

What Is an MS4: Municipal Separate Storm Sewer System

An MS4, or Municipal Separate Storm Sewer System, is a system designed to collect and carry stormwater using municipal drainage systems, streets, catch basins, curbs, gutters, ditches, channels, and specialized storm drains. This system is not connected to wastewater treatment plants, which means the stormwater is not cleaned before it discharges into our local waterways. Polluted stormwater



runoff is the major reason that almost 40 percent of surveyed US waterbodies do not meet water quality standards. Polluted runoff flows directly into

local waterbodies over land or via storm sewer systems.

If left unmanaged, this water pollution can result in the destruction of fish, wildlife, and aquatic habitats; a loss in aesthetic value; and threats to public health through contaminated fish and shellfish, closed beaches, and recreational waterways.

What is an MS4 Permit?

Under the Federal Clean Water Act, stormwater discharge in densely populated areas must be addressed through a permit system, known as the MS4 Permit. The permit requires municipalities and other entities to implement measures to reduce pollution reaching waterways through stormwater. These measures include mapping stormwater outfalls, identifying the source of pollutants, educating the public, finding and eliminating illegal stormwater discharges, reducing water pollution stemming from new construction and development, and others.

IMPORTANT TERMS

Stormwater runoff – Rain or snowmelt that flows over permeable or impermeable surfaces collecting debris and other pollutants.

First flush – The initial runoff during rain is the most polluted because it is collecting the pollutants on the ground, thus it is a crucial part of managing stormwater.

Direct drainage – A stormwater system in which stormwater runoff travels over land directly into the nearest waterway, instead of being collected and conveyed through pipes.

MS4 Permit – A permit issued by the NYS Department of Environmental Conservation (DEC) that regulates discharges from a Municipal Separate Storm Sewer System into local waterways. Also referred to as a Phase II permit.

Stormwater Management Plan (SWMP) - Plans developed by municipalities to reduce pollution in stormwater runoff and prohibit illicit discharges. This is a requirement of the MS4 Permit.