

Municipal Separate Storm Sewer (MS4) Tier A Permit Requirements

WASHINGTON TOWNSHIP, MORRIS COUNTY

Stanley Schrek, PE, AIA, PP
Van Cleef Engineering Associates, LLC

MS4 Training Outline

- MS4 Permit – The Basics
- Permit Requirements
 - Stormwater Pollution Prevention Plan (SPPP)
 - Rules and Regulations
 - Street Sweeping
 - Storm Drains
 - DPW Community-Wide Measures
 - MS4 Mapping
 - Watershed Improvement Plan (WIP)

**Washington Township,
Morris County**



MS4 Permit – The Basics

MS4 – Municipal Separate Storm Sewer System

- What is the MS4 system?
 - All municipally-operated pipes, structures and facilities that convey stormwater runoff following a rain event.
 - Separate from the sanitary sewer system.
- What is the Tier A MS4 Permit?
 - General permit issued by NJDEP on a 5-year cycle.
 - Outlines regulations, standards and requirements to ensure the MS4 system is properly maintained and in good condition.
 - Most recently renewed in January 2023.
- Who oversees the permit requirements?
 - Washington Township is responsible for enforcing the permit.
 - Stormwater Program Coordinator (SPC) oversees the program.
 - Stan Schrek is the SPC

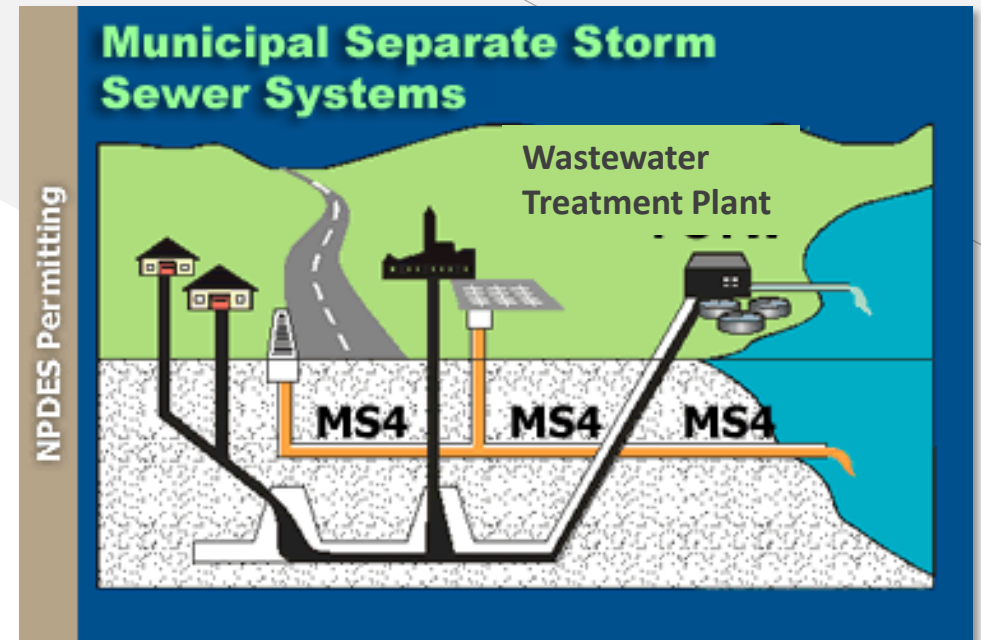


Photo credit: US EPA Introduction to Clean Water Act Watershed Academy

Permit Requirements – SPPP

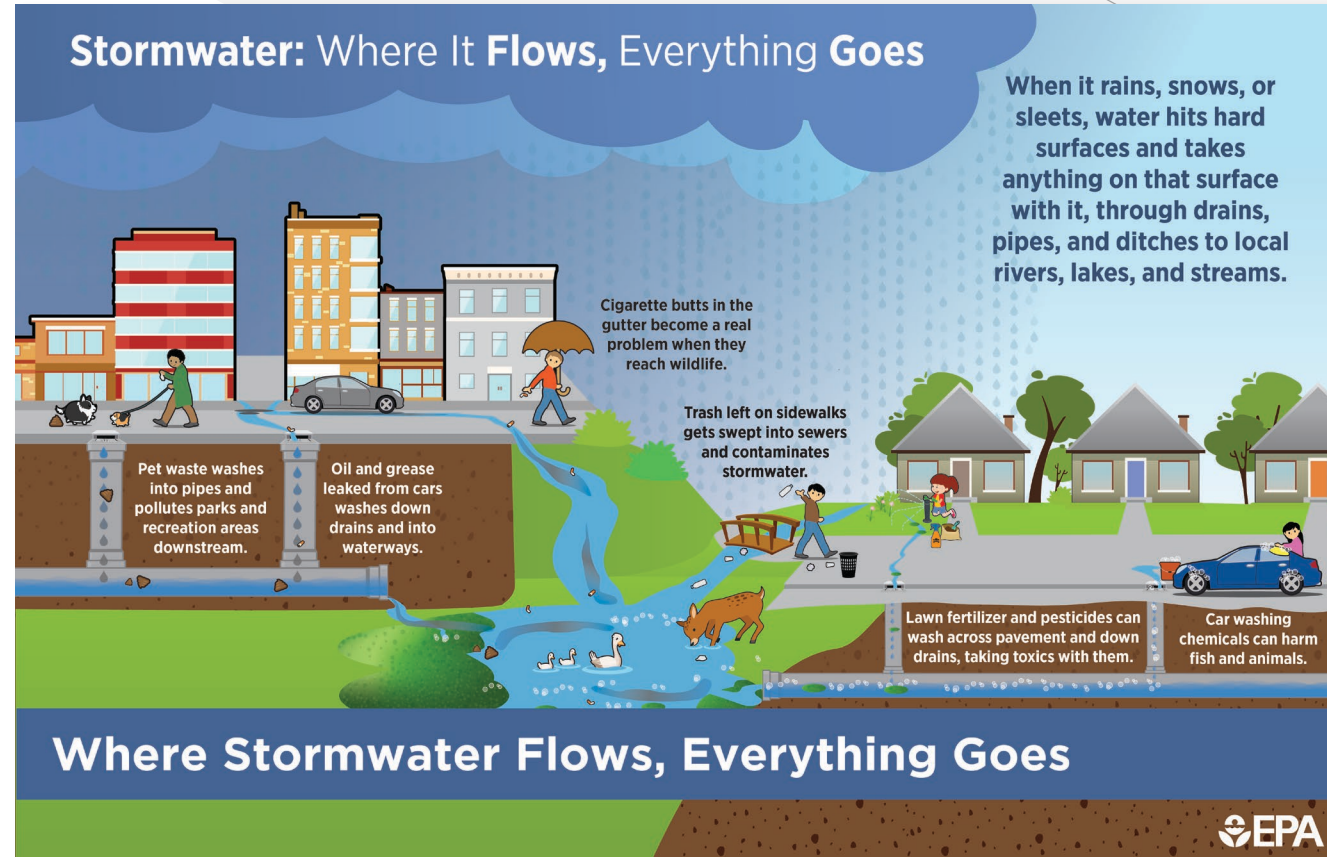
Stormwater Pollution Prevention Plan – SPPP

- Purpose
 - Lists activities undertaken to prevent pollutants from entering the MS4.
 - Identifies municipal maintenance yard measures to prevent pollution.
 - Lists municipal rules and regulations for stormwater management and pollution prevention.
- Updated in 2023 for renewed permit cycle
 - Also updated as needed
- Posted on the Township's Stormwater Website

Permit Requirements – Rules and Regulations

Community Wide Ordinances

- Minimum standards for pollution prevention



Permit Requirements – Rules and Regulations

Community Wide Ordinances

- Minimum standards for pollution prevention

Yard Waste	
Minimize pollution due to yard waste stockpiled for disposal	
Illicit Connections	§155-6 – §155-10
Prohibits connections to MS4 for sewage, process wastewater, industrial waste, etc.	
Improper Disposal of Waste	§114-4
Prohibits spilling/dumping of non-stormwater materials to MS4	
Pet Waste	
Requires proper pet waste disposal to prevent runoff to MS4	
Wildlife Feeding	§46-24 – §46-28
Prohibits feeding of unconfined wildlife on Township property	

Dumpsters and Refuse Containers	§81-1 – §81-6
Requires dumpster covers and prohibits leaking	
Private Storm Drain Inlet Retrofitting	§170-12 – §170-17
Requires design standard updates for privately-owned storm drains when adjacent improvements are conducted	
Litter Control	§114
Regulates litter handling/disposal to prevent pollution	
Privately-Owned Salt Storage	New! May 1, 2024
Requires proper storage of salt and de-icing materials	
Tree Removal and Replacement	New! May 1, 2024
Regulates tree removal to promote infiltration of runoff	

Permit Requirements – Rules and Regulations

Stormwater Management Rule – N.J.A.C. 7:8

- Chapter 170 in Township Code
- Regulates design standards and requirements for Major Development
 - Green infrastructure, rainfall intensities, design methodology, etc.
 - Major Development
- Rule was revised in July 2023
 - Updated precipitation models to adjust for increased rainfall totals and intensities
- ★ • Township must amend its Stormwater Control Ordinance by July 18, 2024



Township of Washington, NJ / Part II: General Legislation
Chapter 170 Stormwater Control

§ 170-2 Definitions.

MAJOR DEVELOPMENT

A. Any individual development, as well as multiple developments that individually or collectively result in:

- (1) The disturbance of one or more acres of land since February 2, 2004;
- (2) The creation of 1/4 acre or more of “regulated impervious surface” since February 2, 2004;
- (3) The creation of 1/4 acre or more of “regulated motor vehicle surface” since March 2, 2021; or
- (4) A combination of (2) and (3) above that totals an area of 1/4 acre or more. The same surface shall not be counted twice when determining if the combination area equals 1/4 acre or more.

B. Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of conditions (1), (2), (3) or (4) above. Projects undertaken by any government agency that otherwise meet the definition of “major development” but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered “major development.”

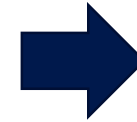
Permit Requirements – Rules and Regulations

Stormwater Management Rule – N.J.A.C. 7:8

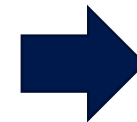
- Post-Construction Stormwater Management
- Township responsibilities:
 - Proposed Major Development plans must be in compliance with N.J.A.C. 7:8 and RSIS.
 - A project's Review Engineer must not be the same person as the Design Engineer.
 - Ensure construction is in accordance with approved development plans.
 - Ensure stormwater maintenance and operation plans are enacted.



Planning / Zoning Board Review



Construction Inspection



Long-Term Enforcement

Permit Requirements – Street Sweeping

Previous Standards

- *Once per month* sweeping for municipally-owned roads with all of the following:
 - Curbed and has storm drains
 - Speed limit is 35 mph or less
 - Not an entrance or exit ramp
 - In a predominantly commercial area

Revised Standards

- *Triannual sweeping* (once every 4 months) for municipally-owned roads with both of the following:
 - Concrete or asphalt surface
 - Storm drains that discharge to surface water
- *Annual sweeping* for all other municipally-owned roads

**Implemented on or before
January 1, 2026**

Permit Requirements – Storm Drains

Requirement

- Retrofit or replace all municipally-owned storm drain inlets that do not meet current design standards.

Design Standards

- Bicycle safe grates
- Inlet openings to prevent trash and floatables from entering the storm sewer

**Implemented on or before
January 1, 2028**



No ❌



Yes ✓



No ❌



Yes ✓

Permit Requirements – DPW Measures

Herbicide Application

- Restrict application to prevent pollution and erosion.
- N/A – Not utilized in Washington Township.

Excess De-icing Material

- Remove piles of excess salt and de-icing materials on municipally-operated streets and parking areas within 72 hours after the end of the storm event.

Roadside Vegetative Waste

- Ensure proper pickup, handling, storage and disposal of municipally-generated wood waste and yard trimmings.

Roadside Erosion Control

- Inspect stability of roadside shoulders, embankments, ditches, etc.
- Repair erosion as necessary.

Permit Requirements – MS4 mapping

Township Stormwater Infrastructure Map

- Outfalls
- Storm drain inlets and manholes
- Conveyance (pipes, swales, etc.)
- Stormwater facilities (basins, rain gardens, etc.)
- Groundwater discharge points
- Maintenance yard location
- MS4 interconnections

**Implemented on or before
January 1, 2028**

Permit Requirements – WIP

Watershed Improvement Plan

- Purpose: Improve water quality by reducing pollution and stormwater flooding

Phase 1 – Inventory Report

- Summarize and map the following:
 - Municipal outfalls and inlets
 - Individual outfall drainage area and receiving waterbody
 - Inter-municipal MS4 connections
 - Water quality classification of receiving water body segments
 - Total maximum daily load (TMDL) for municipal waters
 - Water quality impairment areas
 - Impervious areas
 - Privately-owned outfalls and basins/infrastructure

**Submitted to NJDEP
on or before
January 1, 2026**

Permit Requirements – WIP

Phase 2 – Watershed Assessment Report

- Public information sessions / input required
- Report to include the following:
 - Potential water quality improvement projects
 - Estimate of TMDL/impaired parameters reduction
 - Summary of public feedback
 - Estimate of funding required for improvement projects
 - Potential funding source(s)
 - Estimated implementation schedule

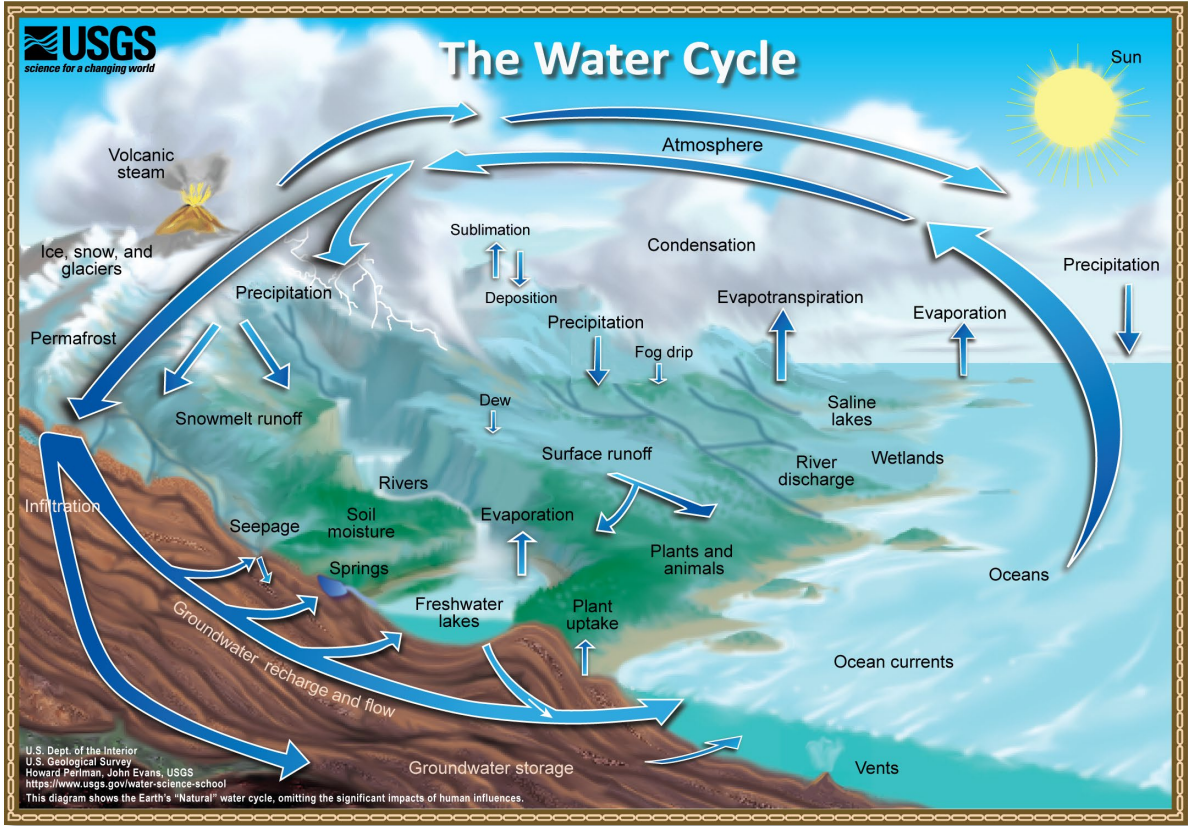
**Submitted to NJDEP
on or before
January 1, 2027**

Phase 3 – Watershed Assessment Report

- Final Watershed Improvement Plan

**Submitted to NJDEP
on or before
January 1, 2028**

Questions?





Thank You.



Stan Schrek, PE, AIA, PP



sschrek@vancleefengineering.com



www.vancleefengineering.com