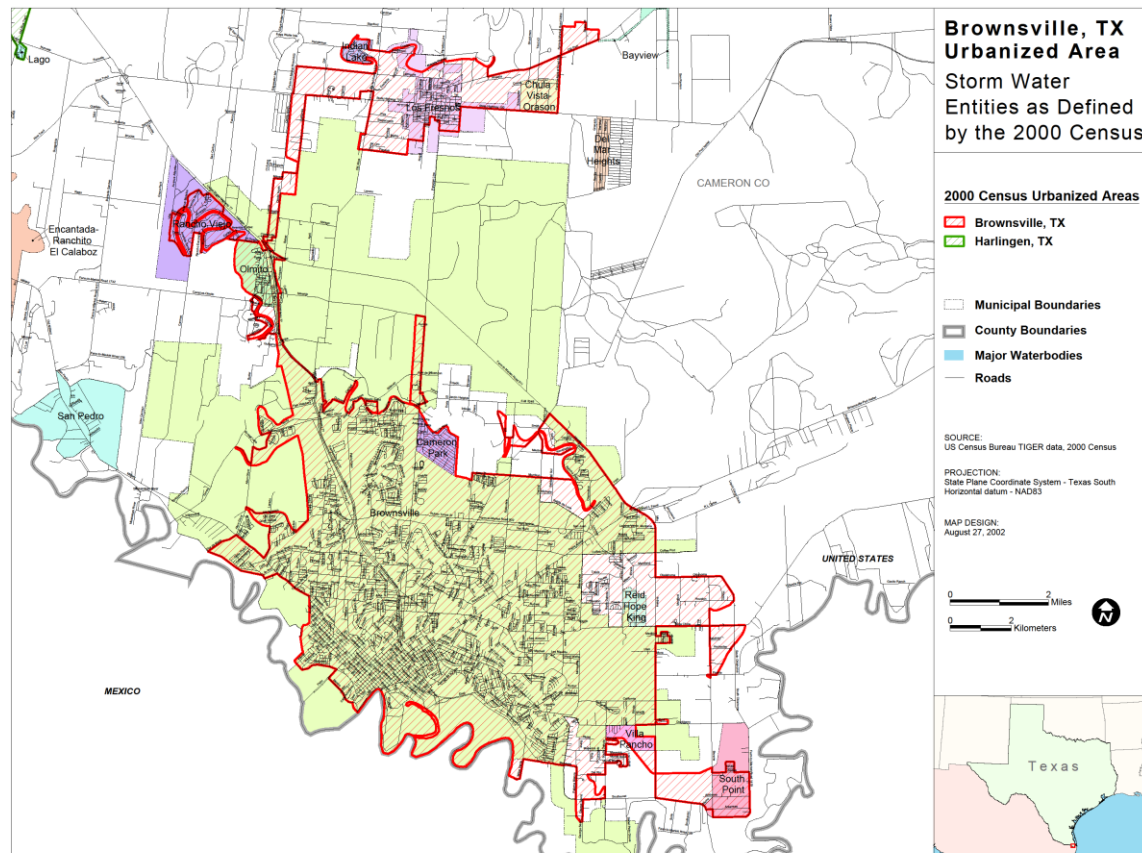
Urbanized Area: McAllen



Urbanized Area: Harlingen



Urbanized Area: Brownsville



General Permit for Phase II (Small) MS4s

- Issued December 13, 2013; effective for five years
- *****All regulated entities (new and existing) will have 180 days to apply for coverage or a waiver under the general permit, the deadline to apply is June 11, 2014.*****



What is Required??

- Notice of Intent (NOI)
- Storm Water Management Program (SWMP)
- Public Notice by MS4 Operator
- Renewal at end of five year permit term



Deadlines:

- NOI and new or revised SWMP due **June 11, 2014**
- Annual Report due in November each year
- Full Implementation of SWMP by August 13, 2012



Stormwater Management Program

Develop and implement comprehensive SWMP:

- Reduce polluted runoff to the maximum extent practicable
- Protect water quality – source of drinking water, recreation
- Meet water quality requirements of the CWA and the TWC
- Required inside of UA only
- BMPs and mechanisms to prevent / reduce the discharge of pollutants
 - Schedules
 - Prohibitions
 - Maintenance procedures
 - Programs and controls
 - Ordinances
- Include six minimum control measures



SWMP Evaluation

- Meet regulatory requirements
- Document progress toward goals
- Provide feedback to program management
- Evaluate social indicators / behavior change
- Monitoring to assess reductions in pollutants
- Ensure efficient use of resources



Minimum Control Measures

1. Public education and outreach
2. Public involvement / participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post-construction site storm water management for new development and redevelopment
6. Pollution prevention / good housekeeping for municipal operations



Developing an Outreach Strategy



Source: EPA NPDES

http://cfpub.epa.gov/npdes/stormwater/menueofbmps/index.cfm?action=factsheet_results&view=specific&bmp=115

MS4s In RGV – Stormwater Management Programs/Department



Source: City of Brownsville: <http://publicworks.cob.us/stormwater>



MS4s In RGV – Stormwater Management Programs/Department



Source: City of McAllen: <https://www.mcallen.net/public-works/storm-water-management>



MS4s In RGV – Stormwater Management Programs/Department



Source: City of Alamo: <http://www.alamotexas.org>
<http://www.youtube.com/user/CityofAlamoGov>.



For each MCM:

- Establish measurable goals
- Evaluate / assess efforts to meet goals
- Maintain records
- Full implementation by August 13, 2018
- Meet MEP standard for each goal



Challenges

- New Program
 - Unrecognized by Public
- Resources
 - Staff
 - Funding
- Developing Ordinances/Orders



Investigations

- CCI's
 - Comprehensive Investigation
- CRR
 - Record Reviews for submittal of required Documents
- Recons
 - MS4 in UA
 - NOI / SWMP Submitted
 - Waiver
 - Designated MS4
 - NOI / SWMP
 - Annual Reports



Regulations

Federal

- Clean Water Act
- 40 CFR: Ch. 122.26

State

- Texas Water Code:
 - Ch. 26.121 – Discharge Prohibited W/O Authorization
 - Ch. 26.027 – TCEQ Designated Authority
- 30 Texas Administrative Code: Ch. 281, 305, 308
- MS4 General Permit: TXR040000



Common MS4 Violations

- Submittal of NOI/SWMP
 - Resolution: Submit NOI/SWMP
- Submittal of Annual Reports
 - Resolution: Submit Annual Report
- Submittal of other Documents
 - Resolution: Submit Documents
- Record Retention
 - Resolution: Maintain Records



Assistance Tools for Municipal Separate Storm Sewer Systems (MS4s)

- TCEQ: <http://www.tceq.texas.gov/assistance/water/sw-ms4.html>
- TCEQ: Municipal Separate Storm Sewer System (MS4) Discharges: Am I Regulated?
http://www.tceq.texas.gov/permitting/stormwater/WQ_ms4_AIR.html
- EPA Region 6 NPDES STORM WATER PROGRAM
Municipal Separate Storm Sewer Systems (MS4s):
<http://www.epa.gov/region6/water/npdes/sw/ms4/>





Questions?

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