# **1. INTRODUCTION**



This guidance document has been prepared to assist Tier A municipalities in complying with the renewal of their NJPDES MS4 permit. This introductory chapter provides an overall history of the municipal permitting program, along with the following:

- Why Managing Stormwater Matters
- Stormwater Program and Permit Development
- Permits and Permit Requirements

#### **Historical Overview**

On February 2, 2004, the Department adopted amendments to the New Jersey Pollutant Discharge Elimination System (NJPDES) regulations for the development and implementation of the Municipal Stormwater Regulation Program. This program was developed in 2004 in response to U.S. Environmental Protection Agency's (USEPA) Phase II Rules published in December 1999 which require municipalities to develop and implement a program to reduce discharges of pollutants entering our waters from their stormwater systems, referred to as "municipal separate storm sewer systems" (MS4s), to the maximum extent practicable. Pursuant to USEPA's Phase II rules, the Department's Municipal Stormwater Regulation Program issues NJPDES developed pursuant to the state and federal rules noted above permits

to municipalities throughout the state, as well as public complexes, and highway agencies. Public complexes include certain large public colleges, prisons, hospitals and military bases. Highway Agencies include county, state, interstate, or federal government agencies that operate highways and other thoroughfares, and include each of the 21

#### The Municipal Stormwater Regulation Program is part of the Clean and Plentiful Water initiative.

county highway departments, the New Jersey Department of Transportation, the Port Authority of N.Y. and N.J., the New Jersey Turnpike Authority, and the South Jersey Transportation Authority. The Tier A MS4 permit was originally issued in 2004, renewed in 2009, and then renewed again most recently on January 1, 2018. The MS4 permit renewal has been designed to comply with the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System General Permit Remand Rule, adopted December 9, 2016.

#### Why Managing Stormwater Matters

During and shortly after a precipitation event, some of the rain, hail or snow that reaches the ground is returned to the atmosphere through evapotranspiration. Some infiltrates into the ground below the root zone of the vegetation present to become groundwater and some becomes stormwater runoff which then flows from rooftops, over paved areas and bare soil, and through sloped vegetated areas while picking up a variety of sediments and pollutants on its way. The quantity and quality of stormwater runoff is affected by many factors including the season, local meteorology, geography, topography, land cover, and the activities which lie in the path of the flow. Impervious surfaces, such as rooftops and pavement, can increase the probability of downstream erosion and flooding. Although the amount of pollutants from a single site may seem unimportant, the combined concentrations of pollutants running off of many sites can negatively affect receiving waterbodies, and the quality of our surface water, as



"Floatables," like the trash seen here, contribute to stormwater pollution, which is also known as nonpoint source pollution.

well as groundwater, which directly impacts the health of our ecosystems and the quality of our lives. For example, opportunities to engage in boating, swimming and fishing are diminished if water quality is impaired. Additionally, impaired water quality impacts shellfish production, tourism at beaches and coastal communities, and increases drinking water treatment costs.

Stormwater/nonpoint pollution can often be linked to our daily activities and lifestyles. The way we plan communities, build shopping centers, commute, and maintain lawns all impact stormwater quality. Many times, people do not know or understand that there are alternatives. For example, homeowners can have a green lawn without high doses of fertilizers and pesticides; pet owners should deposit pet waste in the trash or in the toilet and not leave it on the ground. Often there is a lack of public awareness. People are unaware that storm drains often discharge directly to water bodies. When people allow motor oil, trash, and their pet's waste to enter the storm sewer in their street, they don't realize that it may end up in the lake down the block or many miles away. Individually these acts may seem insignificant, but the cumulative impacts of these activities contribute to stormwater/nonpoint source pollution and reduce water quality.

USEPA and the State of New Jersey realize the critical importance of substantially reducing stormwater/nonpoint pollution entering into the waters of the State. The Municipal Stormwater Regulation Program is designed to do just that, through the implementation of Statewide Basic Requirements (SBRs) and best management practices, contained in the NJPDES Stormwater General Permits.

## **Program and Permit Development**

The Department developed the Municipal Stormwater Regulation Program with input from members of the regulated community, affected governmental agencies, and the public. The Department established an advisory group that included representatives from municipalities and groups such as the New Jersey State League of Municipalities, New Jersey County Planners Association and the Association of New Jersey Environmental Commissions. A Best Management Practices Subcommittee was also formed to assist in the development of practical best management practices for general permits. This subcommittee included representatives of municipal and county public works departments, highway agencies, and New Jersey Department of Transportation.

## **Permits and Permit Requirements**

The Department issued four general permits to implement the Municipal Stormwater Regulation Program:

- the Tier A Municipal Stormwater General Permit ("Tier A Permit");
- the Tier B Municipal Stormwater General Permit ("Tier B Permit");
- the Public Complex Stormwater General Permit ("Public Complex Permit"); and
- the Highway Agency Stormwater General Permit ("Highway Permit").

These permits address stormwater quality issues related to new development, redevelopment and existing developed areas by requiring the development of a stormwater program and implementation of specific permit requirements, referred to as Statewide Basic Requirements (SBRs). SBRs may also require the permittee to implement related best management practices (BMPs). All SBRs and related BMPs contain minimum standards, measurable goals, and implementation schedules. New development and redevelopment is addressed, in part, by requiring municipalities to adopt and enforce a stormwater management plan and ordinance in accordance with N.J.A.C. 7:8. Existing developed areas are addressed through broad topics including Local Public Education, and (for the Tier A, Public Complex, and Highway Permits) Improper Disposal of Waste Solids and Floatable Controls, Maintenance Yard Operations and Employee Training.

The Tier A Permit, Tier B Permit, Public Complex Permit, and Highway Permit may require the implementation of Additional Measures (AMs). AMs are measures (non-numeric or numeric effluent limitations) that may modify or be in addition to the SBRs required by the permits, and whose inclusion in a stormwater program may be required by a Water Quality Management Plan (WQM plan). AMs may be required by TMDLs approved or established by USEPA, regional stormwater management plans, or other elements of WQM plans. (See *Chapter 5: Additional Measures* for more details).

The permits also allow for the inclusion of Optional Measures. These are BMPs that are not specifically required by the permit but are recommended as ways to further enhance a stormwater program and improve water quality.



Wildlife management, an Optional Measure, may include geese population control techniques.