

Is Your Municipality Complying with the MS4 Rules?

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RUTGERS
New Jersey Agricultural
Experiment Station



www.water.rutgers.edu

Each Municipality has a permit for their MS4

(Municipal Separate Storm Sewer System = MS4)

A primary objective of the MS4 stormwater program shall be to implement best management practices and other measures that are designed to reduce the discharge of pollutants from the permittee's MS4, municipal maintenance yards and other ancillary operations to the maximum extent practicable pursuant to N.J.A.C. 7:14A-25.6(a)1 and 40 CFR 122.34(a), to protect water quality, and to satisfy the applicable water quality requirements of the Clean Water Act.

Section A: Stormwater Management Program

- Develop, update, implement and maintain a Stormwater Pollution Prevention Plan (SPPP)
- Designate a Stormwater Program Coordinator (SPC)
- Ensure the MS4 Program and the SPPP is consistent with the Municipal Stormwater Management Plan (MSWMP)
- Ensure the MSWMP is a component of the municipal master plan
- Shall modify and update applicable ordinances and plan to reflect the MS4 Program including the Stormwater Control Ordinance (SCO)

**All should have been submitted to NJDEP by
January 1, 2024**

Section B:

Minimum Standards for Public Involvement and Participation

- Comply with applicable State and local public notice requirements
- Develop a municipal stormwater webpage displaying:
 - Stormwater Pollution Prevention Plan (SPPP) (excluding inspection logs and other recordkeeping documents)
 - Municipal Stormwater Management Plan (MSWMP)
 - Stormwater Control Ordinance (SCO)
 - Pet Waste Ordinance
 - Wildlife Feeding Ordinance
 - Litter Control Ordinance
 - Improper Disposal of Waste Ordinance
 - Containerized Yard Waste/Yard Waste Collection Program Ordinances
 - Private Storm Drain Inlet Retrofitting Ordinance
 - Illicit Connection Ordinance
 - Tree Removal/Replacement Ordinance
 - Privately-Owned Salt Storage Ordinance
 - MS4 Outfall Pipe Map
 - MS4 Infrastructure Map
 - Watershed Improvement Plan

**Dedicate webpage should have been posted
by January 1, 2024**

NJDEP Stormwater Webpage Template

What is stormwater?

Human activity is largely responsible for stormwater pollution. Everything that we put on the ground or into the storm drain can end up in our water. Each of us has a responsibility to make sure these contaminants stay out of our water. Whether we have clean water is up to you.

The official definition of stormwater under the New Jersey Pollutant Discharge Elimination System(NJPDES) regulations at N.J.A.C. 7:14A is as follows:

'Stormwater' means water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewage or drainage facilities, or conveyed by snow removal equipment.

Stormwater Program Coordinator (SPC) Contact Information

If you have any questions about our stormwater program or would like additional information, please contact:

[insert contact information here](#)

Stormwater Links



Stormwater Pollution Prevention Plan (SPPP)

The SPPP was last updated on [insert date here](#) and describes how we implement the stormwater program in order to meet the requirements of our NJPDES Municipal Separate Storm Sewer System (MS4) permit.

- [Check out the SPPP here](#) [Insert your own SPPP here](#)

Municipal Stormwater Management Plan (MSWMP)

- [Check out the Municipal Stormwater Management Plan Here](#) [Insert your own MSWMP here](#)

MS4 Outfall Pipe Map



Watershed Improvement Plan (WIP)

The purpose of the WIP is to identify opportunities to improve water quality, reduce MS4 contribution of pollutants to waterbodies with impairments and Total Maximum Daily Load(TMDLs), and to address stormwater flooding to protect human health and safety, and the environment.

- [Watershed Inventory Report](#)
- [Watershed Assessment Report](#)
- [Watershed Improvement Plan Report](#)



Stormwater Resources

Click on the links below to learn more about stormwater and get access to educational resources.

- [Rutgers Cooperative Research & Extension](#)
- [Clean Water NJ](#)
- [NJ Stormwater](#)



Stormwater Ordinances/Regulatory Mechanisms

Click on our adopted stormwater ordinances below.

- [Stormwater Control Ordinance](#)
- [Pet Waste Ordinance](#)
- [Wildlife Feeding Ordinance](#)
- [Litter Control Ordinance](#)
- [Improper Disposal of Waste Ordinance](#)
- [Containerized Yard Waste Ordinance](#)
- [Yard Waste Collection Program Ordinance](#)
- [Private Storm Drain Inlet Retrofitting Ordinance](#)
- [Illicit Connection Ordinance](#)
- [Tree Removal/Replacement Ordinance](#)
- [Privately-Owned Salt Storage Ordinance](#)
- [\(Optional\) Privately-Owned Refuse](#)

NJDEP Stormwater Webpage Template

Brochures and Handouts

Check out the following handouts for more information on stormwater.

(INSERT MUNICIPALITY NAME HERE) PET WASTE AND WATER POLLUTION  [insert municipality] has adopted and enforces an ordinance that requires immediate and proper disposal of solid pet waste deposited on any property not owned or possessed by the pet owner or keeper. [insert municipality page/hotlink] [Township can insert any other specific requirement to their ordinance]. Pet waste is carried by rain, melting snow, and ice to storm drains that empty into rivers, lakes, and the ocean. It also reaches reservoirs which supply much of the drinking water in New Jersey. Pollution due to pet waste negatively impacts swimming, boating and fishing in these water bodies. Pet waste contains microorganisms that can cause bacterial diseases, roundworms and parasitic infections. In addition, pet waste contains harmful levels of nutrients which promote excessive algae and plant growth. This can rob the waterbody of oxygen, potentially killing all aquatic life in the area. Such nutrient pollution also causes waters to become cloudy and green. Proper Pet Waste Disposal Flush it down the toilet. *But do not flush bags, debris, or nonbiodegradable items* OR Put it in the trash. THANK YOU FOR DOING YOUR PART TO KEEP NEW JERSEY'S WATERS CLEAN  For More Info • See the Pet Waste Ordinance [insert municipal page/hotlink] • NJDEP Municipal Stormwater Regulation https://dep.nj.gov/njdes-stormwater/municipal-stormwater-regulation-program/example-ordinances/ • EPA- Polluted Runoff: Nonpoint Source Pollution https://www.epa.gov/nps Pet Waste Flyer DOWNLOAD PET WASTE FLYER >	Solutions to Stormwater Pollution <i>Easy Things You Can Do Every Day To Protect Our Water</i> A Guide to Healthy Habits for Cleaner Water Pollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the ocean and lakes our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings: You name it and it ends up in our water. Stormwater pollution is one of New Jersey's greatest threats to clean and plentiful water, and that's why we're all doing something about it. By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater. It all adds up to cleaner water, and it saves the high cost of cleaning up once it's dirty. As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines or other penalties.  As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water. Limit your use of fertilizers and pesticides ■ Do a soil test to see if you need a fertilizer. ■ Do not apply fertilizers if heavy rain is predicted. ■ Look into alternatives for pesticides. ■ Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer. ■ If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it. Properly use and dispose of hazardous products Make sure you properly store or discard any unused portions. ■ Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints. ■ Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated. Stormwater Education Brochure DOWNLOAD BROCHURE >	 STORMWATER POLLUTION: WHAT DO YOU THINK? • You may think littering is no big deal (it is). • You may think that whatever runs into the storm drains gets treated before it reaches local rivers and streams (it isn't). • You may think motor oil and other hazardous materials doesn't harm the water very much (it does). Pollution seeps into the ground and is carried by stormwater (rain and snow) directly to our drinking water, streams, lakes and oceans. Contaminated stormwater is the #1 cause of water pollution in New Jersey. Simple things, like proper clean-up after oneself and careful use of chemicals in the home, office and yard, are helpful ways for businesses and residents to protect the water. [Insert Municipality Name] has ordinances aimed at reducing pollution from litter, fertilizer, oil, pesticides, detergents, animal waste, grass clippings and other debris. For details, see [Insert Municipal Ordinance Website Link] . Thank you for keeping them in mind and doing your share.  Keep grass, leaves and trash out of storm drains  Don't feed wildlife  Clean up after your pet  Limit use of fertilizers & pesticides  Properly handle hazardous products  NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION https://dep.nj.gov/njdes-stormwater/ www.cleawater.nj.org Stormwater Education Handout DOWNLOAD BROCHURE >
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Section C:

Minimum Standards for Local Public Education and Outreach

- Implement a Public Education and Outreach Program
 - Earn 12+ points each year – at least three different activities
 - A minimum of one activity must involve educating businesses, which discharge to the MS4, and the general public of hazards associated with illicit connections and improper disposal of waste



**Due every year by
December 31st**

Section E:

Minimum Standards for Post Construction Stormwater Management in New Development and Redevelopment

1. Stormwater Management Program to Address Post Construction Stormwater Management in New Development and Redevelopment
2. Municipal Stormwater Management Plan (MSWMP)
3. Municipal Stormwater Control Ordinance (SCO)
4. Mitigation Plan (optional)

**All should have been submitted to NJDEP by
January 1, 2024**

Stormwater Control Ordinance (SCO)

The SCO requires all major development to comply with the NJ Stormwater Management Regulations

1. Manage Peak Flows (Water Quantity Requirement)
2. Maintain annual average groundwater recharge
3. Remove 80% of the total suspended solids (Water Quality Requirement)
4. Achieve retention of the water quality design storm

Must use green infrastructure to satisfy these requirements.

Section F:

Minimum Standards for Pollution Prevention/ Good Housekeeping for Municipal Operators

1. Community-wide Ordinances

- Pet Waste
- Wildlife Feeding
- Litter Control
- Improper Waste Disposal
- Yard Waste
- Private Inlet Retrofitting
- Privately-Owned Salt Storage
- Tree Removal/Replacement



**All adopted by
May 1, 2024**

Section F:

Minimum Standards for Pollution Prevention/ Good Housekeeping for Municipal Operators

2. Community-wide Measures

- Street Sweeping
- Storm Drain Inlet Labeling
- Storm Drain Inlet Retrofitting
- Herbicide Application Management
- Excess De-Icing Material Management
- Roadside Vegetative Waste Management
- Roadside Erosion Control



Section F:

Minimum Standards for Pollution Prevention/ Good Housekeeping for Municipal Operators

3. Inspection and Maintenance of Stormwater Facilities Owned or Operated by the Permittee
 - Storm Drain Inlet Inspection
 - Storm Drain Inlet Cleaning and Maintenance
 - Catch Basin Inspection
 - Catch Basin Cleaning
 - MS4 Conveyance Inspection and Cleaning
 - Stormwater Infrastructure Inspection
 - Stormwater Infrastructure Maintenance



Section F:

Minimum Standards for Pollution Prevention/ Good Housekeeping for Municipal Operators

4. Inspection and Maintenance of Stormwater Facilities Not Owned or Operated by the Permittee



Section F (cont'd)

5. Municipal Maintenance Yards and Other Ancillary Operations

- Monthly Site Inspections
- Maintain Inventory List
- Label all Containers
- Spill Kits
- Bulk Liquid Storage
- Fueling Operations
- Discharge of Stormwater from Secondary Containment
- Vehicle/Equipment Maintenance and/or Repair
- Wash Wastewater Containment
- Salt and Other Granular De-icing Material Storage and Handling
- Aggregate Material, Wood Chips, and Finished Leaf Compost Storage
- Cold Patch Asphalt Storage
- Street Sweepings and Storm Sewer Clean-out Material Storage
- Construction and Demolition Waste, Wood Waste, and Yard Trimmings Storage
- Scrap Tires
- Inoperable Vehicles or Equipment
- Outdoor Refuse Containers and Dumpsters

Section F: (cont'd)

6. Stormwater Program Coordinator (SPC) Training

January 1, 2026

- Participate in Department free training webinar

7. Annual Employee Training

- Individual responsible for implementation of MS4 permit receive annual training, i.e. governing body members, municipal employees in public works, engineering, etc.
 - i. SPPP
 - ii. Construction Site Stormwater Runoff
 - iii. Post-Construction Stormwater Management in New Development and Redevelopment
 - iv. Community-wide Ordinances
 - v. Community-wide Measures
 - vi. Stormwater Facility Maintenance
 - vii. Municipal Maintenance Yard
 - viii. Operations and other ancillary operations
 - ix. MS4 Mapping
 - x. Outfall stream scouring detection and control
 - xi. Illicit Connection Elimination
 - xii. Watershed Improvement Plan

Due every year by December 31st

Section G: MS4 Mapping, and Scouring, and Illicit Discharge Detection Elimination

- MS4 Mapping
 - i. MS4 outfalls
 - ii. MS4 groundwater discharge points
 - iii. MS4 interconnections
 - iv. Storm drain inlets
 - v. MS4 manholes
 - vi. MS4 conveyance
 - vii. MS4 pump stations
 - viii. Stormwater facilities
 - ix. Property boundaries of maintenance yards

Due January 1, 2026

Non-Municipally Owned or Operated Stormwater Facilities

Detailed information for these facilities must be included in the Watershed Inventory Report including type, quantity, block and lot, and owner of the infrastructure (outfall, stormwater management measure, etc.) within each subwatershed. Include a PDF map of all privately owned infrastructure within the permittee's jurisdiction.

Bioretention Systems (large-scale)	Sand Filters (large-scale)
Blue Roofs	Small-scale Bioretention Systems
Cisterns	Small-scale Infiltration Basins
Dry Wells	Small-scale Sand Filters
Extended Detention Basins	Standard Constructed Wetlands
Grass Swales	Stormwater Outfalls
Green Roofs	Subsurface Gravel Wetlands
Infiltration Basins (large-scale)	Vegetative Filter Strips
Manufactured Treatment Devices (MTDs)	Wet Ponds
Pervious Paving Systems	

Section H:

Watershed Improvement Plan

- Designed to improve water quality problems
- Focused on reducing the MS4 contribution of pollutants to waterbodies with listed impairments and TMDLs
- Reducing or eliminating flooding with priority given based on human health and safety, environmental impacts, and frequency of occurrence
- Plan shall be developed with input from residents, businesses, neighboring towns, other dischargers

Section H:

Watershed Improvement Plan

Phase 1 – Prepare and submit the Watershed Inventory Report; conduct outreach (January 1, 2026)

- Summarize/map required information, some is available from the Department's GIS database

Phase 2 – Prepare and submit the Watershed Assessment Report; conduct outreach (January 1, 2027)

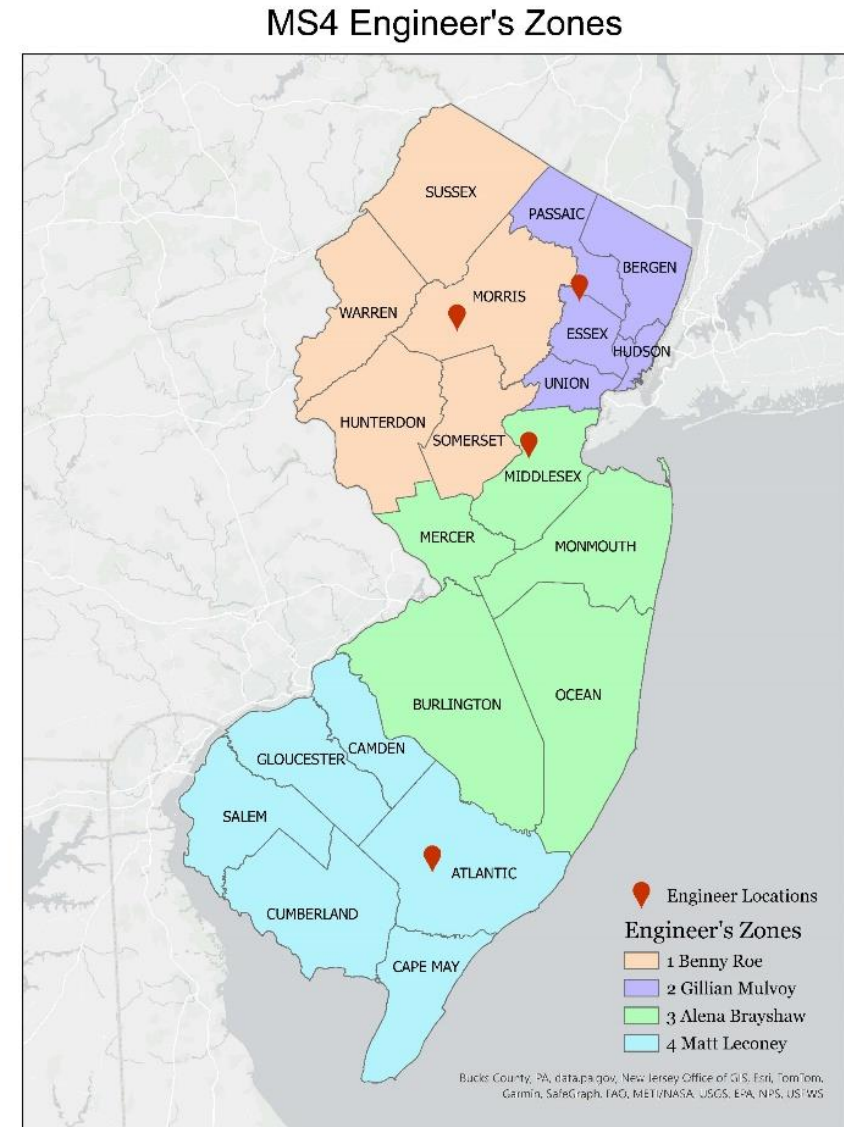
- Assess potential projects with estimates of the reduction in pollutant loading & funding need

Phase 3 – Prepare and submit the Watershed Improvement Plan Report; conduct outreach (December 1, 2027)

- Summarize proposed projects with improvement expected, comments received, costs, coordination with other regulatory programs, and implementation schedule

MS4 Technical Assistance Program

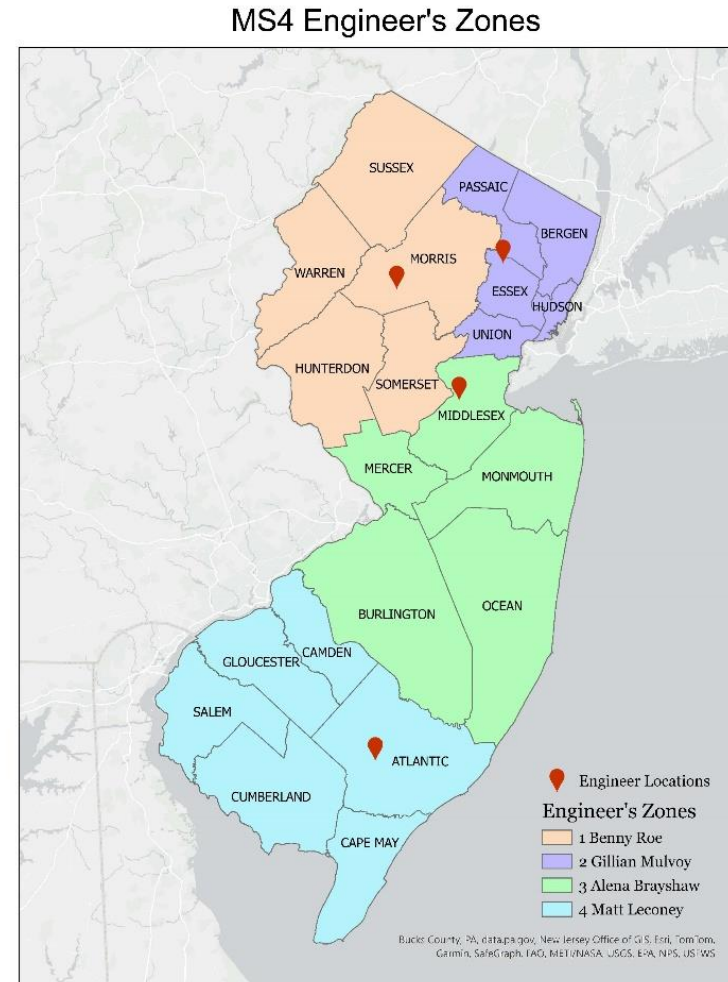
- Three-year agreement w/ NJDEP to support MS4 communities statewide
- Four Regional Engineers
- Provide technical support to all municipalities
- Focus on former Tier B municipalities
- Expand to existing Tier A as capacity is available



MS4 Technical Assistance Program

Contact us!

- Northwest – Benny Roe
 - benny.roe@rutgers.edu
- Northeast – Gillian Mulvoy
 - gillian.mulvoy@rutgers.edu
- Central – Alena Brayshaw
 - alena.brayshaw@rutgers.edu
- South – Matthew Leconey
 - matthew.leconey@rutgers.edu



Questions?

