



Top Ten Water Quality Issues in New York State

Aquatic Weeds and Invasive Species

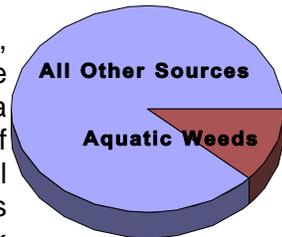
The Problem...

While rooted aquatic plants are a natural component of a healthy aquatic system, excessive weed growth can have significant negative effects on waterbodies. In addition, invasive species that alter the aquatic plant community also contribute to restriction of recreational and other uses.

Aquatic plant populations are governed by a complex interaction of physical, chemical and biological factors. These factors include light penetration into the lake, water and sediment chemistry (see also *Nutrient Loadings and Eutrophication*), growing space and the presence of invasive plants—the most common of which are Eurasian watermilfoil, water chestnut, curly leafed pondweed and fanwort. When weed growth becomes excessive resulting problems include reduced plant biodiversity, weed blooms that deplete oxygen and cause odors when they die off, alteration of fish communities from larger game fish to pan fish, and nuisance growth that can reduce circulation, clog boat propellers and hinder swimmers. Healthy waterbodies reflect an appropriate balance of adequate, but not excessive, weed growth.

The Significance...

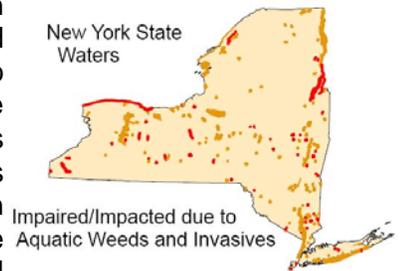
Nuisance aquatic weeds, algae and/or invasive species are identified as a major source of impairment in 10% of all waterbodies assessed as impaired in New York State. In another 6% of impaired waters, aquatic weeds/invasive plants are a contributing source of impact (though not the most significant source).



In addition, for 14% of the waters with less severe minor impacts or threats, aquatic weeds and invasive plants are noted as a major contributing source of impact. These sources are also cited as contributing to an additional 4% of other waters with minor impacts/threats.

Specific Waters...

Impaired waters (shown in red) or impacted/threatened waters (orange) due to aquatic weed growth are fairly widespread across New York State. This broad distribution is due in part to the fact that some weed growth is a normal feature of aquatic systems.



The factors that cause weed growth to become excessive—such as sources of nutrient loading and the presence of invasive plants—are also fairly common throughout the state.

What is Being Done...

Efforts to combat excessive aquatic weed growth and invasive species are underway in a number of areas. The most visible of these efforts was the creation of the Invasive Species Task Force in 2003 which brought together 17 New York State agencies and other organizations to identify actions and develop a strategy to address invasive species. The task force led to the establishment of the Office of Invasive Species within NYSDEC in 2007. Another initiative that grew out of the task force was the creation of Partnerships for Regional Invasive Species Management (PRISM). PRISM uses education, early detection, and rapid response to promote cooperative management of invasives on an integrated watershed level.

NYSDEC also has a number of programs in place aimed at reducing nutrient loadings, which promote aquatic weed growth. These include a comprehensive stormwater program, a Concentrated Animal Feeding Operations (CAFO) program, and waterbody-specific nutrient reduction and allocation strategies, known as Total Maximum Daily Load (TMDL) plans for specific lakes and other waterbodies. NYSDEC also provides assistance to local lake associations through the State Federation of Lake Associations for developing management strategies to address weed and other lake issues.

More Information

NYSDEC - Invasive Species Task Force
<http://www.dec.ny.gov/animals/6989.html>
New York State Federation of Lake Associations
<http://www.nysfola.org/>