



Top Ten Water Quality Issues in New York State

Inadequate Onsite Wastewater Treatment

The Problem...

While most residences are connected to sewer systems and larger centralized wastewater treatment plants, about one-quarter of New Yorkers and a comparable number of businesses and institutions are served by onsite wastewater treatment systems. Onsite systems are effective and economical when properly designed, installed and maintained. However the lack of an adequate onsite system, poor routine maintenance, increased density of homes served by onsite systems, undersized and overused systems (particularly due to conversion of vacation cottages and camps into year-round residences), and the installation of systems on sites with unacceptable conditions can all lead to onsite system failure and water quality impacts.

Acute failures resulting in wastewater pooling on the ground, impacts to beaches or backups into buildings are potential health problems. Chronic problems can result in bacteria contamination of groundwater and nutrient loadings to nearby lakes and other recreational waters that spur excessive aquatic weed and algal growth (see also *Aquatic Weeds and Invasive Species*).

The Significance...

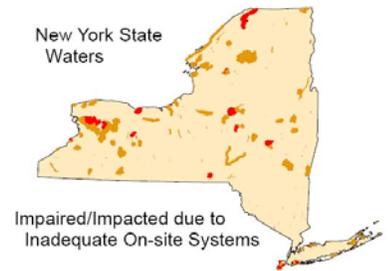
Inadequate and/or failing onsite wastewater treatment (septic) systems are identified as a major source in 7% of all waterbodies assessed as impaired in New York State. In another 20% of impaired waterbodies, onsite systems are noted as a contributing source (though not the most significant source).



In addition, for 7% of the waters with less severe impacts or threats, onsite systems are noted as a major contributing source. Failing onsite systems are also cited as the major suspected source in 11% of waters where impacts need to be verified, while also being cited as suspected contributing sources for 22% of waters needing verification of impacts.

Specific Waters...

Waters that are impaired or impacted by inadequate and/or failing onsite systems are located throughout New York State. Most such instances occur in smaller hamlets and communities that are not served by municipal collection and wastewater treatment facilities. NYSDEC has identified over 100 unsewered communities where inadequate/failing onsite systems contribute to water quality problems and where improved onsite treatment and/or a centralized community system is being sought.



What is Being Done...

Since 1990, NYSDEC has worked with USEPA, state and local health departments, municipalities, local agencies and organizations, and universities to address siting, design, construction and maintenance issues for residential and small community onsite wastewater treatment systems. The Onsite Training Network (OTN) has been established to provide wastewater treatment training events across the state to share knowledge and expertise with local officials, building inspectors and professional engineering firms.

Financing for projects to construct municipally owned decentralized wastewater treatment systems is available from the Clean Water State Revolving Fund. The fund provides low-interest funding for new projects or upgrades to address inadequate or failing systems, or to help establish sewer districts and alternative centralized treatment systems, where appropriate. However, properly functioning onsite systems typically provide effective wastewater treatment at a lower cost than centralized treatment plants, particularly in non-urban areas.

More Information

- Onsite Training Network - http://www.delhi.edu/bcs/otn_wastewater/
- NYSEFC Onsite Wastewater Treatment Systems Funding - <http://www.nysefc.org/home/index.asp?page=387>
- USEPA Onsite (Septic) Systems Information - <http://cfpub.epa.gov/owm/Septic/index.cfm>