

TPDES Permitting

Municipal Separate Storm Sewer
Systems (MS4s) Updates

Water Quality Seminar

September 16-17, 2014

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Outline of Presentation

- Municipal Stormwater
 - Phase I program – Individual Permits
 - Phase II program – General Permit TXR040000



What is an MS4?

- An MS4 is a publicly-owned or operated stormwater drainage system
 - Designed to collect or convey stormwater
 - Includes storm drains, pipes, ditches, gutters, etc.



Phase I MS4s

➤ Medium and Large

- Municipal population 100,000+ (1990 Census)
- Includes public entities in the urbanized area (UA)
 - TxDOT, universities, some others
- Universe: 26 TPDES permits
 - some include coalitions (about 50 permittees)
- First renewals submitted summer of 2010
- Last renewals submitted spring of 2014



Phase I MS4 Permit Renewals

- Minimum Control Measures (MCMs – examples)
 - MS4 Maintenance Activities
 - Post-Construction Control Measures
 - Illicit Discharge Detection and Elimination
 - Pollution Prevention/Good Housekeeping for Municipal Operations
 - Industrial & High Risk Runoff
 - Construction Site Runoff
 - Public Education and Outreach/Public Involvement and Participation
 - Monitoring, Evaluation and Reporting



Requirements of Phase I MS4s

- Perform Monitoring - three options
 - Representative Storm Events,
 - Representative Rapid Bioassessment, or
 - Watershed Monitoring - Regional Wet Weather Characterization Program (Dallas-Fort Worth area)
 - Coordinated by North Central Texas Council of Governments
 - Program reviewed and approved by TCEQ



Requirements of Phase I MS4s

In addition to monitoring above:

- Monitoring of Floatables
 - Often required in 2 locations at a frequency 2 times per year
 - Report collected amount

- Submit Annual Reports
 - TCEQ reviews and provides feedback



Phase I MS4s Permit Renewals

- Discharges into Impaired Waters with Total Maximum Daily Load (TMDL) and Implementation-Plan (I-Plan)
 - Add language from the I-Plan related to the MS4 permittee
- Discharges into Impaired Waters with no TMDL
 - Permittee is required to address impairment within the MCMs



Phase I MS4s Permit Renewals

➤ EPA Review

- Requesting similar requirements as Phase II GP
 - Priority areas
 - List of construction sites
 - Procedures for inspection of industrial sources
 - Mapping requirements
 - Impaired waterbodies with and without TMDLs
- Requesting to see inspection or audit reports completed by TCEQ



TxDOT MS4 Statewide Individual Permit

The screenshot shows the homepage of the Texas Department of Transportation (TxDOT). At the top left is the TxDOT logo, a stylized star with a swoosh, followed by the text "TEXAS DEPARTMENT OF TRANSPORTATION". To the right is a search bar and navigation links: "A - Z Site Index | Contact Us | Español". Below the search bar are links for "Driver | Government | Business | Inside TxDOT". The main content area features a large "TEXAS HIGHWAYS" logo with the tagline "The TRAVEL MAGAZINE of TEXAS". To the left of the logo is a tablet displaying a magazine cover for "TEXAS HIGHWAYS" with the headline "The COUNTDOWN BEGINS! The TEXAS TOP 40 TRAVEL DESTINATIONS". To the right of the logo is a dark blue box with the text "Texas Highways Celebrates 40 Years" and a "Read More" link. Below this is a row of three featured sections: "Driver" with a photo of a woman driving, "Government" with a photo of a man and a star, and "Business" with a photo of a woman. Each section has a brief description of the content. At the bottom left is a "My TxDOT" button. At the bottom right is a logo for a water quality program, featuring a sun, clouds, and green hills.

TEXAS DEPARTMENT OF TRANSPORTATION

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Find studies, policies and legislation, and explore ways TxDOT can work with your community.

Business
Find information on partnering with TxDOT, including opportunities, resources and the bidding process.

My TxDOT



TxDOT MS4 Statewide Individual Permit WQ0005011000

- Application received March 18, 2013
 - EPA and TCEQ agreed with concept
 - Delays due to complexity of permit and legal implications
- Coverage will replace
 - 15 Phase I individual permits
 - 19 Phase II authorizations under the Phase II GP
- Coverage will include New MS4 areas



TxDOT MS4 Statewide Individual Permit WQ0005011000

- Permit Requirements include
 - Level 2 MS4 provisions from Phase II GP
 - Phase I provisions from TxDOT Phase I individual permits



TxDOT MS4 Statewide Individual Permit WQ0005011000

➤ Transition Period

- Previous Phase I copermittees reapply without TxDOT
- All requirements in Phase I and Phase II need to be met
- TxDOT Phase I responsibilities will be carried over to statewide individual permit

➤ Permit Development

- Draft permit was completed March 2014
- Draft permit going through internal reviews



Phase II MS4 General Permit

- Phase II General Permit TXR040000
 - Regulates small MS4s located in a UA
 - Issued December 13, 2013 – 5 year term
 - 472 approved authorizations included 66 waivers under 2007 GP
 - 400 additional new MS4 entities (estimated)
 - 100 cities
 - 300 non-traditional MS4s



Phase II MS4 General Permit

- Notification letters sent to new and existing MS4s
- Permit documents on website:
 - General Permit
 - Fact sheet
 - ED response to comments

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

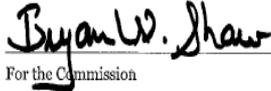
This permit supersedes and replaces
TPDES General Permit No. TXR040000, issued August 13, 2007

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


For the Commission



Urbanized Area (UA)

- UAs represent densely developed territory
- A densely settled core of census tracts and/or census blocks meeting minimum population density requirements:
 - A combined residential population of at least 50,000 people
 - Overall population density of at least 1,000 people per square mile



Urbanized Area (UA)

- US Census Bureau develops the UAs
- UA maps illustrate defined boundaries of UAs in the form of a map
- EPA website regarding UA maps:
<http://cfpub1.epa.gov/npdes/stormwater/urbanmaps.cfm>
- TCEQ website regarding UA maps:
<http://www.tceq.texas.gov/assistance/water/sw-ms4.html>



Phase II MS4 GP Renewal

- Tiered Permitting Approach (based on population in the UA)
 - Level 1: Up to 10,000
 - Level 2: 10,000 to 40,000
 - includes non-traditional MS4s
 - Level 3: 40,000 to 100,000
 - Level 4: More than 100,000



Waiver Option from Permitting Requirements

➤ Option 1

- Serves a population less than 1,000 in an UA and
 - Discharge not contributing substantially to interconnected regulated MS4
 - No TMDL or WLA for an impaired waterbody that requires the MS4 to have additional controls

➤ Option 2

- Serves a population under 10,000 and
 - Receiving water has been evaluated
 - No TMDL or WLA for an impaired waterbody that requires the MS4 to have additional controls
 - Future discharge will not impair water body



Phase II MS4 GP Renewal

- Minimum Control Measures (MCMs)
 1. Public Education, Outreach, and Involvement
 2. Illicit Discharge Detection and Elimination
 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
 6. Industrial Stormwater Sources
 7. Optional MCM for Construction done by the Permittee (MS4)



Phase II MS4 GP Renewal

- Required Elements in Each MCM
 - All levels – requirements in 40 CFR §122.34 and expired general permit
- Additional requirements for higher levels
 - MCM 2, Illicit Discharges – level 4 additional requirements:
 - Identify priority areas likely to have illicit discharges
 - Conduct dry weather field screening to detect illicit discharges



Phase II MS4 GP Renewal

- MCM 3, Construction – level 3 and 4 additional requirements
 - Maintain an inventory of all regulated construction sites
- MCM 4, Post Construction – level 4 additional requirements
 - Develop an inspection program to ensure post-construction BMPs are operating correctly and are being maintained



Phase II MS4 GP Renewal

- MCM 5, Pollution Prevention and Good Housekeeping – level 3 and 4 additional requirements
 - Identify high priority facilities
 - Develop stormwater management SOPs for high priority facilities
 - Develop an inspection program to include at minimum high priority facilities
- MCM 6, Industrial Stormwater Sources – level 4 only
- Additional requirements for discharges into impaired waterbodies



Phase II MS4 GP Renewal

Applying for Coverage

- Develop and implement a comprehensive Stormwater Management Program (SWMP)
- Submit:
 - Notice of Intent (NOI), Form TCEQ – 20368
 - SWMP
 - Fee - \$100
 - Paper only
- TCEQ performs technical review of SWMP
- Publish public notice in newspaper
 - Opportunity for the public to view and submit comments on the NOI and SWMP



Phase II MS4 General Permit

- Notice of Intent (NOI) is updated
- Application deadline: June 11, 2014
- Renewals received after deadline will get a new authorization number

TCEQ Office Use Only
Permit No.:
RN:
CN:
Region:

[RESET FORM](#)



TCEQ Notice of Intent (NOI) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) under the TPDES Phase II MS4 General Permit (TXR040000)

IMPORTANT:

- Use the [INSTRUCTIONS](#) to fill out each question in this form.
- Use the [CHECKLIST](#) to make certain you filled out all required information. Incomplete applications WILL delay approval or result in automatic denial.
- Once processed your authorization can be viewed at: http://www2.tceq.texas.gov/wq_dpa/index.cfm

APPLICATION FEE:

- You must pay the \$100 Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
 - Go to <https://www3.tceq.texas.gov/epay/index.cfm>
 - Select Fee Type: GENERAL PERMIT MS4 PHASE II STORM WATER DISCHARGE NOI APPLICATION
- **Provide your payment information below, for verification of payment:**
 - Mailed Check/Money Order No.: _____
Name Printed on Check: _____
 - EPAY Voucher No.: _____
Is the Payment Voucher copy attached? Yes

One (1) copy of the NOI and Stormwater Management Program (SWMP) with the completed SWMP Cover Sheet MUST be submitted with the original NOI and SWMP.

Is the copy attached? Yes

RENEWAL: Is this NOI a Renewal of an existing Phase II MS4 General Permit Authorization?
(Note: An authorization cannot be renewed after June 11, 2014.)
 Yes The existing authorization number is: TXR04_____
(If an authorization number is not provided, a new number will be



Phase II MS4 General Permit

- Checklist in NOI provides overview of permit requirements
- Develop and submit SWMP with NOI

MCM 4: Post-Construction Stormwater Management in New Development and Redevelopment

Page # (s) – Provide the page number (s) to the left of each item.

The SWMP includes the following required elements:

Requirements for all MS4s:

1. Description of program that will be developed, implemented and enforced, to address stormwater runoff from new development and redeveloped 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.
2. Ordinance or other regulatory mechanism is in place or planned which will regulate discharges from new development and redevelopment projects.
3. Establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality.
4. Document and maintain records of enforcement actions.
5. Long-term operation and maintenance of post construction stormwater control measures is addressed.
6. Operation and maintenance is documented.

Additional Requirements for Level 4 small MS4s:

1. Develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained.
2. Inspections are documented.

SWMP lists BMPs used to fulfill this MCM. Examples may include:

- Local ordinance in place or planned
- Guidance document for developers to utilize
- Specific BMPs established for particular watersheds
- List of appropriate BMPs provided to operators
- Elimination of curbs and gutters is encouraged
- Zoning takes into account stormwater issues
- Incentives for use of permeable choices, such as porous pavement
- Requirements for wet ponds or other BMPs for certain size sites
- Xeriscaping

SWMP includes measurable goals, and the method of measurement, for addressing stormwater quality.

SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from permit issuance date.



Phase II MS4 General Permit

Developing a SWMP

- Existing Permittees
 - Assess previous program elements
 - Modify as necessary
 - Develop and implement new elements
- New Permittees
 - Develop and implement new elements
- Developing Ordinances
 - Model Ordinances will be available on TCEQ website September, 2014



Stormwater Management Program

➤ Implementation of SWMP

- Develop a schedule
- Implemented in yearly intervals over the 5 year permit term
- Must be fully implemented at the end of the 5 year permit term

➤ Possibility for Coalitions

- Usually share a boundary or watershed
- Each MS4 is responsible for own compliance
- Enter into agreements with clear delineation of responsibilities



Impaired Waterbodies

➤ Lists of Impaired Waterbodies

- CWA 303(d) List includes waterbodies with no TMDL (category 5)
- Index of Water Quality Impairments in the Integrated Report of Surface Water includes:
 - impaired waterbodies with a TMDL (category 4)
 - impaired waterbodies with no TMDL (category 5)

http://www.tceq.texas.gov/waterquality/assessment/305_303.html

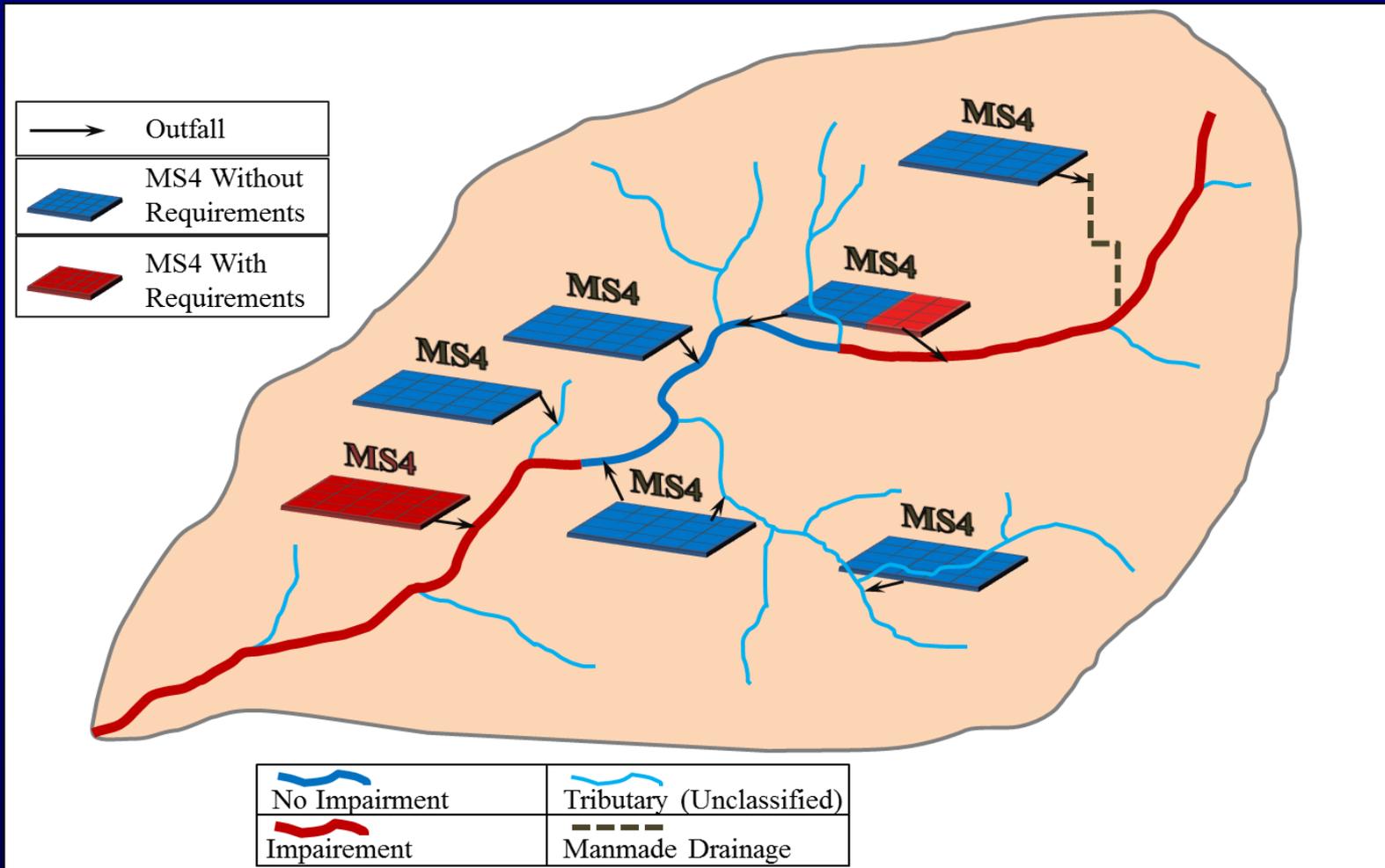


Impaired Waterbodies

- Discharges into Impaired Water Bodies without an Approved TMDL
 - Determine if MS4 is source of the POC
 - Include focused BMPs to reduce to the Maximum Extent Practicable (MEP) the POC
 - Identify sources
 - Modify program as necessary
 - Include progress in annual report



Discharges to Impaired Waterbodies without a TMDL

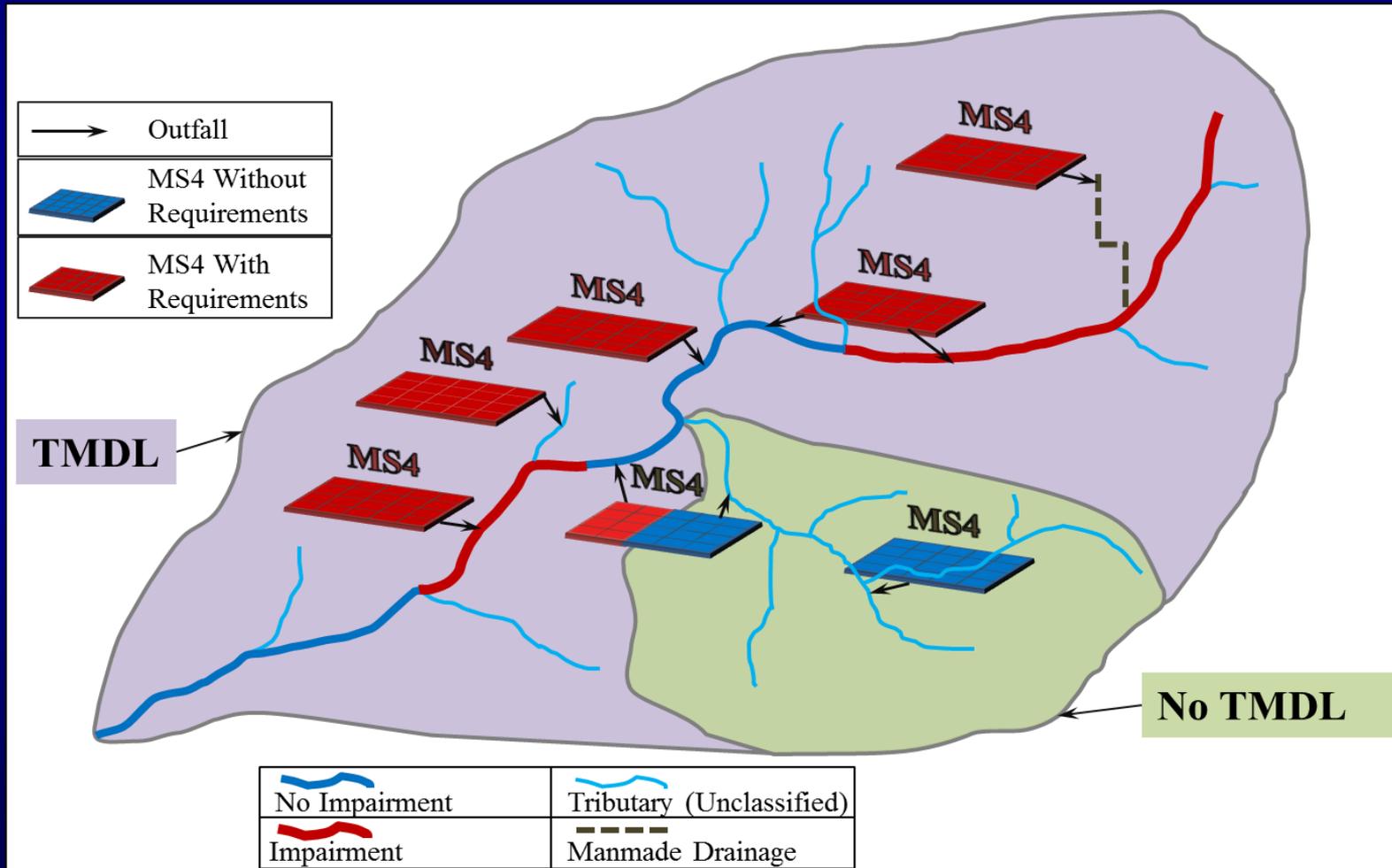


Impaired Waterbodies

- Discharges into Impaired Water Bodies with an Approved TMDL
 - Determine if MS4 is source of the POC
 - Identify a Benchmark
 - Implement targeted control (BMPs) with measurable goals
 - If POC is bacteria refer to I-Plan or use alternative BMPs
- Assess progress towards benchmark
 - If no progress, select alternative BMPs



Discharges to Impaired Waterbodies with a TMDL



Phase II MS4 General Permit

- Notice of change (NOC)
 - Changes to SWMP
 - Form TCEQ – 20392
- Annual Report
 - Due 90 days after reporting year
 - Flexibility selecting reporting year
 - Fiscal year, calendar year, or permit year



Phase II Annual Reports

Permit Year Option		Fiscal Year (example) Option	
<u>Date</u>	<u>Action</u>	<u>Date</u>	<u>Action</u>
Dec. 2013	Permit effective date	Dec. 2013	Permit effective date
June 2014 (180 days)	NOI + SWMP	June 2014 (180 days)	NOI + SWMP
Dec. 2014	End of permit year	Sept. 2014	Start of MS4 fiscal year
March 2015	Year 1 Annual Report due (90 days from permit year)	Sept. 2015	End of MS4 fiscal year
		Dec. 2014 or Dec. 2015	Year 1 Annual Report due (90 days from fiscal year)

- *New MS4s: The first annual report needs to include all months since the permit effective date*
- *Existing MS4s: The first annual report needs to include all months since the end of last reporting period*



Annual Reports

- Annual Report template will be available:
<http://www.tceq.texas.gov/assistance/water/sw-ms4.html>
- Template is currently being updated
- Same format as earlier
- New elements added
 - Impaired waterbodies



Sample of a Annual Report Table

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (yes or no). Explain.



Phase II MS4 General Permit

- Current Permitting Activities
 - Reviewing applications, SWMPs and Waivers
 - By August 2014, applications received:
 - About 600 NOIs
 - 38 Waivers
- About 150 Existing and New MS4s did not apply



Application Review Process

- Administrative Review
- Water Quality Standards Review
- Review of SWMPs
- Public Notice
 - Approval of public notice by MS4

Note: All MS4 entities will be contacted by TCEQ
– quick responses facilitate issuance of
authorizations



Application Review Process

- Lessons Learned by Review of SWMPs
 - Many programs are being continued
 - Some has no requirements for impaired waterbodies
 - Some have vague implementation schedule
 - General and qualitative measurable goals
- MCMs
 - Various requirements are missing
- Seeing more coalitions formed



Application Review Process

➤ Deficiencies Noted

- Segments missing or incorrect
- TMDL requirements not included
- Impairment requirements not included
- Not clear that Non-traditional MS4s only have Level 2 requirements
- Direct vs. indirect discharge



Application Review Process

➤ Innovations in SWPS

- Bumper stickers on municipal vehicles to promote SWMP
- Social Media
- MUDS using Rate Orders for regulating and enforcing SWMPs



Application Review Process

- TCEQ's Goal for Review Process
 - All applications technical review by end of 2014

- Current Status (Sep. 3, 2014)
 - Applications received: 600
 - Admin complete: 300
 - Tech complete: 180
 - Sent to Chief Clerk's Office: 150
 - Publish Notice



TCEQ Web Links

➤ Stormwater Home Page

- http://www.tceq.texas.gov/permitting/stormwater/sw_permits.html

➤ Small Business and Local Government Assistance

- <http://www.tceq.texas.gov/assistance>



TPDES Stormwater Program Contacts

➤ Water Quality Division

- Rebecca L. Villalba, Stormwater & Pretreatment team leader
- Stormwater permit writers
 - Hal Bailey
 - Hanne Lehman Nielsen
 - Dan Siebeneicher
 - Lindsay Garza
 - Kent Trede
 - Elisabeth Molidor
- Austin Office: (512) 239-4671



Contact Information

- Small Business and Local Government Assistance (SBLGA)
(800) 447-2827
www.texasenvirohelp.org
- Stormwater NOI/NEC/NOT Status
(512) 245-0130
swpermit@tceq.texas.gov
- Permitting Information (Technical)
(512) 239-4671
swgp@tceq.texas.gov

