

# 2014 Section 305(b) Water Quality Report Executive Summary

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The 54,471 square miles of New York State are rich in water resources. Freshwater resources include more than 87,000 miles of rivers and streams, nearly 7,900 lakes and ponds totaling about 690,000 acres (not including Great Lakes), and over 400 miles of Great Lakes coastline. The marine waters of the state include more than 1,530 square miles of estuaries, as well as about 120 linear miles of Atlantic Ocean coastline. New York State is the only state in the country that has some of all five of these designated waterbody types. Additionally, about six million residents draw drinking water from abundant groundwater resources in the state. Water quality in a majority of these waters supports all intended uses. However, there are waterbodies that are affected by some level of water quality impact, use impairment, or are otherwise threatened by various human activities.

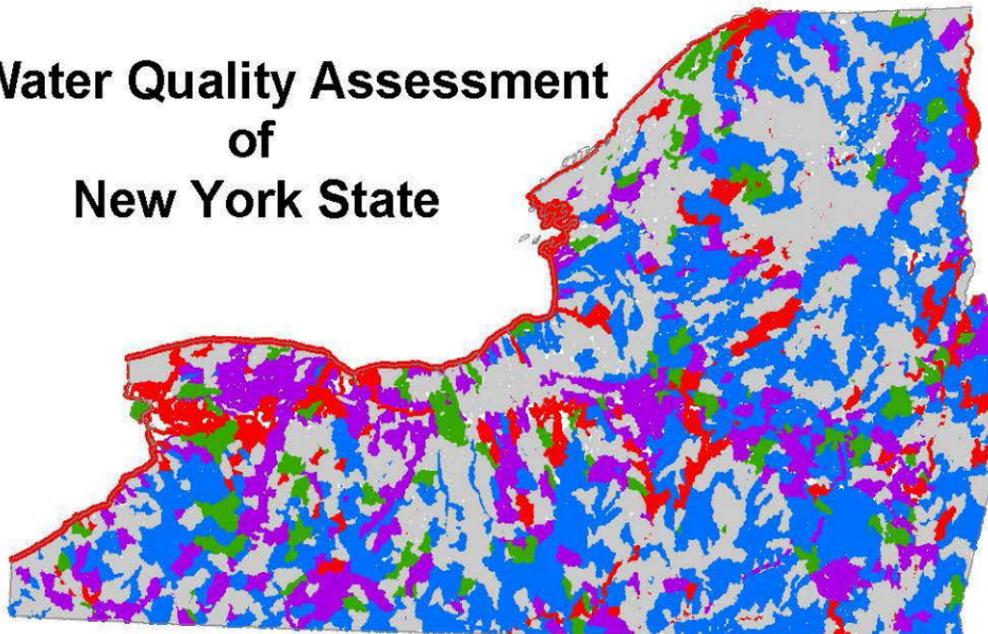
The New York State Department of Environmental Conservation (NYSDEC) Division of Water maintains an extensive inventory/database of these waters. The *Waterbody Inventory/Priority Waterbodies List (WI/PWL)* provides waterbody-specific summaries of water quality conditions, tracks the degree to which the waterbodies support (or do not support) a range of uses, and monitors progress toward the identification and resolution of water quality problems, pollutants and sources. Information from the WI/PWL serves as the basis for this *Clean Water Act Section 305(b) Water Quality Report*.

## *Water Quality Assessment Map*

An overview [map](#) on the following page shows current water quality conditions in New York State. The map shows how the waters of the state correspond to five assessment categories:

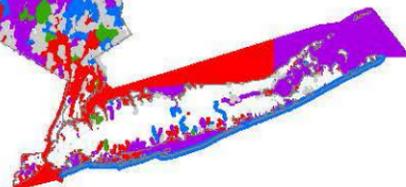
- Impaired Waters
- Waters with Minor Impacts
- Waters with No Known Impacts
- Waters Needing Verification of Impact
- UnAssessed Waters

# Water Quality Assessment of New York State



## Water Quality Assessment Categories

- Impaired Segment
- Minor Impacts
- No Known Impact
- Need Verification
- UnAssessed



## Overall New York State Water Quality

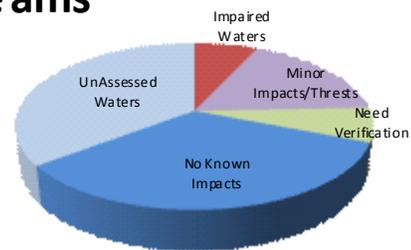
Overall use support for various types of waterbodies in New York State is as follows:

**Rivers and Streams:** Two-thirds (67%) of the 87,526 miles of New York State river and stream miles are assessed. Approximately 7% are categorized as being *Impaired Waters* that do not fully support their designated use, with about 6% of river/stream miles on the 2014 New York State Section 303(d) List. About 18% of river/stream miles are assessed as having *Minor Impacts or Threats* but still

support uses, while nearly 7% of these **Rivers/Streams**

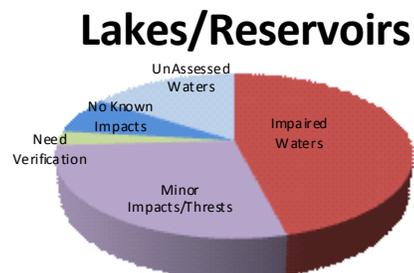
waters *Need Verification* of impact to determine standards attainment/use support.

One-third of rivers/stream miles have *No Known Impacts*. About 33% percent remain *UnAssessed*; this percentage of UnAssessed waters is down from 45% in 2008, but down only slightly (from 34%) since 2012.



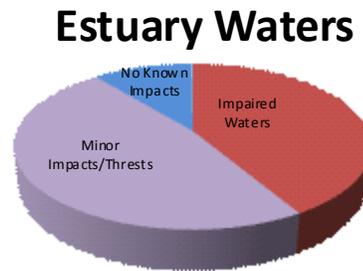
**Lakes and Reservoirs:** Nearly half (47%) of New York State lake and reservoir acres are categorized as *Impaired Waters* that do not fully support designated uses; 38% of state acres are included on the 2014 Section 303(d) List. However, much of the lake impairment in the state is due to a few large waterbodies that support most uses but have lakewide restrictions for a specific use. For example, while Lake Champlain supports drinking water use and a variety of recreational activities, a limited fish consumption advisory for the entire lake accounts for over one-quarter of the impaired lake acres in the state. About 28% of lake acres have *Minor Impacts or Threats* but

still support uses, while 3% of these waters *Need Verification* of impact to determine standards attainment/use support. Only 8% of lake acres have *No Known Impacts*. About 15% percent remain *UnAssessed*; this percentage of Unassessed waters is down from 20% in 2008 and down slightly from 16% in 2012.



**Estuary Waters:** About 46% of New York State estuary waters are categorized as *Impaired Waters* that do not fully support uses; most (36%) are on the 2014 Section 303(d) List. Most (over 90%) of the *Impaired Waters* are the

result of fish consumption; shellfishing impairment occurs in about one-quarter of *Impaired Waters*. Other uses such as public bathing, recreation and aquatic life are supported in over 90% of estuary waters. About half (50%) of estuary waters have Minor Impacts or Threats but still support uses. Only about 11% of estuary waters have *No Known Impacts*.



**Great Lakes Shoreline:** The New York State Great Lakes shoreline is categorized as being *Impaired Waters* that do not fully support designated uses, with all of these shore miles included on the 2014 New York State Section 308(d) List due to fish consumption advisories.

**Atlantic Ocean Coastline:** All (92%) of New York State ocean coastal waters are considered to have *No Known Impacts* and support all designated uses.

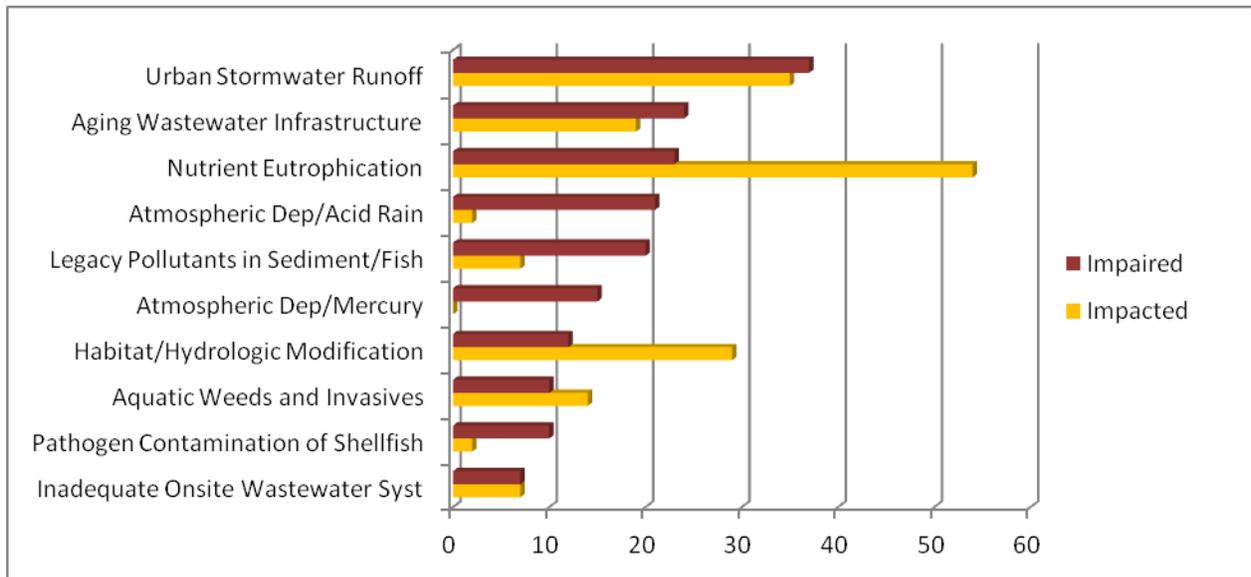
### *Top Ten Water Quality Issues in New York State*

The NYSDEC Water Quality Assessment Program has identified the Top Ten most prevalent causes/sources of water quality impact/impairment in the assessed waters of New York State. These are:

- Urban Stormwater Runoff
- Aging/Inadequate Wastewater Treatment Infrastructure
- Nutrient Eutrophication
- Atmospheric Deposition and Acid Rain
- Legacy Pollutants in Sediments and Fish
- Atmospheric Deposition of Mercury
- Habitat/Hydrologic Modification
- Nuisance Aquatic Weed Growth and Invasive Species
- Pathogen Contamination of Shellfish

- Inadequate Onsite Wastewater Treatment

The figure below shows the frequency for which a specific cause/source is noted as a significant contributing factor in New York State waters. The figure shows the occurrence of each cause/source as a percentage of all waters assessed as impaired (red) or impacted (yellow).



Note: Frequency totals do not equal 100% because categories are not mutually exclusive.

Each of these causes/sources is discussed in greater detail on individual [Fact Sheets](#). These fact sheets outline the nature of the specific problem, the significance of the problem, what New York State waters are most susceptible to the problem and what is being done to address the problem.

### *Waterbody Inventory and Assessment Coverage*

Originally the New York State water quality assessment effort focused on assessing waters with known or suspected water quality problems. However beginning in the mid-1990s and continuing through the present, that focus has shifted to producing a more comprehensive and representative assessment of all the waters of the state. Although the comprehensive assessment goals have yet to be fully realized, considerable progress has been made toward the assessment of 100% of the waters of the state.

