



Department of
Environmental
Conservation

Overview of the Municipal Separate Storm Sewer System General Permit, GP-0-24-001

Christina Chiappetta and Kathy Czajkowski

Division of Water – Central Office

Bureau of Water Permits

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Fundamentals

- Minimum control measures (MCMs)
- Maximum extent practicable (MEP)
- Best management practices (BMPs)
- USEPA Phase II Remand Rule
- Stormwater management program (SWMP)



Notable Dates

- January 3, 2024 – Effective date of the permit (EDP)
- January 3 to January 2 – Annual reporting year
- February 20, 2024 – Electronic notice of intent (eNOI)
- March 4, 2024 – Interim coverage under GP-0-15-003 expires
- July 3, 2024 – Six (6) months from the EDP
- October 1, 2024 – Interim progress certification
- April 1, 2025 – First annual report

Electronic NOI due February 20, 2024

- All MS4 Operators must submit an NOI to certify that they can comply with the requirements of the final GP-0-24-001
- eReport submission number

MS4 Notice of Intent ?

Submission HQ0-H6QB-31Z9N Revision 1 Form Version 1.0

MS4 Operator Information

- Receiving waterbody information
- NYSDEC nForm Public Users Guide

Multi-Sector General Permit (MSGP)

- If an MS4 Operator is operating an MSGP facility, the facility needs to gain coverage under the MSGP
 - Complete MSGP eNOI as soon as possible
- When filling out the MSGP eNOI
 - Do not use your MS4 permit ID
 - Click “no” for “Has this facility been assigned a SPDES ID under previous versions of the MSGP?”
- For help, MSGPCompliance@dec.ny.gov

Multi-Sector General Permit (MSGP) (cont.)

- Potential municipal facilities which may require MSGP coverage

Facility	Sector
Airports	S
Asphalt or concrete batch plants	D
Composting facilities	C
Concrete Batch Plants	E
Hazardous Waste Facilities	K
Hazardous Waste Handling & Transfer Facilities	K
Landfills, operating or closed	L
Marinas	Q
Mines and gravel pits	J
Recycling Facilities	N
Solid waste handling and transfer facilities	N
Vehicle and fleet maintenance facilities	P
Treatment Works (WWTPs)	T

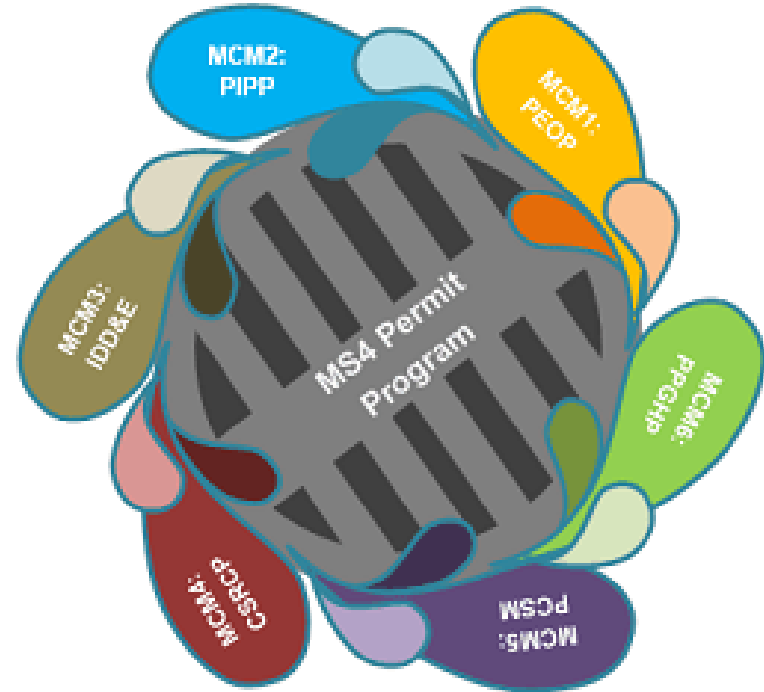


Q&A

Municipal Separate Storm Sewer System (MS4)

What is an MS4?

Municipal
Separate
Storm
Sewer
System



MS4 General Permit (GP-0-24-001)

- Authorizes the discharge of stormwater from municipal separate storm sewer systems (MS4) located within designated urbanized areas to surface waters of the State
- Automatic and Additional Designation
- Over 500 regulated entities including:

Towns, Cities,
Villages

Counties

State-wide
agencies

Linear
Transportation

Institutions

- Permit term = 5 years

Stormwater Management Program (SWMP) Requirements (Part IV.)

- Develop, implement and enforce the SWMP
- The SWMP must be retained in written format, hardcopy or electronic (*referred to as the SWMP Plan*)
- Annually update the SWMP for compliance with the terms and conditions of the permit;
- Maintain other records of activities completed, such as trainings, within the SWMP Plan.
- Develop and maintain an inventory of entities assisting in permit implementation which includes:
 - Name of entity performing permit implementation
 - Permit requirement implemented/performed by entity



Reporting (Part V.B.)

Report Submittal

- Reports must be submitted electronically using the forms located on DEC's website (<http://www.dec.ny.gov/>)

Annual Reports

- Reporting period for Annual Report is January 3 of the current year to January 2 of the following year (reporting year)
- Required to be submitted **electronically** to the Department by April 1 each year.

Reporting Continued

Interim Progress Certifications

- Twice a year, MS4 Operators must **electronically** submit an Interim Progress Certification which verifies activities included in this SPDES general permit have been completed
- Required to be submitted to the Department semi-annually:
 - January 3 through June 30 submitted by October 1 of each year; and
 - July 1 through January 2 submitted by April 1 of each year

Standardized Approaches throughout the Permit

Programs

- Procedures
- Training
- Documenting who took training
- Updating procedures

Inventory

- Monitoring locations
- Construction sites
- Post-construction SMPs
- Municipal facilities

Prioritizations

- Criteria
- Prioritize previously unprioritized permit components
- Update prioritizations

Corrective Actions

If an on-going source of pollution is...

- **Present**, timeframes based on if it *does* or *does not* have “reasonable likelihood of adversely impacting human health or the environment”
- **Absent**, timeframes based on severity of the issue



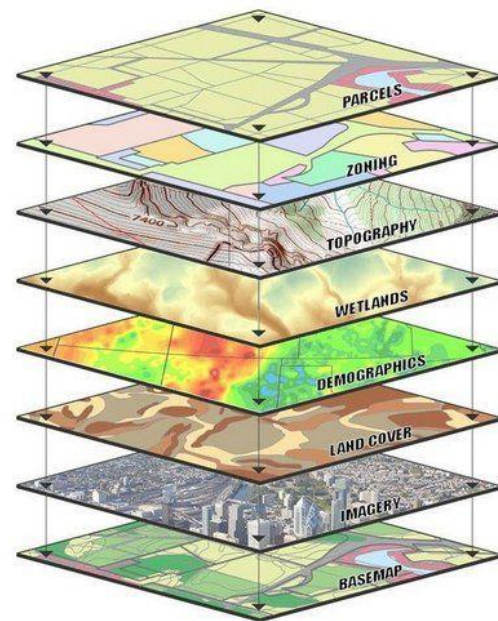
Mapping (Part IV.D.)

- MS4 Operator must develop and maintain comprehensive system mapping
- Within 6 months of the EDC the comprehensive system mapping must include:
 - MS4 Outfalls
 - Interconnections
 - Preliminary storm-sewershed boundaries
 - MS4 Infrastructure for select TMDLs
 - Basemap



Mapping (Part IV.D.1.e)

- Required basemap information:
 - Automatic and additionally designated areas
 - Names and location of all surface waters, including
 - Waterbody classification
 - Waterbody Inventory/Priority Waterbodies list
 - Impairment status; and
 - Pollutant of concern (POC), if applicable
 - TMDL watershed areas (if applicable)
 - Land use
 - Roads
 - Topography



Mapping –Infrastructure and source mapping

Phase I (within 3 years of EDC)

- Location of all monitoring locations with prioritization;
- Focus areas;
- Publicly-owned post construction stormwater management practices (SMPs); and
- Municipal facilities

Phase II (within 5 years of EDC)

- MS4 infrastructure:
 - Conveyance: type and direction of flow;
 - Stormwater structures: type and number of connections; and
- Privately-owned/operated post-construction SMPs which discharge to the MS4

Q&A

Minimum Control Measures

- MCM 1 – Public Education and Outreach Program
- MCM 2 – Public Involvement/Participation
- MCM 3 – Illicit Discharge Detection and Elimination (IDDE)
- MCM 4 – Construction Site Stormwater Runoff Control
- MCM 5 – Post-Construction Stormwater Management
- MCM 6 – Pollution Prevention and Good Housekeeping

Public Education and Outreach Program (MCM 1)

MCM 1: Public Education and Outreach Program

Development

- *Focus Areas*

Within 3 years of EDC, the MS4 Operator must identify and document *focus areas* in the SWMP Plan. *Focus areas* to be considered are:

- Areas discharging to priority waters of the State
- Sewersheds for impaired waters (Appendix C)
- TMDL watersheds
- Areas with construction activities
- Areas with on-site wastewater systems
- Residential, commercial, and industrial areas
- Stormwater hotspots
- Areas with illicit discharges



MCM 1: Public Education and Outreach Program (cont.)

Development

- ***Target Audiences and Associated Pollutant Generating Activities***

Within 3 years of EDC, the MS4 Operator must identify and document the applicable *target audience(s)* as follows:

- Residents
- Commercial: Business owners and staff
- Institutions: Managers, staff, and students
- Construction: Developers, contractors, and design professionals
- Industrial: Owners and staff
- MS4 Operator's municipal staff

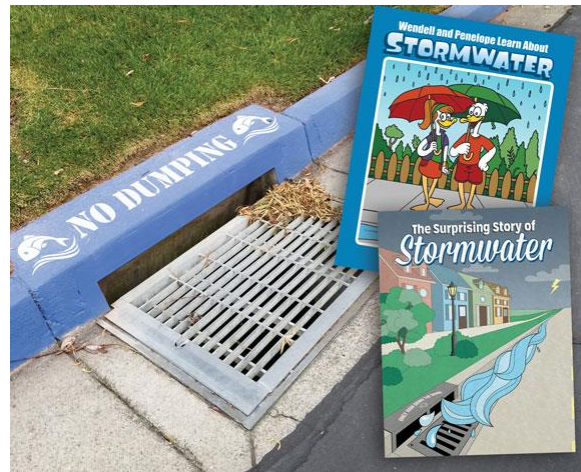


MCM 1: Public Education and Outreach Program (cont.)

- **Development**

- ***Education and Outreach Topics***

- Within 3 years of EDC, the MS4 Operator must identify and document in the SWMP Plan:
- The education and outreach topics
- How the education and outreach topics will reduce the potential for pollutants to be generated by the target audience



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Conservation

MCM 1: Public Education and Outreach Program (cont.)

- **Frequency**
 - Once every five (5) years...deliver an educational message to each target audience for each focus area based on the defined education and outreach topic
 - Document the completion of this requirement in the SWMP Plan

Public Involvement/ Participation (MCM 2)

MCM 2: Public Involvement/Participation

- Frequency
 - Annually, provide an opportunity for public involvement/participation in the development and implementation of the SWMP;
 - Annually, provide an opportunity for the public to review and comment on the SWMP Plan; and
 - Annually, provide an opportunity for the public to review and comment on the draft annual report.



MCM 2: Public Involvement/Participation (cont.)

- Consideration of Public Input
 - Annually, summarize comments received on the SWMP Plan and draft annual report
 - Within 30 days of receipt of public input, update the SWMP Plan based on those comments, where appropriate



Q&A

Illicit Discharge Detection and Elimination (MCM 3)

MCM 3: Illicit Discharge Detection and Elimination

- Illicit Discharge Detection
 - Within 6 months of EDC, establish and document in the SWMP Plan contact information for the public to report *illicit discharges*
 - Within 30 days of report of *illicit discharge*, document in the SWMP Plan the following information:
 - Date of report
 - Location of the illicit discharge
 - Nature of the illicit discharge
 - Follow up actions taken or needed
 - Inspection outcomes and any enforcement taken



MCM 3: Illicit Discharge Detection and Elimination (cont.)

- Monitoring locations = inspection points within the MS4 that are necessary for illicit discharge detection.
 - Includes:
 - MS4 outfalls (discharging to surface waters of the state);
 - Interconnections (discharging to another MS4 or private storm sewer system); and
 - Stormwater conveyed from the MS4 Operator's municipal facility to the MS4 Operator's own MS4.
- Within 3 years of EDC, develop and maintain an inventory of monitoring locations in the SWMP Plan.



MCM 3: Illicit Discharge Detection and Elimination (cont.)

- Monitoring locations prioritization (within 3 years of EDC)
 - High priority includes:
 - At a high priority municipal facility
 - Discharging to impaired waters
 - Discharging within a TMDL watershed
 - Discharging to water with designated best usage of primary and secondary contact recreation or higher
 - Confirmed citizen complaints on three or more occasions in previous 12 months.
- Annually update the prioritization in the inventory and document in the SWMP Plan



MCM 3: Illicit Discharge Detection and Elimination (cont.)

- Develop and implement *Monitoring Locations Inspection and Sampling Program* (within 2 years of EDC)
 - Inspection of *monitoring locations* once every five (5) years regardless of prioritization
 - Sample *monitoring locations* characterized as “suspect” or “obvious” illicit discharge
 - Initiate track down procedures for *monitoring locations* characterized as “suspect” or “obvious” illicit discharge
 - Within 30 days re-inspect *monitoring locations* with “physical indicators not related to flow”



Monitoring Locations Inspection and Sampling Field Sheet

Section 4: Physical Indicators for Flowing Monitoring Locations Only

Are Any Physical Indicators Present in the flow? Yes No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Monitoring Locations

Are physical indicators that are not related to flow present? Yes No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Monitoring Location Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	<div style="border: 1px solid red; padding: 5px; display: inline-block;"> Reinspect within 30 days </div>
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Monitoring Location Characterization

Unlikely
 Potential (presence of two or more indicators)
 Suspect (one or more indicators with a severity of 3)
 Obvious

Initiate track down

MCM 3: Illicit Discharge Detection and Elimination (cont.)

- Develop and Implement an *Illicit Discharge Track Down Program* (within 2 years of EDC)
 - Procedures as described in Chapter 13 of CWP IDDE Guidance Manual (2004) or equivalent
 - Corrective actions
- Develop and Implement an *Illicit Discharge Elimination Program* (within 2 years of EDC)
 - Provisions for escalating enforcement and tracking
 - Corrective actions
 - Time frames for *illicit discharge elimination*



Q&A

Construction Site Stormwater Runoff Control (MCM 4)

MCM 4: Construction Site Stormwater Runoff Control

- Develop and implement *Construction Oversight Program* documented in the SWMP Plan (within 1 year of EDC)
- Develop and maintain a *Construction Site Inventory & Inspection Tracking Program* (within 6 months of EDC)
- Prioritize construction sites within 30 days of becoming active
- Annually update the prioritization in the inventory and document in the SWMP Plan



MCM 4: Construction Site Stormwater Runoff Control (cont.)

- **Prioritize of all construction sites** (within 1 year of EDC)
- High Priority construction sites:
 - A direct conveyance to waterbodies specified in GP-0-24-001;
 - Earth disturbance within one hundred (100) feet of any lake or pond;
 - Within fifty (50) feet of any rivers or streams (perennial or seasonal);
 - With greater than five (5) acres of disturbed earth at any one time
- All other sites are Low Priority

MCM 4: Construction Site Stormwater Runoff Control (cont.)

- **SWPPP review**
 - Training for individual(s) responsible for reviewing SWPPPs for acceptance
 - 4 hours of erosion and sediment control training
 - Within 3 years of EDC and every 3 years thereafter
- **Pre-construction meeting**
 - Held prior to commencement of construction activities
 - Owner/operator listed on the CGP NOI;
 - MS4 Operator;
 - Contractor(s) responsible for implementing the SWPPP for the construction activity; and
 - Qualified inspector



MCM 4: Construction Site Stormwater Runoff Control (cont.)

- **Construction site inspections**
 - Training for individual(s), responsible for construction site inspections
 - Every 3 years, E&SC training
 - Annually inspect all construction sites
- **Construction site close-out**
 - Ensure final construction site inspection is conducted and documented
 - Notice of Termination (NOT) must be signed by MS4 Operator

Post-Construction Stormwater Management (MCM 5)

MCM 5: Post-Construction Stormwater Management

- Includes **publicly and privately** owned/operated post-construction SMPs:
 - Post-construction SMPs installed as part of any CGP covered site or individual SPDES permit (since March 2003); and
 - All new post-construction SMPs constructed as part of the construction site stormwater runoff control program



MCM 5: Post-Construction Stormwater Management (cont.)

- Post-construction SMP inventory and inspection tracking (within 5 years of EDC)
- Develop and implement a *Post-construction SMP Inspection and Maintenance Program* (within 1 year of EDC)
 - O&M of post-construction SMPs
 - Documentation of inspections
 - Provisions to initiate follow-up actions (within 30 days of inspection)
 - Provisions to initiate enforcement if follow-up actions are not complete (within 60 days of inspection)



Q&A

Pollution Prevention & Good Housekeeping (MCM 6)

MCM 6: Pollution Prevention & Good Housekeeping

- Develop and implement a *pollution prevention and good housekeeping program* for municipal facilities and municipal operations
 - Incorporate best management practices (within 3 years of EDC)
 - Comprehensive BMP list included



MCM 6: Pollution Prevention & Good Housekeeping

- Develop and implement a *Municipal Facility Program* (within 3 years of EDC)
 - Municipal facility procedures
 - Develop and maintain a *Municipal Facility Inventory* (within 2 years of EDC)



MCM 6: Pollution Prevention & Good Housekeeping (cont.)

- Municipal facility prioritization (within 3 years of EDC)
 - High priority includes:
 - Storage of chemicals, salt, petroleum, pesticides, fertilizers, anti-freeze, lead-acid batteries, tires, waste/debris;
 - Fueling stations; and/or
 - Vehicle or equipment maintenance/repair
- High priority municipal facilities which qualify for a No Exposure Certification → Low priority municipal facilities



MCM 6: Pollution Prevention & Good Housekeeping (cont.)

- High priority municipal facility requirements:
 - Municipal facility-specific SWPPP (within 5 years of EDC)
 - Assessments
 - Wet weather visual monitoring of monitoring locations – once every 5 years
 - Comprehensive site assessments – once every 5 years
- Low priority municipal facility requirements:
 - Assessments
 - Comprehensive site assessments – once every 5 years

MCM 6: Pollution Prevention & Good Housekeeping (cont.)

- Develop and implement a *municipal operations program* (within 3 years of EDC)
 - BMPs
 - Corrective actions
 - Catch Basin Inspection and Maintenance
 - Roads, bridges, parking lots, and right of way maintenance



MCM 6: Pollution Prevention & Good Housekeeping (cont.)

Catch Basin Inspection and Maintenance – A four-step approach

1. Identify when an inspection is necessary
2. Inventory the inspection with five pieces of information: *date, depth of structure, depth of sump, approximate level of trash, sediment or other debris, and date of cleanout*
3. Based on the results of the inspection, clean out catch basins
 - Not required to clean out catch basins if operating properly and
 - There is no trash, sediment, and/or debris in the catch basin; or
 - The sump depth of the catch basin is less than or equal to two (2) feet.
4. Manage the material and/or water removed from the catch basins, so it does not reenter the MS4 or surface waters of the State



MCM 6: Pollution Prevention & Good Housekeeping (cont.)

- Roads, bridges, parking lots, and right of way maintenance
 - Develop and implement procedures for sweeping and/or cleaning municipal streets, bridges, parking lots and right of ways owned/operated by the MS4 (within 6 months of EDC)
- Sweeping – every 5 years in the spring
- Annually, from April 1 through October 31 in business districts and commercial areas



Q&A

Enhanced Requirements for Impaired Waters without a TMDL (Part VIII.)



Part VIII: Impaired Waters without a TMDL

- Sewersheds which discharge to impaired waters without a TMDL
- List of Impaired Waters (Appendix C)
 - Pollutant source of “urban/stormwater runoff”
 - POCs – Phosphorus, silt/sediment, pathogens, nitrogen, floatables
- Build up from Part VI. and Part VII.



Part VIII: Impaired Waters without a TMDL (cont.)

- Mapping – expedited timeframe
 - E.g., Infrastructure mapping within 3 years of EDC
 - Additionally Designated Area (ADA) MS4 outfalls
 - MS4 outfalls → automatically designated area
 - ADA MS4 outfalls → additionally designated area subject to Criterion 3 of the Additional Designation Criteria
- Many of the requirements only occur following the completion of mapping requirements



Part VIII: Impaired Waters without a TMDL (cont.)

A. Pollutant Specific BMPs for Phosphorus

Part VIII.A. must be implemented for all phosphorus impaired waters listed in Appendix C.

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:

4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.A.1, within five (5) years of the EDC, the *MS4 Operator* must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the *MS4 Operator* type) the number of each item identified in Part VIII.A.1.b. for each associated *MS4 outfall*.

Watershed Improvement Strategy Requirements for TMDL Implementation (Part IX.)



Part IX. TMDL Implementation

- Total Maximum Daily Load (TMDL)
- Watersheds
- POC sources in the watershed
- MS4 Operators must implement BMPs to meet a specific pollutant load reduction
- If a TMDL has an MS4 contribution and TMDL is not listed in GP-0-24-001, the load reduction is satisfied by the BMPs in Part VI. and Part VII.



Part IX. TMDL Implementation

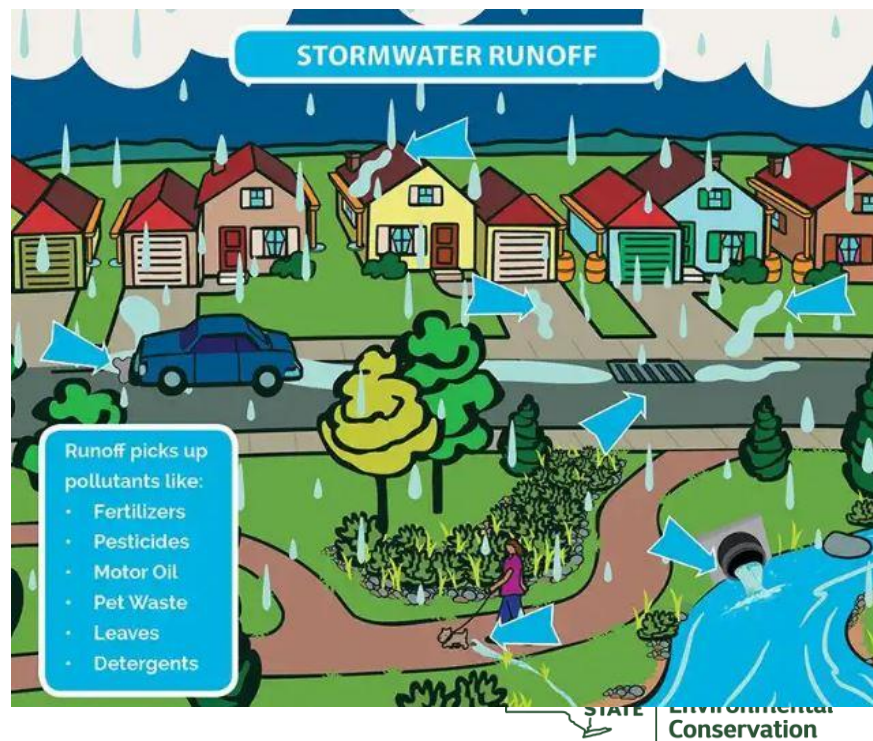
Table 3. Approved TMDL Watersheds with MS4 Contribution		
TMDL	POC	Part IX. Reference
Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000	Phosphorus	A
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel, October 2016		
Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake, March 2015		
Impaired Waters Restoration Plan for Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, September 2005	Phosphorus	B
Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012		
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008		
None	Pathogen	C
TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries, September 2007	Nitrogen	D



Q&A

Tools

- Main MS4 permit webpage
 - Permit
 - Fact Sheet
 - Responsiveness Summary
- MS4 Toolbox
 - SWMP Plan Components
 - Compliance Items Summary
- GP-0-24-001 is the ruling document



Grants

- NPG – MS4 Mapping
- WQIP – Vacuum Truck
- Timeline
 - Requests for application (RFA) come out in May
 - Applications usually due end of July
- Tips!
 - Read the RFA closely – changes year to year
 - Make sure the required documents are attached



Next Steps

- Upcoming presentations
 - February 27 – Dunkle Training, Zoom
 - March 26 – Western NY SW Conference and Tradeshow, Buffalo, NY
 - May 16 – Genesee/Finger Lakes Regional Planning Council Spring Conference, Batavia, NY
- Plan for engaging the MS4 community
 - Stakeholder meetings – semi-annual/annual



Q&A