



Top Ten Water Quality Issues in New York State

Urban Stormwater Runoff

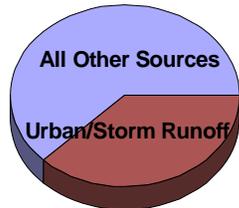
The Problem...

Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces such as paved streets, parking lots and rooftops and does not seep into the ground. Consequently, it accumulates and transports chemicals, nutrients, sediment or other pollutants and debris. If the runoff is not captured or it is discharged without first being treated, it can adversely affect water quality in the receiving lakes, rivers and estuaries.

The impact from stormwater runoff is a more significant problem in urban and developed areas where there is a greater percentage of impervious surfaces. There are numerous Best Management Practices (BMPs) designed to capture and treat stormwater, however retrofitting these approaches in long-established urban areas can be technically challenging and costly.

The Significance...

Urban stormwater runoff is identified as a major source in 37% of all waterbodies assessed as impaired in New York State. In another 40% of impaired waterbodies, urban stormwater runoff is a contributing source (though not the most significant source). In addition, for 35% of the waters with less severe minor impacts or threats urban stormwater runoff is noted as a major contributing source of impact.



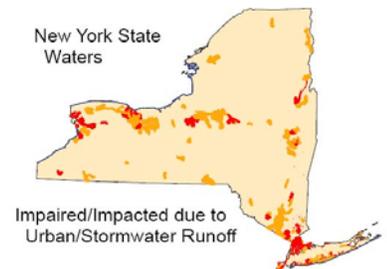
However, if atmospheric deposition of pollutants (acid rain, mercury) and legacy pollutants in river and lake sediments (PCBs, dioxin) – sources that are largely beyond the control of water programs – are not considered, urban/stormwater runoff is cited as a contributing source in 75% of all impaired waters and a major contributing source in 61% of impaired waters in the state.

In addition to being cited as a major source in one-third of all impaired waters, urban/stormwater runoff is noted as a major source of contaminants in 36% of all waters that experience lesser, but measurable, minor impacts to water quality, and a contributing source in nearly half (47%) of waters with minor impacts.

Specific Waters...

Waters that are impaired or impacted by urban stormwater runoff occur throughout New York State.

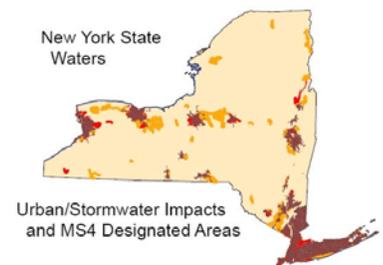
Not surprisingly, however, such waters are most likely to occur in and around the major metropolitan areas of the state, such as New York City, Buffalo, Syracuse, Rochester, Albany and other population centers.



What is Being Done...

Because of the impacts of stormwater on water quality, stormwater control has become a significant NYSDEC Water Program initiative. The cornerstone of this effort is implementation of the Phase II stormwater regulations, which require permits for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urban areas. NYSDEC has issued a general permit for MS4s in urban areas requiring that these municipalities develop a Stormwater Management Plan (SWMP) that includes identification of Best Management Practices (BMPs) to be implemented, as well as public education and reporting components.

The MS4 areas, where much of the NYSDEC stormwater effort is concentrated, coincide closely with waters that are impaired and impacted by stormwater runoff.



More Information

NYSDEC Stormwater Control Program

<http://www.dec.ny.gov/chemical/8468.html>

US Environmental Protection Agency Stormwater Program

http://cfpub1.epa.gov/npdes/home.cfm?program_id=6