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LONG ISLANDENVIRONMENT

Long Island Sound water quality plateaued or declined in 2022, Save the Sound reports

The 2022 Long Island Sound Report Card gives low marks to waterways closer to New York City and higher marks in waters out east. Credit: Newsday/ John Paraskevas; Thomas Lambui

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After years of steady improvement, water quality in Long Island Sound plateaued or declined in many areas in 2022, according to a new report card from a leading environmental organization.

The biennial report card from Save the Sound, a nonprofit based in Larchmont, found mixed results in grading the water quality of the Sound, a 110-mile tidal estuary.

The good news: the waters off eastern Long Island continue to register high grades, driven by improved wastewater treatment systems, reduced nitrogen pollution and lower population density compared with their neighbors to the west.

The bad news: the more populated Eastern and Western Narrows, from Northport Bay to New York City, continued to receive low grades, largely from nitrogen and other pollutants contaminating the water.

WHAT TO KNOW

- **The biennial report card** from Save the Sound, an environmental nonprofit, showed that water quality in Long Island Sound plateaued or declined in many areas in 2022
- **The waters off eastern Long Island** continue to register the highest grades, largely from improved wastewater treatment systems that reduced nitrogen pollution
- **The more populated Eastern and Western Narrows** continued to receive low grades, the result of pollutants contaminating the water, along with the effects of climate change

"There's some signs of slight regression, but there's also signs of hope," said Peter Linderoth, director of water quality for Save the Sound. "So it's not a time for management actions and nitrogen pollution reduction to take a back seat to other issues. It's a time where we need to keep pushing for nitrogen reductions and get back on track with significant improvement in those regions."

The report card, which provides grades ranging from an A to an F for dozens of local bays, harbors and coves —allowing local communities to target problematic waterways —was released Thursday at simultaneous events at Northport Harbor, the Bronx and Bridgeport, Connecticut.

The group has compiled 14 years of water testing results in the open waters of the Sound and four years of testing more than 50 bays.

The report divides the Sound into five subregions. The Eastern and Central Basins, which on Long Island stretches from eastern Suffolk through Port Jefferson, received A grades.

In fact, the five highest grades in the New York bays were all on Long Island —Outer and Middle Port Jefferson Harbor, Huntington Bay, Outer Manhasset Bay and Oyster Bay.

Water quality, however, gets progressively worse moving west.

The Western Basin, for example, averaged a grade of B while the Eastern Narrows, which is exclusively on Long Island, saw a grade of C.

The Western Narrows —from Manhattan to Sands Point —had the lowest score of F, as it had in previous reports, although it showed modest improvements compared to previous years.

The most polluted sections of the Sound, the group found, were the Bronx River, Inner Flushing Bay, Inner Eastchester Bay, Middle Hempstead Harbor and Inner Cold Spring Harbor.

Meanwhile, of the 53 bay segments monitored in the report, 57% received grades of C or lower, while only 11 earned an A.

During the 1980s, Linderoth said, the Western Long Island Sound "essentially flatlined and died" because of low dissolved oxygen from nitrogen pollution. The conditions led to blankets of dead fish and reports of lobsters crawling out of the water in a futile attempt to breathe.

But local, state and federal efforts to reduce nitrogen pollution in the Sound made a significant difference in water quality, said Jamie Vaudrey, a professor at the University of Connecticut and science adviser to the report.

"What we're worried about right now, though, is that we may be reaching a point where we're plateauing," she said. "So yes, we got better. But we're kind of slowing down on that improvement curve."

Also eroding the early success, Vaudrey said, is the effects of climate change.

A 2021 study from the University of Connecticut noted that water temperatures in the Western Long Island Sound are increasing by 1.4 degrees per decade.

"While that might not seem greatly significant, for many reasons it can be detrimental to the marine environment," Linderoth said. "The animals that live in the Sound …aren't really adapted to have that temperature come in place. It can cause issues with their immune system. It can cause issues with their survival rate. To put it simply: the warmer the water becomes, the less oxygen that it can hold."

The group recommends policymakers push for the installation of nitrogen-removing septic systems, while residents can lighten their water usage and reduce or eliminate their use of fertilizer.

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