newsday.com
$1.50 | LI EDITION
Wednesday
Oct. 22, 2014

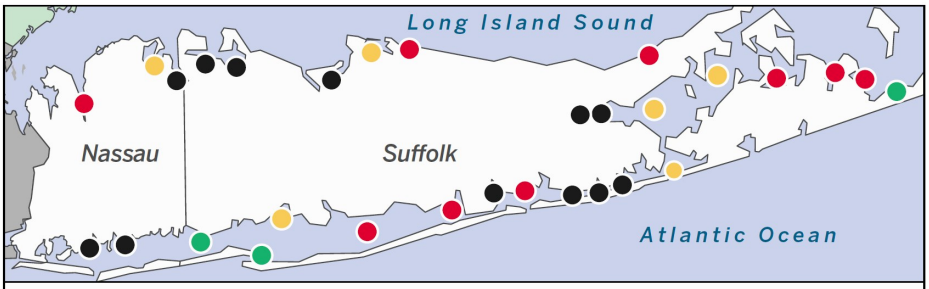
Newsday
SPORTS FINAL
THE LONG ISLAND NEWSPAPER

HI 61° LO 48°
RAIN LIKELY

Troubled waters

About 70 percent of the waters tested around Long Island were rated poor quality or lethal to fish.

DANIELLE FINKELSTEIN



Fish survival

Good Fair Poor Lethal

Scientists measured the amount of dissolved oxygen in water in 30 sites around Long Island. Areas with oxygen levels below 3 milligrams per liter are considered poor or lethal for fish survival. Fair or Good denotes oxygen levels are satisfactory for fish survival

SOURCE: STONY BROOK UNIVERSITY

NEWSDAY

- **Report: Fish** can't survive along most of LI coast
- **Stony Brook** researchers cite lack of oxygen

BY JENNIFER BARRIOS
jennifer.barrios@newsday.com

More than two-thirds of Long Island's coastal waters did not contain enough oxygen this summer to enable fish to survive, according to research to be released today by Stony Brook University.

Results from 30 monitors placed in the waters surrounding Long Island over the summer showed poor or lethally low levels of oxygen at 21 of the sites, said Christopher Gobler, a professor at the university's School of Marine and Atmospheric Sciences, who conducted the research.

The worst sites, with oxygen levels lower than 0.1 milligrams per liter, were mainly grouped near Westhampton Beach, the Forge River and western Nassau County on the South Shore; off Cold Spring Harbor, Huntington Bay and Northport on the North Shore; and Flanders Bay on the East End.

The New York State standard for fish survivability is 3 milligrams of oxygen per liter.

Low levels of oxygen — a condition known as hypoxia — can be caused by high levels of nitrogen in the water, Gobler said.

Elevated levels of nitrogen, such as from runoff from septic systems, can lead to algal blooms. Decaying algae reduces the water's oxygen level, he said.

The situation is exacerbated in areas with poor water circulation. Areas near ocean inlets on the South Shore, for example, generally saw levels of oxygen better for fish life, Gobler said.

While there was no evidence of a mass die-off of fish due to hypoxia, Gobler said, fish in the areas with the lowest levels of dissolved oxygen would have two choices: move or die.

In the areas where the oxygen levels "went down to nearly zero, that's a situation whereby the fish are going to move out or not make it," he said.

Low oxygen levels also lead fin fish and shellfish to grow more slowly, he said.

Since warm seawater cannot hold as much oxygen as cooler water, the problem chiefly arises in the summer months, Gobler said. He added that the situation will likely get worse in coming years as sea temperatures are expected to rise.

Charles Witek, a Babylon fisherman, said hypoxia was a serious concern for fishermen.

"One of the reasons flounders may be troubled in our bays is because many summers the young . . . fish are stressed by hypoxia in the bays," Witek said.

Chris Clapp, a marine scientist with The Nature Conservancy on Long Island, said the data show the area is in "crisis mode."

"There's not a single water body that doesn't have a problem," Clapp said.

He said he hoped policymakers would continue to act to reduce nitrogen in the water.

"Just because it's going to take a long time and a lot of money to fix this, it doesn't mean that you shouldn't," Clapp said. "Because the problems are only going to continue to get worse."