



Top Ten Water Quality Issues in New York State

Pathogen Contamination of Shellfish

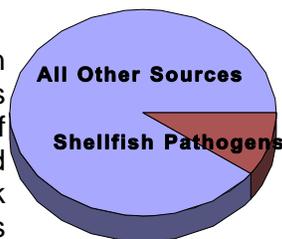
The Problem...

The marine waters of New York State support a wide variety of shellfish and a significant shellfishing industry, as well as being a valuable recreational resource. However, much of the marine waters district is adjacent to highly populated areas of the state and subject to pathogen contamination that can make shellfish unsafe to eat. As a result, shellfishing is restricted in some waters and at various times.

NYSDEC regularly evaluates and monitors shellfishing waters and classifies them as either certified or closed for shellfishing. There are three types of closures. Regulatory closures are based on the water quality of an area over a long period and are not changed often. Temporary emergency closures occur when an area that is normally open experiences sudden, short-term degradations in water quality, usually the result of a storm event or the presence of a biotoxin in the water. Once the event has passed and water quality has improved, the area is reopened. Special shellfish closures are implemented in anticipation of conditions that pose a threat to water quality, such as holidays when boating use increases.

The Significance...

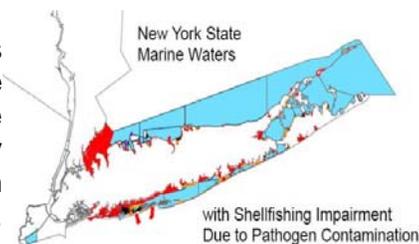
Pathogen contamination of shellfish is identified as a major source in 10% of all waterbodies assessed as impaired in New York State. Specific sources of pathogens include urban runoff, stormwater discharges, onsite septic impacts, and boating discharges.



While pathogen contamination of shellfish is responsible for only 10% of impaired waterbodies statewide, such contamination is responsible for 92% of the impairment found in waterbodies designated for shellfishing. Shellfishing restrictions affect 13% of the total estuary area classified as being otherwise appropriate for shellfishing.

Specific Waters...

Shellfishing restrictions are not a statewide issue, because shellfishing use only applies to certain marine waters. Waters that are designated for shellfishing are generally located around Long Island. The adjacent map shows areas where long-term water quality issues result in regulatory closures.



What is Being Done...

NYSDEC addresses the impact of pathogens that result in contamination of shellfish through two efforts. The first is the shellfishing management program. This effort relies on the collection of thousands of water samples each year to monitor the quality of shellfishing waters to make sure that human health is protected. If water quality is not up to New York State and national standards, DEC closes the area to shellfish harvesting.

NYSDEC is also moving forward in reducing the levels of pollutants entering the marine shellfishing waters of the state. The most significant of these is the implementation of Phase II stormwater regulations, which require permits for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4) and mandate stormwater management plans and Best Management Practices to reduce runoff. NYSDEC has also developed Total Maximum Daily Load (TMDL) plans for a number of specific shellfishing impaired waters that identify sources of contamination and set pathogen load reduction targets for these sources. NYSDEC has also worked with local agencies to establish vessel waste no discharge zones to reduce wastewater impacts from boats in marine waters.

More Information

NYSDEC Shellfish Management Program

<http://www.dec.ny.gov/outdoor/345.html>

Shellfishing Closures

<http://www.dec.ny.gov/regs/4014.html>

NYSDEC Shellfish Pathogen TMDL

http://www.dec.ny.gov/docs/water_pdf/tmdlpathshel07.pdf