

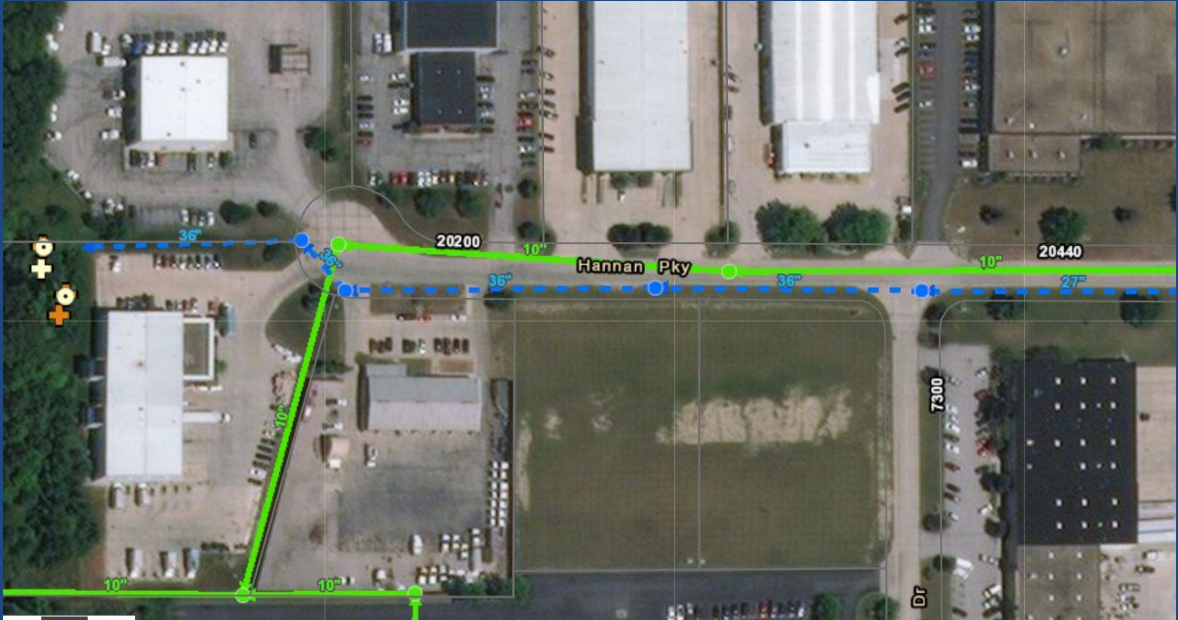
Ohio EPA MS4 Program Overview

May 19, 2021

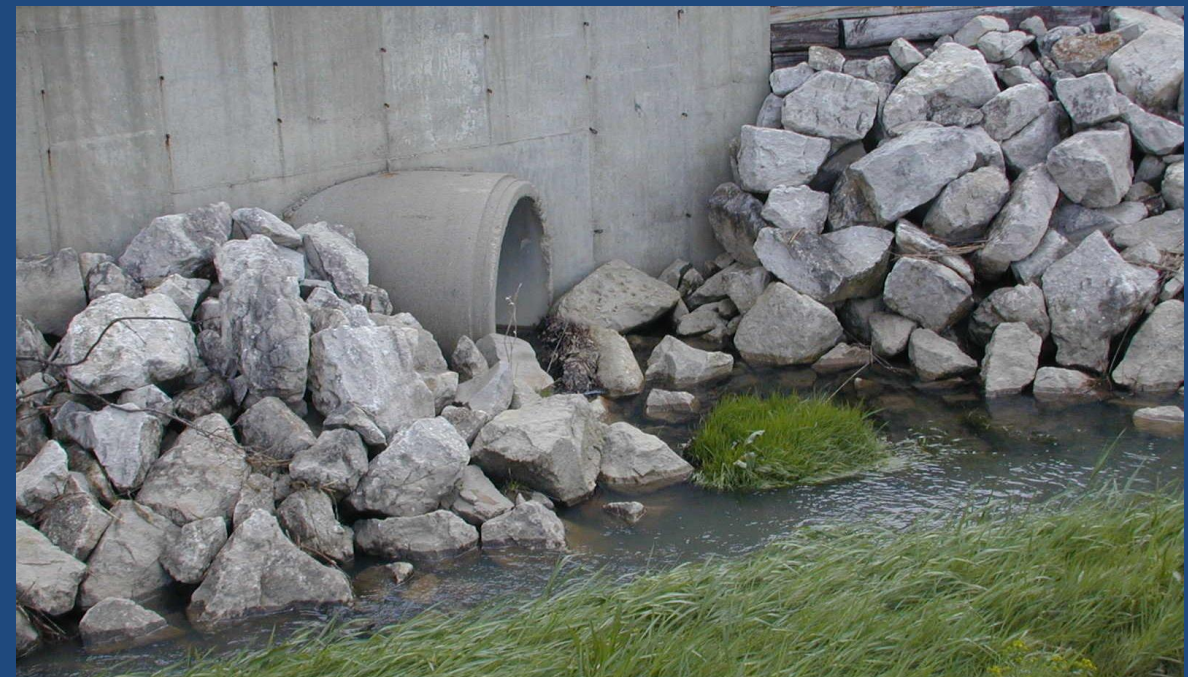
Jason Fyffe/John Mathews
Stormwater Program
Division of Surface Water
Ohio EPA



MS4 – Municipal Separate Storm Sewer System



Municipal Separate Storm Sewer Systems



Stormwater Pollution

Sediment

Oil, grease and toxic chemicals

Pesticides and nutrients

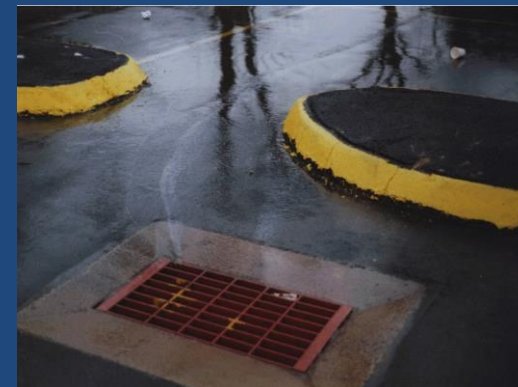
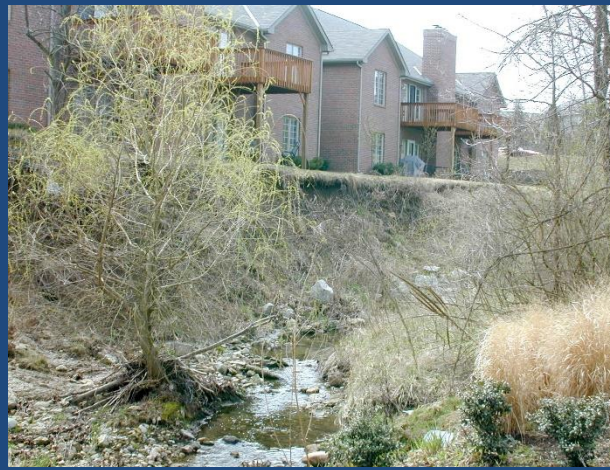
Viruses and bacteria

Road salts

Heavy metals

Trash and litter

Thermal pollution



Municipal

- Communities located in “Urbanized Areas” as defined by US Census Bureau
- Includes non-traditional operators such as ODOT and state universities located in urbanized areas

Construction

Industrial

National
Pollutant
Discharge
Elimination
System
(NPDES) Permit
Program for
Stormwater

Municipal Stormwater Program

- Municipal Separate Storm Sewer System (MS4)
 - Conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains that are
 - Owned or operated by the federal, state, municipal, township or county government, the district or other public body
 - Designed or used for collecting and conveying solely Stormwater
 - Which is not a combined sewer, and
 - Which is not part of a publicly owned treatment works

Municipal Stormwater Program

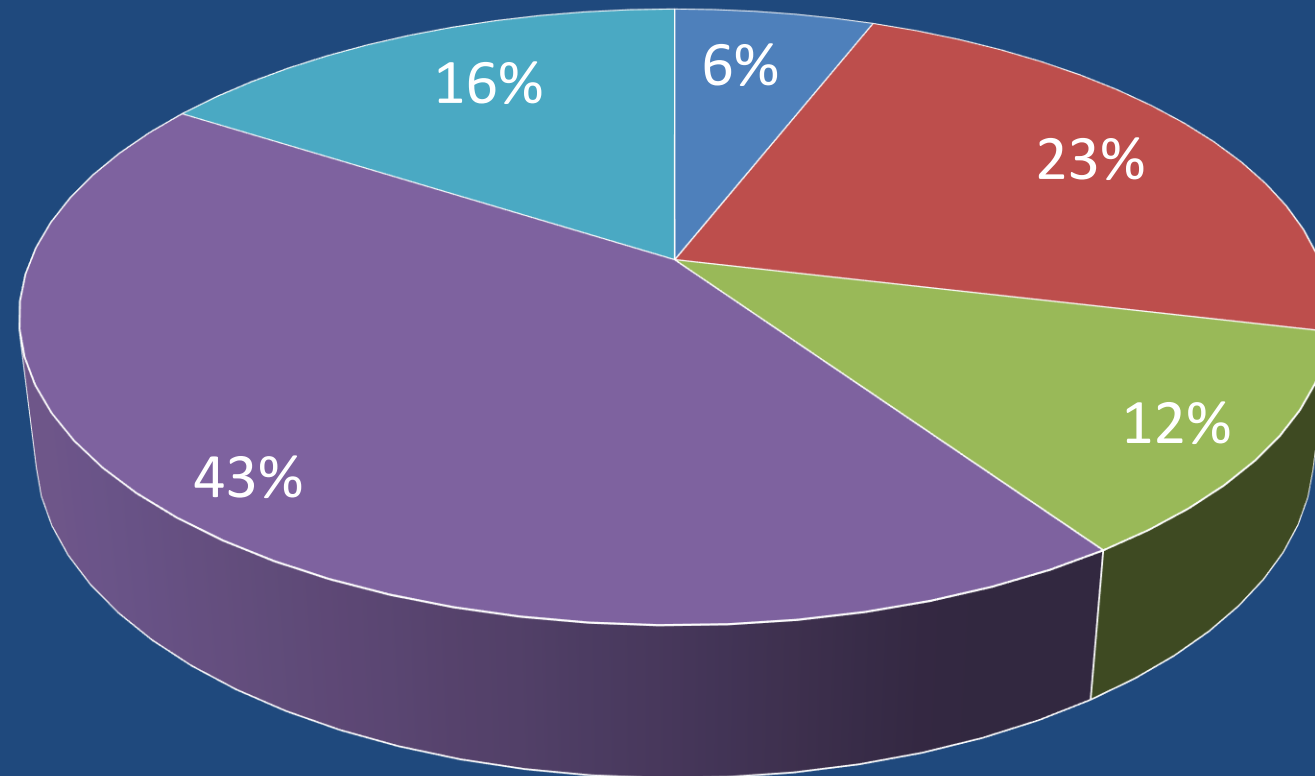
- Phase I: Large and Medium MS4s
 - Regulated since 1992
 - MS4 serves population of 100,000 or more
 - Issued individual NPDES permits
 - Stormwater Management Program (SWMP)
 - Six minimum control measures (MCMs)
 - Plus, industrial facility and wet weather monitoring programs
 - Akron, Columbus, Dayton and Toledo

Municipal Stormwater Program

- Phase II: Small MS4s
 - Regulated since 2003
 - MS4 serves a population of < 100,000 and located in an urbanized area (UA)
 - Issued coverage under a general NPDES permit
 - SWMP for six MCMs
 - 619 total communities regulated in Ohio
 - 296 general permit coverages issued

Distribution of Regulated MS4s in Ohio

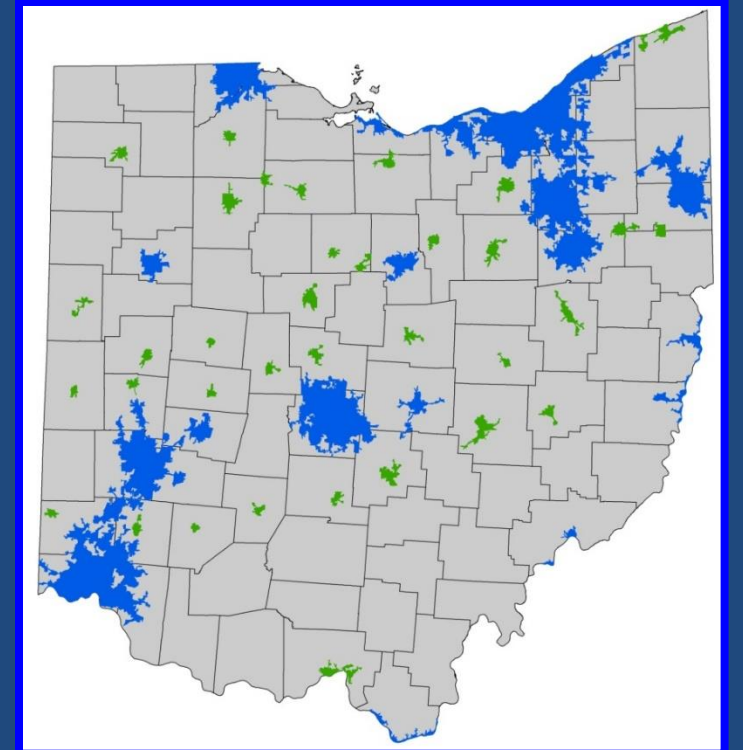
MS4 Permits



□ SEDO □ SWDO □ NWDO □ NEDO □ CDO

Municipal Stormwater Program

- US Census Bureau determines “urbanized area”
 - Initial list of regulated communities based on 2000 census
 - Community may become regulated due to urban growth with each decennial census thereafter
- Once permitted, it remains in the program
 - Even if community is removed from urbanized area in a future census



How Urbanized Areas Affect WQ

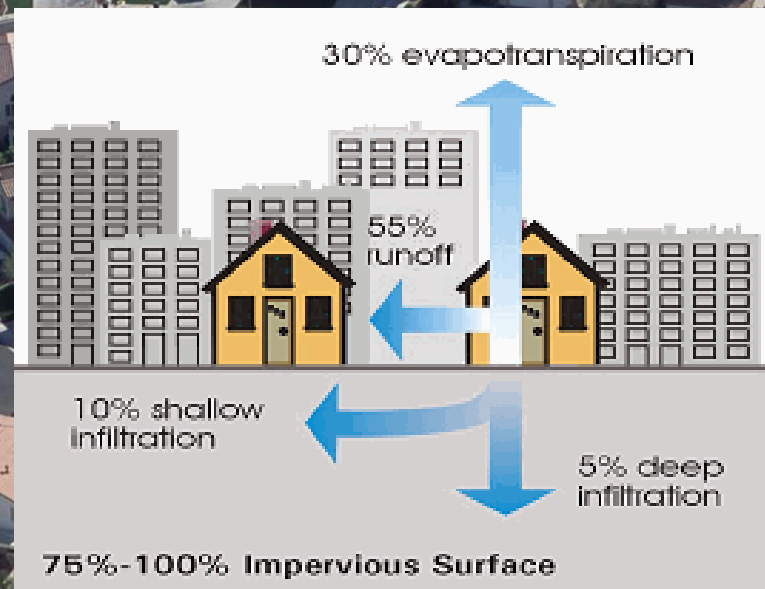
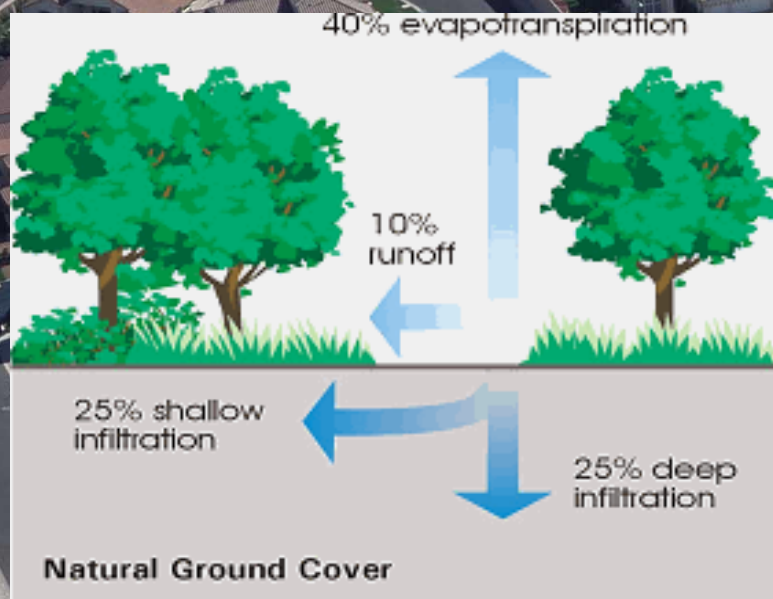


Photo courtesy of USDA NRCS

MS4 Program – What's Required

- Submittal
 - Notice of Intent (NOI)
 - Alone or with a group (Co-Permittee, E.g. County & townships)
- Develop and Implement a Stormwater Management Program
 - The SWMP needs to be updated within 1 year (of permit reissuance) and submitted with the 2021 Annual Report
- Recordkeeping/Reporting
 - April 1, Annual Reports are due to Ohio EPA

Stormwater Management Program (SWMP)

- Detail the Best Management Practices (BMPs) which address 6 Minimum Control Measures
- Show how Minimum Performance Standards are being met
- Detail how TMDLs are being addressed.
- Who is the Responsible Person?
- How will success of minimum control measures and BMPs be evaluated?

MS4 Requirements for Particular TMDLs

Performance standards or choices of performance standards that must be included (in SWMP) in response to an applicable TMDL in the MS4's watershed

Appendix A

The following identifies regulated MS4s that are located within a USEPA approved TMDL and the TMDL pollutant(s) for the MS4. Not included on this list are MS4s which become permitted after the effective date of this general permit (i.e., designated by Ohio EPA, 2020 Census).

COUNTY	REGULATED MS4	TMDL PROJECT	TMDL POLLUTANT(S)
Allen	Allen County	Ottawa River (Lima)	TP, E. coli
Allen	American Township	Ottawa River (Lima)	E. coli
Allen	Bath Township	Ottawa River (Lima)	E. coli

Six Minimum Control Measures

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control Program
5. Post-Construction Stormwater Management Program
6. Pollution Prevention and Good Housekeeping for Municipal Operations

Public Education & Involvement (PIPE)



MCM 1 & 2: PIPE Program Performance Standards

- PIPE = Public Involvement and Public Education
- Education
 - 5 messages/themes over 5 years
 - Use more than one mechanism to deliver message
 - Reach 50% of the population in your UA
- Involvement
 - 5 activities over 5 years
 - TMDL: Target each TMDL pollutant identified ... at least once towards satisfying your minimum of five Stormwater themes or messages over the permit term.

Illicit Discharge Detection & Elimination (IDDE)

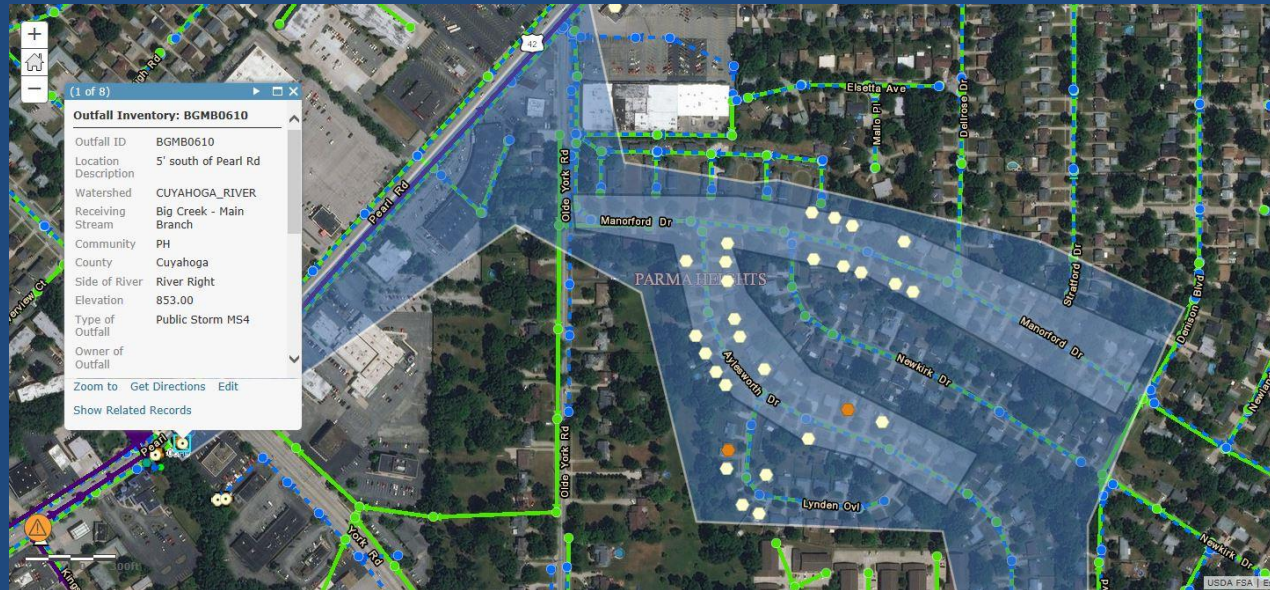
CHAPTER 1053 Illicit Discharge and Illegal Connection Control

- [1053.01](#) Purpose and scope.
- [1053.02](#) Applicability.
- [1053.03](#) Definitions.
- [1053.04](#) Disclaimer of liability.
- [1053.05](#) Conflicts, severability, nuisances and responsibility.
- [1053.06](#) Responsibility for administration.
- [1053.07](#) Discharge and connection prohibitions.
- [1053.08](#) Monitoring of illicit discharges and illegal connections.
- [1053.09](#) Enforcement.
- [1053.10](#) Remedies not exclusive.
- [1053.99](#) Penalty.

1053.01 PURPOSE AND SCOPE.

The purpose of this regulation is to provide for the health, safety, and general welfare of the residents of the City through the regulation of illicit discharges to the municipal separate storm sewer system (MS4). This regulation establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process as required by the Ohio Environmental Protection Agency (Ohio EPA). The objectives of this regulation are:

- (a) To prohibit illicit discharges and illegal connections to the MS4.



MCM 3: IDDE Program Performance Standards

- Prohibit illicit discharges to the MS4
 - Regulatory mechanism, e.g., ordinance or resolution
 - Include definition of MS4, allowable non-Stormwater discharges and, identify those occasional non-Stormwater discharges you will allow (see Parts I.B.3.b, III.B.3.g and IIII.B.3.h of MS4 Permit)
 - Establish legal authority to conduct inspections and monitoring, i.e., right-of-entry, to investigate suspected sources
 - Establish enforcement tools and sanctions
 - TMDL: annual employee training on illicit discharge detection and elimination topic(s);

MCM 3: IDDE Program Performance Standards

- Create and maintain MS4 map
 - Include HSTSs connected to MS4
 - Include private post-construction BMPs installed to satisfy MCM 5 and type
 - Update annually

MCM 3: IDDE Program Performance Standards

- Implement a surveillance program to identify sources of illicit discharge to the MS4
 - Must include dry weather screening of outfalls
 - All outfalls to be screened at least once over course of first permit term; subsequent terms apply a surveillance strategy to continue screening
 - Schedule for follow-up screening and source tracking determined based on initial findings
- Take action to eliminate verified sources of illicit discharge

Construction and Post-Construction Programs



MCM 4 & 5: Performance Standards

- Establish local regulatory mechanism, e.g., ordinance or resolution
 - Establishes authority to review plans, inspect sites and take enforcement actions
 - BMP selection and design criteria must meet or exceed requirements of Ohio EPA's general permit for stormwater associated with construction activities (CGP). Update within 1 year of MS4 permit renewal.
- Plan Review & Site Inspection
 - Review 100% of SWP3s for new development or redevelopment where “larger common plan” disturbs ≥ 1 acre
 - Plan Review prior to the commencement of construction
 - Use definitive checklists/tools and document correspondence
 - Must have an enforcement protocol (e.g. when notices of violation are sent, when and how enforcement is escalated)

MCM 4 & 5: Performance Standards

- Site Inspection
 - All active construction sites at least once per month
 - Take enforcement action to compel implementation of the SWP3 or other corrective actions



- TMDLs - Increase inspection frequency for sites w/ specific compliance issues to once every 14 days.

MCM 5: Performance Standard

Long-term Operations & Maintenance program for post-construction BMPs

- Require a long-term O&M plan and maintenance agreement
- Inspect initially to ensure proper construction
- Develop and implement a program to ensure on-going, long-term BMP maintenance

TMDLs-Provide an educational opportunity re Table 4b (Green Infrastr) practices.

And include one of the following (during the permit term):

- Retrofit a peak-discharge Stormwater practice;
- Restore +300' channelized (or degraded) stream
- Install a Table 4b practice to treat an acre of existing impervious area (dev. prior to 2003);
- Require Table 4b (GI) first;

Pollution Prevention & Good Housekeeping (P2GH)



MCM 6: P2GH Performance Standards

- Develop & implement facility-specific Stormwater pollution prevention plans (SWPPP)
 - Municipal facilities regulated under industrial Stormwater program
 - Examples: WWTP \geq 1 MGD, landfills, airports, marinas, steam electric power plants
 - Service facilities with vehicle maintenance operations
 - Municipally-operated bus terminals, composting facilities, impound lots and waste transfer stations
- SWPPP must meet technical requirements of Ohio EPA's industrial Stormwater general permit (MSGP).
- Applicable TMDLs choose one of the following:
 - Perform & document inspections on facilities requiring SWPPPs (w/o Industrial)
 - Develop a street sweeping program; or
 - Develop a catch basin cleaning program; or
 - Develop a leaf/yard waste collection program.

MCM 6: P2GH Performance Standards

- Train employees on SWPPP and stormwater pollution prevention at least once per year
- Establish a maintenance program, including maintenance schedules, for your MS4
- Ensure proper disposal of wastes removed from the MS4
- Provide salt piles w/ cover and brine tanks w/ bollards and/or secondary containment



MS4 Permit Additions (MCM 6)

- Where MS4/ditch maintenance has been performed, seed and stabilize the final grade according to the same standards as construction general permit.



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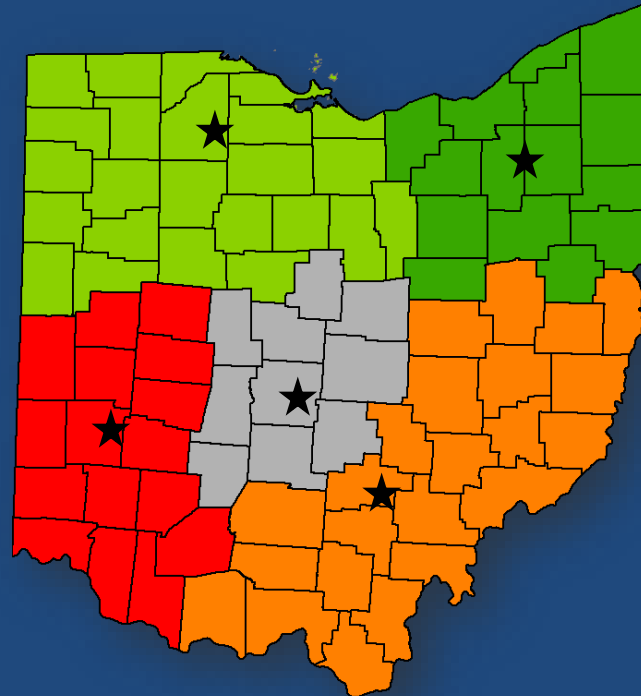
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