



Phase II Small MS4 General Permit, TXR040000

Stormwater Team, Water Quality Division

May 19, 2021

Outline

- ❖ Municipal Separate Storm Sewer System (MS4) Basics
- ❖ Stormwater Management Program (SWMP) Requirements and Measurable Goals
- ❖ Impaired Waterbodies
- ❖ Annual Reports
- ❖ 2021 Updates



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Image of the Lower Rio Grande Valley National Wildlife Refuge

MS4 Basics

What is an MS4?

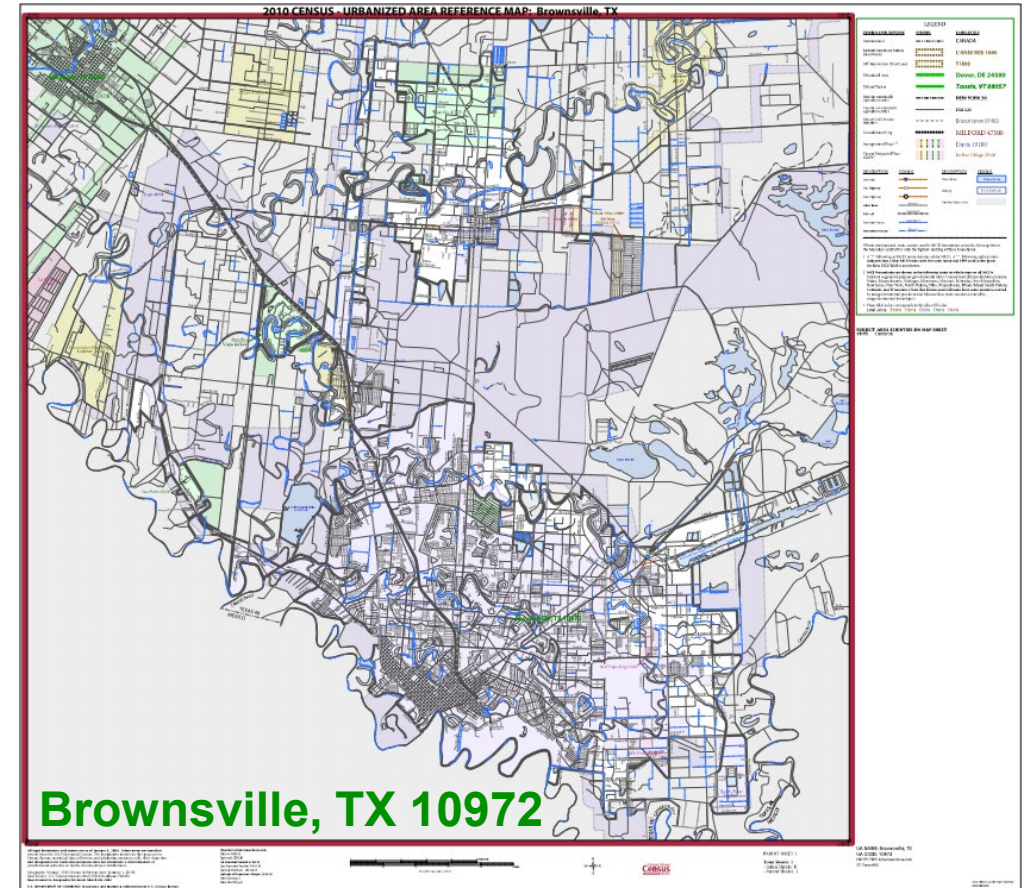
- Publicly-owned or operated stormwater drainage system
 - Designed to collect or convey stormwater
 - Includes storm drains, ditches, curbs, gutters, municipal streets, roads with drainage



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Urbanized Areas

- An Urbanized Area (UA)
 - is a central place (or places) and the adjacent densely settled surrounding territory,
 - has a minimum population of 50,000 people, and
 - has a minimum average density of 1,000 people/square mile.
- Small MS4s are in UAs
 - The U.S. Census develops UA maps that are used as the basis for MS4 permit requirements.



U.S. Census (2010). 2010 Census – Urbanized Area Reference Map: Brownsville, TX.
https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua10972_brownsville_tx/DC10UA10972.pdf

Requirements of Phase II MS4s

- Develop and implement a Stormwater Management Program (SWMP) that includes:
 - six Minimum Control Measures (MCMs),
 - a schedule for implementation expressed as months and years over the five-year permit term,
 - full implementation at the end of the five-year permit term, and
 - additional requirements for discharges into impaired waterbodies (as applicable).
- Submit annual reports



Tiered Permitting Approach

Level 1	<ul style="list-style-type: none">• Up to 10,000
Level 2	<ul style="list-style-type: none">• 10,000 to 40,000• Includes non-traditional MS4s• Additional Requirement in MCM 2
Level 3	<ul style="list-style-type: none">• 40,000 to 100,000• Additional Requirements in MCMs 2, 3, and 5
Level 4	<ul style="list-style-type: none">• More than 100,000• Additional Requirements in MCMs 2, 3, 4, and 5• Required to implement MCM 6

Based on 2000 and 2010 U.S. Census

Waiver option available for population less than 1,000

Application Types

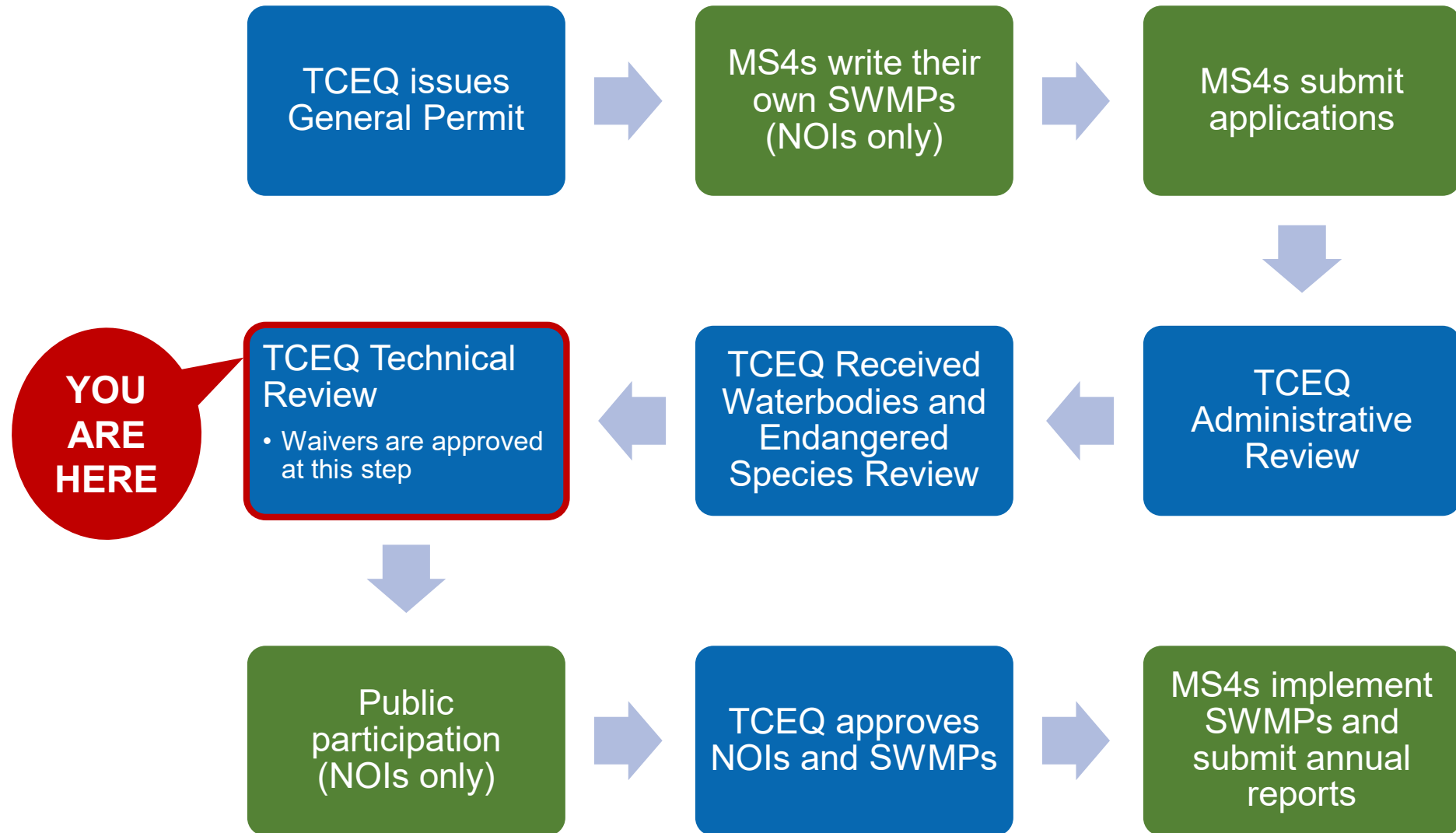
Notices of Intent (NOIs)

- About 530
- Required to develop and implement SWMP
- Required to report on SWMP progress annually

Waivers

- About 35
- SWMP not required
- Option 1
 - Population less than 1,000
 - Not discharging pollutants of concern
- Option 2
 - Population less than 10,000
 - TCEQ evaluates all receiving waterbodies

Application and Review Process: NOIs and Waivers

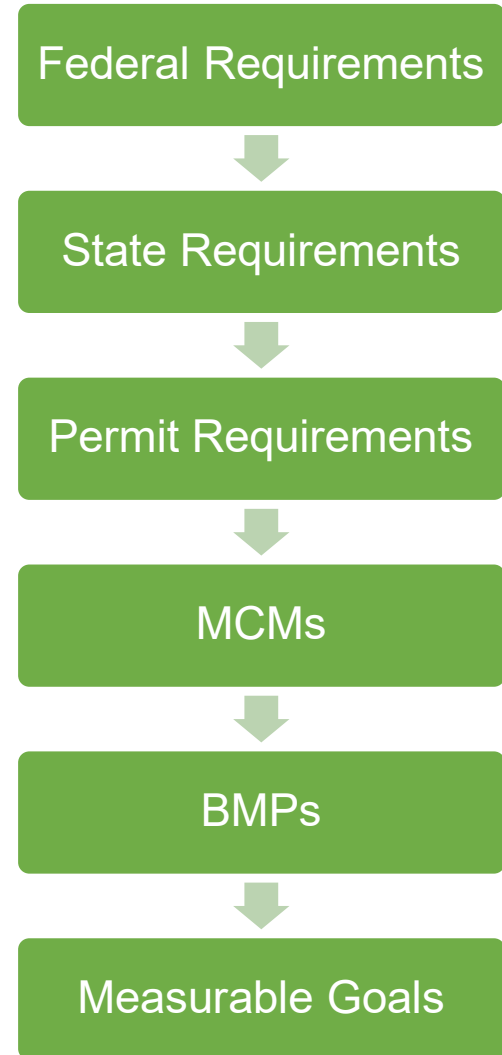


SWMP Requirements and Measurable Goals

What do SWMPs achieve?

MS4 SWMPs set a plan to reduce the discharge of pollutants through development and implementation of Best Management Practices (BMPs) with measurable goals

- MS4s are required to reduce the discharge of pollutants
 - to the maximum extent practicable (MEP), and
 - to meet water quality requirements of the Clean Water Act.
- Required MCMs are
 - designed to achieve reduction in pollutants, and
 - addressed through development and implementation of BMPs.
- BMPs must contain measurable goals



BMPs Must Include Measurable Goals

- MCMs addressed in SWMP through BMPs that include measurable goals
- Measurable Goals
 - Tracking implementation over time
 - Measuring progress in implementing BMPs
 - Tracking total number of BMPs implemented
 - Tracking program effectiveness in reducing pollutants to the MEP
 - Tracking environmental improvement



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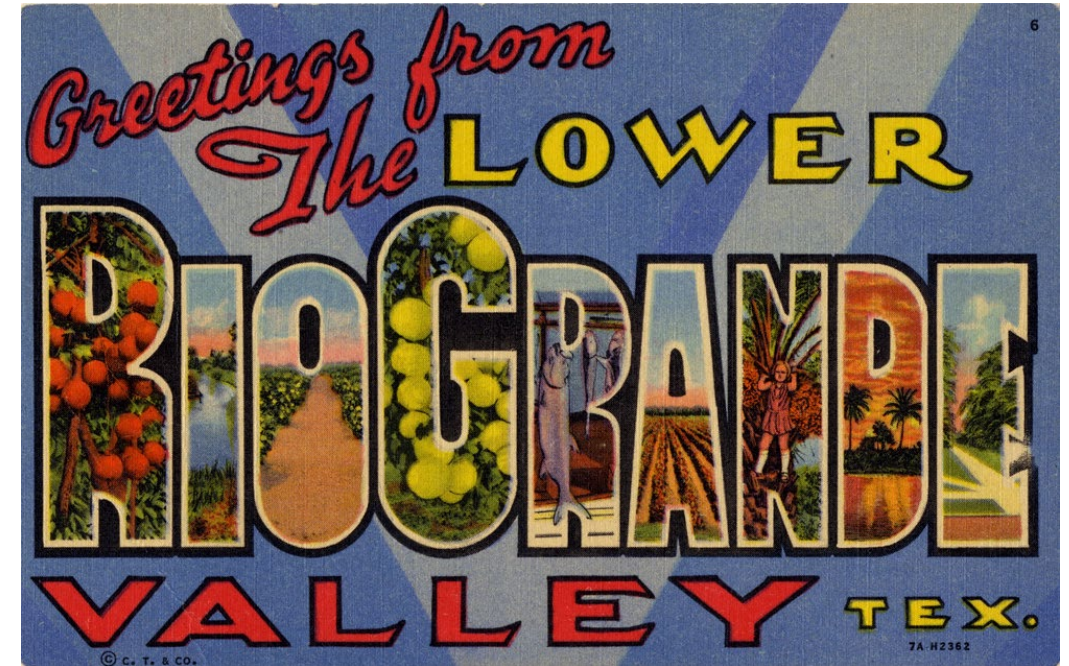
Measurable Goals Components

All permits must be written with terms that are “clear, specific, and measurable.”



Sharing SWMP Responsibilities: Coalitions

- Multiple MS4s that share efforts in meeting any or all SWMP requirements
- Shared SWMPs must include
 - the names and authorization numbers (TXR04####) of each coalition member, and
 - clear descriptions of each members' responsibilities for specific MCMs or other SWMP elements.



Tenney, Fred, and Kevin Hilbert. 2009. *Large Letter Postcards: The Definitive Guide 1930s to 1950s*. Atglen, Pennsylvania: Schiffer Publishing, Ltd. 176 p.

Impaired Waterbodies

Do I discharge to Impaired Waterbodies?

- SWMPs must address impaired waterbody requirements
- Impaired: Identified as not meeting Texas Surface Water Quality Standards on the latest **TCEQ & EPA-approved Texas Integrated Report Index of Water Quality Impairment**
 - Status of the State's waters as required by Sections 305(b) and 303(d) of the Federal Clean Water Act
- MS4s must annually evaluate status of receiving waterbodies
 - Note in annual report

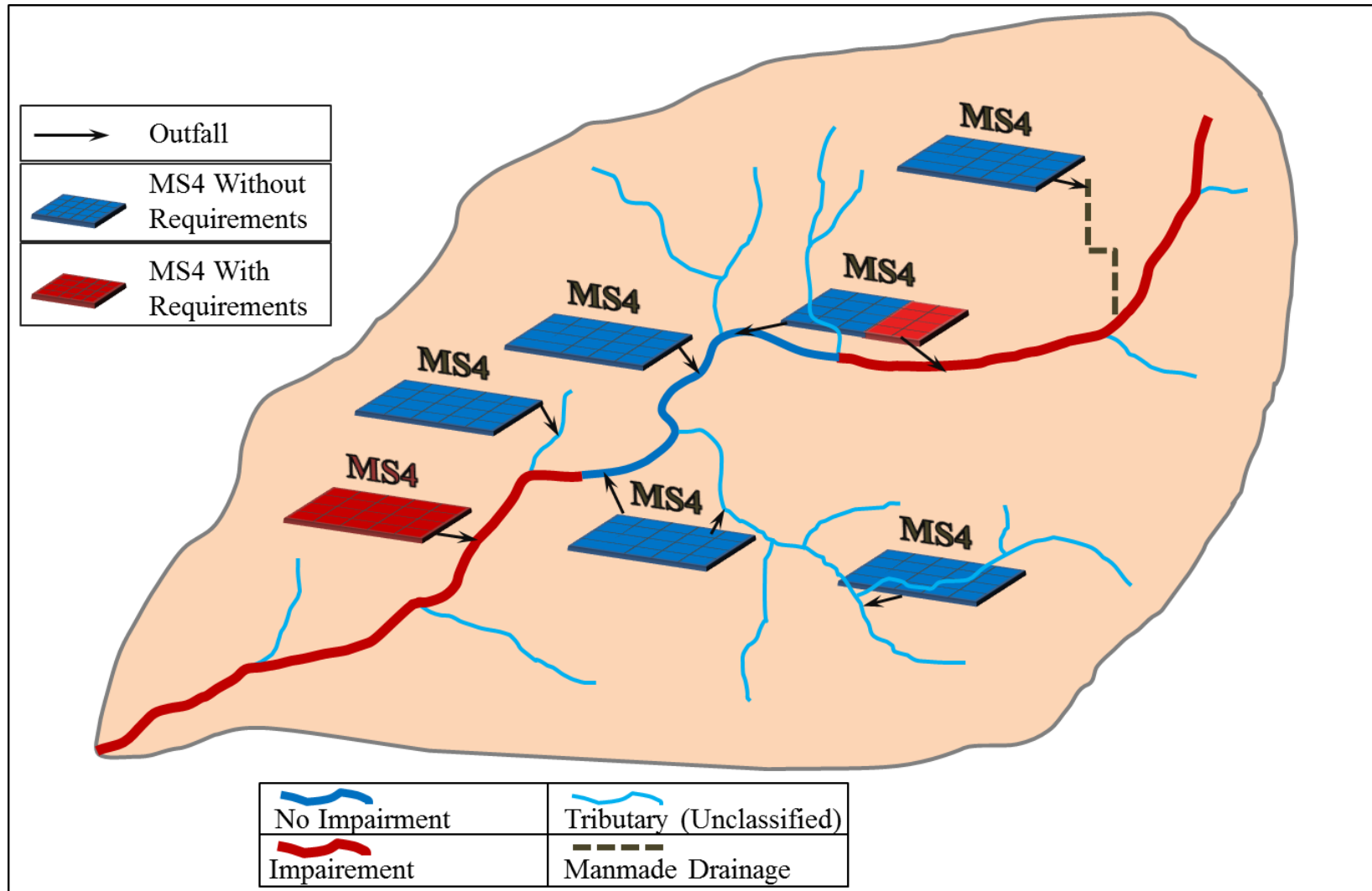


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Image of the Bentsen-Rio Grande Valley State Park

Categories of Impairment

- Category 4a
 - Total maximum daily load (TMDL) has been completed and approved by EPA
 - MS4 must meet TMDL requirements
 - Learn more on the TCEQ TMDL webpage:
<https://www.tceq.texas.gov/waterquality/tmdl>
- Category 5
 - Applicable water quality standards are not met but no TMDL has been approved
 - MS4 must meet impaired water bodies requirements

Direct discharge to impaired waterbody



Impaired Waterbody Example: Arroyo Colorado

Overview

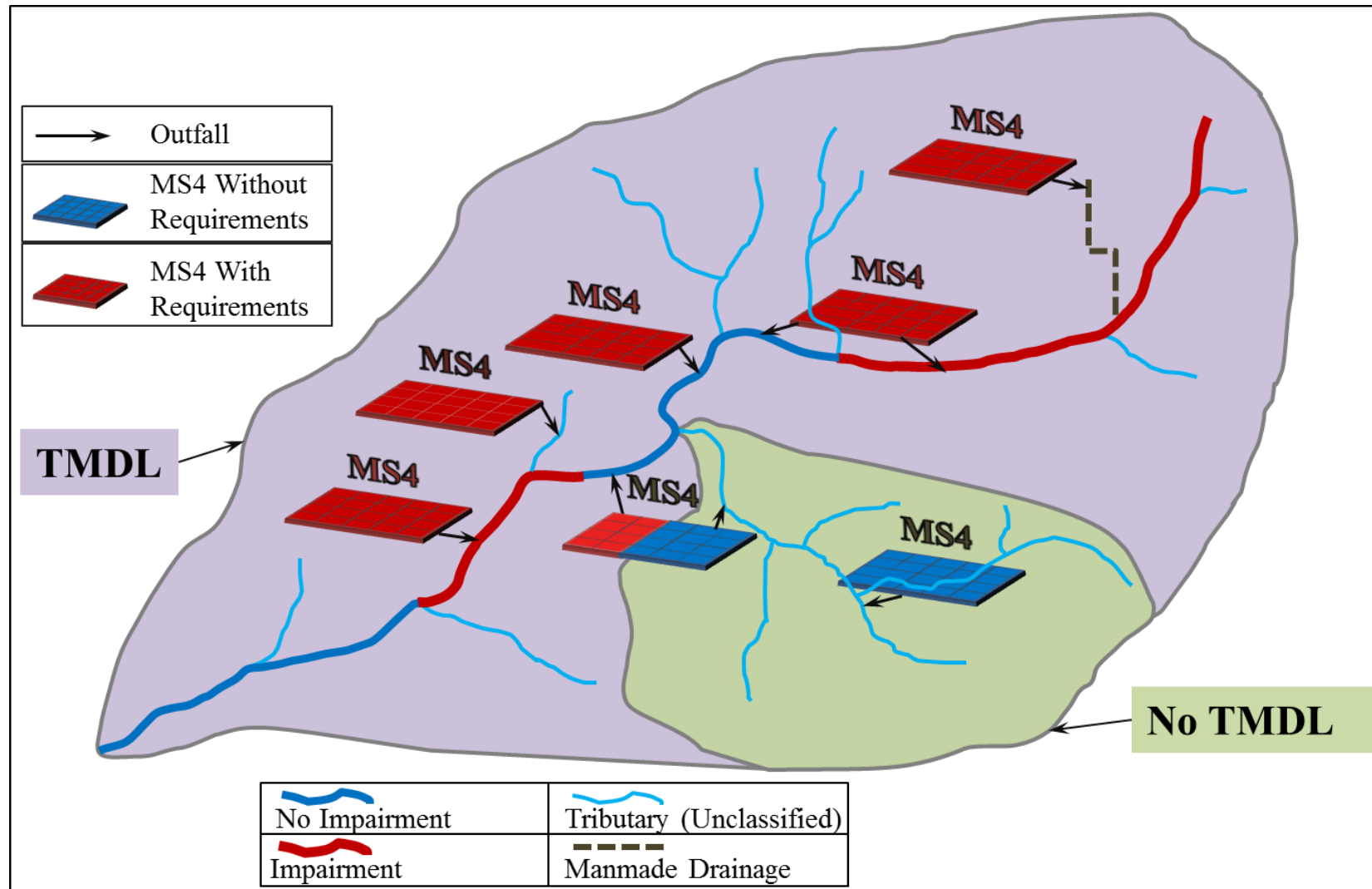
- Cameron and Hidalgo Counties
- Bacteria, Mercury in Edible Tissue, and PCBs in Edible Tissue
- Classified Segment 2202, Arroyo Colorado Above Tidal, in the Nueces-Rio Grande Coastal River Basin



<https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=b0ab6bac411a49189106064b70bbe778>

Surface Water Quality Viewer, Classified Segment 2202, Arroyo Colorado Above Tidal, black with yellow highlight
Segments appear light blue in viewer

Direct or indirect discharge to TMDL waterbody



TMDL Requirements

The SWMP and annual reports must include the following information:

Targeted Controls – Identify areas of focused effort or implement BMPs

Measurable Goals - Include activity to be completed, quantifiable target, and deadline or frequency

Identification of Benchmark – Identify guidance level indicator to determine effectiveness of targeted controls and measurable goals, not a numeric effluent limitation

Monitoring or Assessment of Progress - Develop a plan to monitor or assess progress in achieving benchmarks

TMDL Example: Arroyo Colorado

Overview

- Cameron and Hidalgo Counties
- Legacy Pollutants and Organics in Fish Tissue
- Classified Segment 2202, Arroyo Colorado Above Tidal, in the Nueces-Rio Grande Coastal River Basin
- Adopted by TCEQ on July 25, 2003
- Approved by EPA on May 13, 2004
- Revision of previously-published guidance from 2001

<https://www.tceq.texas.gov/waterquality/tmdl/07-arroyoleg.html>

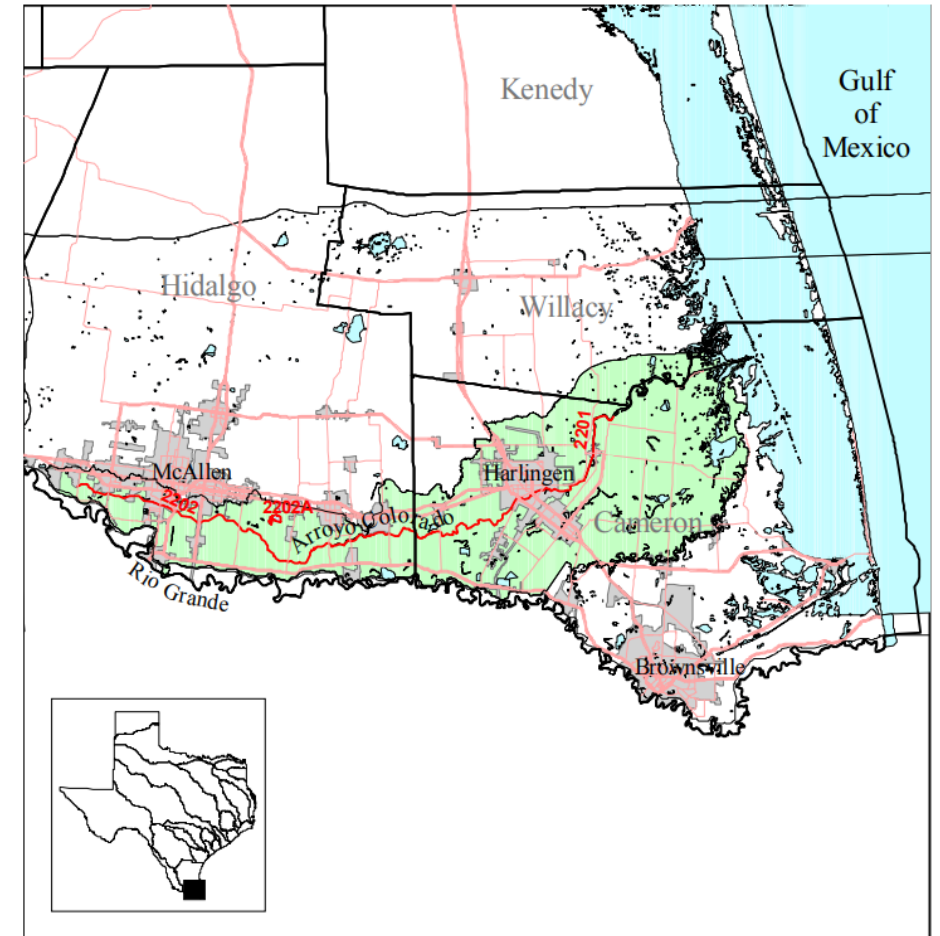


Figure 1. Study Area in the Lower Rio Grande Valley.

https://www.tceq.texas.gov/assets/public/waterquality/tmdl/07arroyoleg/07-arroyo_legacy_tmdl.pdf

Annual Reports

Annual Reports

- The MS4 shall conduct an annual review of its SWMP in conjunction with the preparation of the annual report
- The annual report must:
 - be submitted on the TCEQ-approved form (TCEQ-20561),
 - describe activities conducted during the MS4's reporting year, and
 - be submitted even if the SWMP has not been approved by the TCEQ.



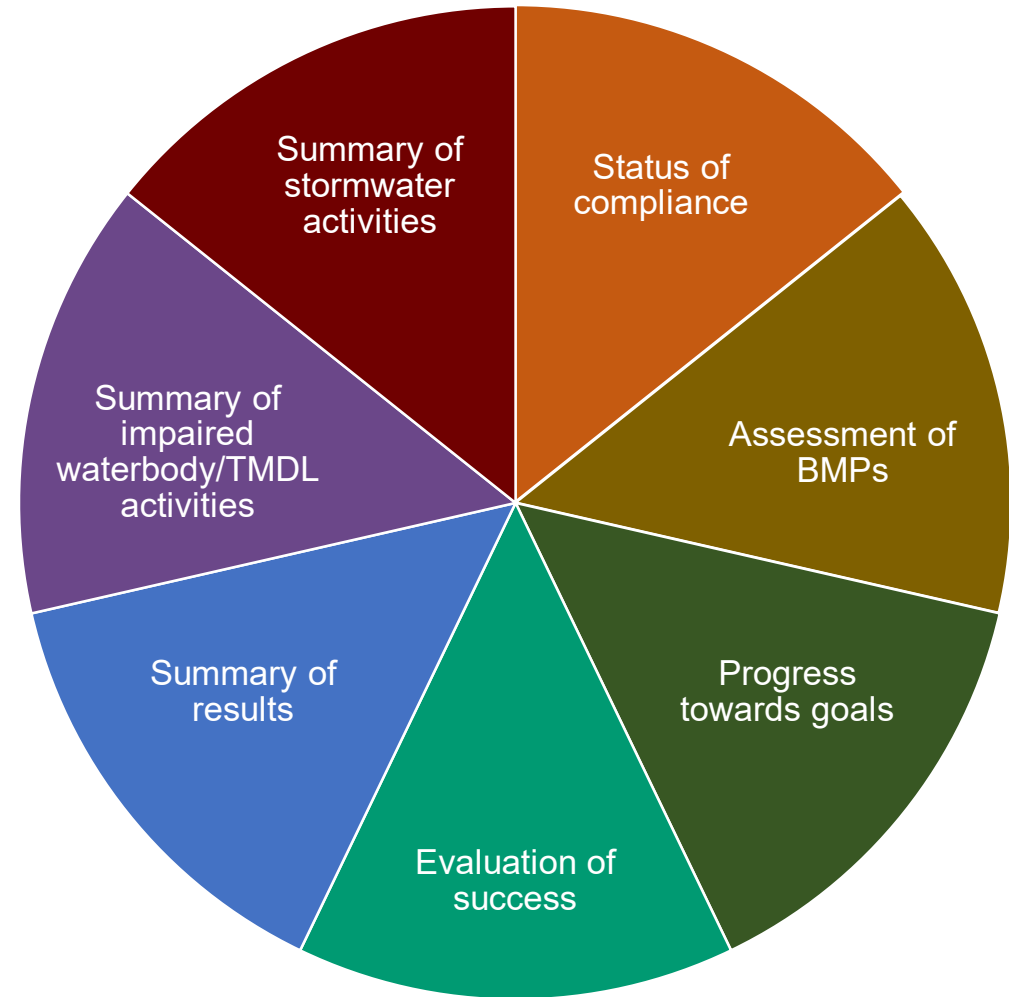
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Reporting Options

- Due to TCEQ within 90 days of the end of each reporting period
- Reporting Year
 - Fiscal Year
 - Small Permit Year
 - Calendar Year
- Reporting Period
 - The dates covered in the annual report for that year

What do I include in my annual report?

- Continue to operate under the existing SWMP until the revised SWMP is approved (General Permit, Part III, Section A.1(a))
- Note in cover letter if you have chosen to implement BMPs from the draft 2019 SWMP



Coalitions and Annual Reports

- Share a common SWMP? Submit a single system-wide report
- MS4s must
 - each contribute to the system-wide report,
 - ensure Section H is correctly filled with authorization numbers and the names of each member, and
 - sign and certify in accordance with 30 TAC §305.128.



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2021 Updates



SWMP Reviews

- About 2/3 of submitted 2019 SWMPs have been technically reviewed
- Almost all SWMPs require significant revisions for measurable goals
 - Most BMPs are not measurable and are missing quantifiable targets
 - Most deadlines are missing months



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What to Expect

- Technical reviews are ongoing
 - Not all SWMPs have been assigned for review
 - Your technical reviewer will email you with SWMP revisions and a deadline for your submission
- After technical review, MS4s will proceed to public notice
 - No public notices have been issued
 - TCEQ will contact you regarding your public notice
- Continue to implement your SWMP
- Continue to submit annual reports

Stormwater Team Contacts

Stormwater Team



512-239-4671



SWGP@tceq.texas.gov

Stormwater Processing Center



512-239-3700

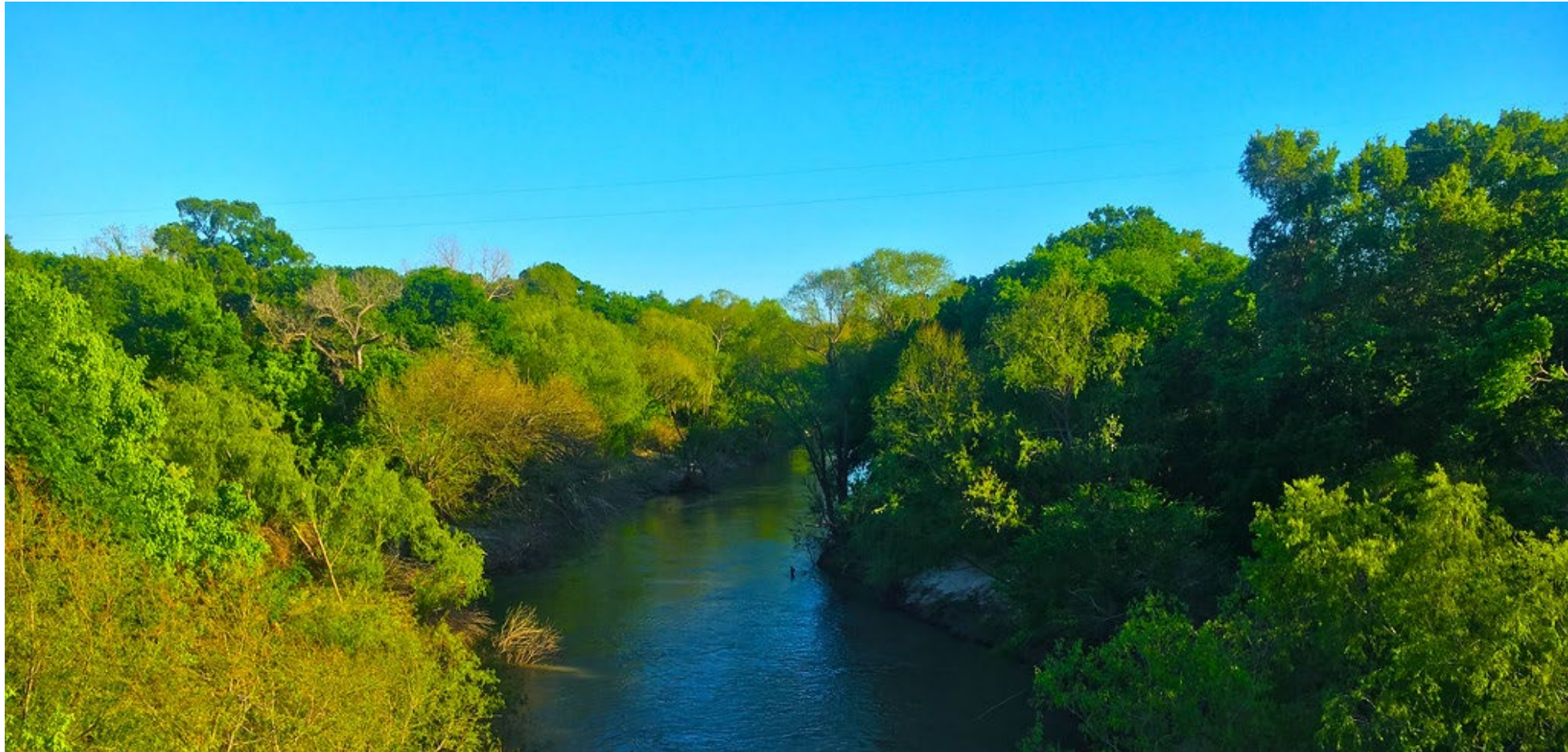


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Questions?



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