

North Shore nitrogen pollution blamed on septic systems

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By Rachel Uda



A survey of 13 watersheds, from Little Neck Bay to Northport Harbor, above, found that septic systems and cesspools are the greatest contributors to nitrogen pollution in Long Island Sound. The report was released March 8, 2016.

Photo Credit: David L. Pokress

HIGHLIGHTS

- Nature Conservancy analyzed 13 watersheds
- Excess nitrogen can lead to algal blooms, red tides

Septic systems and cesspools are the greatest contributors to nitrogen pollution in North Shore watersheds leading to the Long Island Sound, according to a recent report published by the Nature Conservancy.

Thirteen watersheds — from Little Neck Bay to Northport Harbor — were analyzed in the report released March 8.

In all but the Manhasset Bay watershed, septic systems and cesspools accounted for more nitrogen pollution than fertilizer, stormwater runoff or sewage-treatment plants, the report found.

In December, the U.S. Environmental Protection Agency proposed a new nitrogen-reduction strategy for Long Island Sound, warning New York and four other states that their current efforts to reduce the pollutant won't be enough.

The proposal calls for changes at sewage-treatment plants that discharge to the Sound, and adds that nitrogen from runoff, wastewater and fertilizer has "remained steady or increased" in recent years.

Excess nitrogen can lead to harmful algal blooms and red tides, which depletes oxygen from water and can cause fish kills, said Carl LoBue, a marine scientist for the Nature Conservancy. On the North Shore, wastewater pollution has also closed beaches and contaminated shellfishing areas, according to the report.

"One of the reasons we thought it was important to look at this particular region is because we've been seeing hypoxia in Hempstead and red tides in Northport Harbor," LoBue said. "This report is a snapshot that can help people understand the current conditions in the region, and can help us plan for the future."



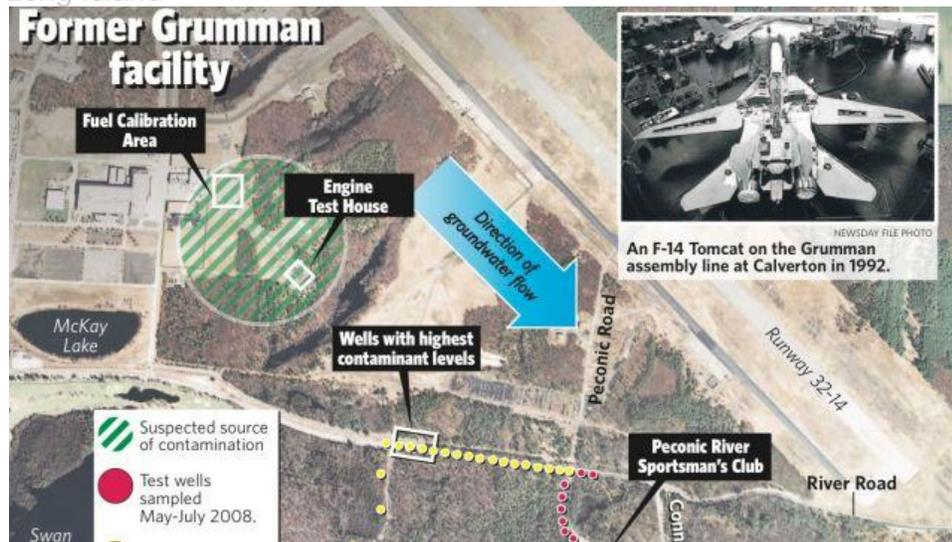
In their analysis, the researchers utilized population and land-use data and wastewater, runoff and fertilizer application statistics to estimate the sources of the pollutant.

Stormwater and fertilizer from lawns, golf courses and parks contributed low amounts of nitrogen in all 13 watersheds, the report found.

However, wastewater from sewage-treatment plants and septic systems accounted for over a third of the nitrogen in all of the regions studied and more than 80 percent in Manhasset Bay, Huntington Harbor, Centerport Harbor and Northport Harbor.

In Centerport Harbor and Huntington Bay, where there are no sewage-treatment plants, cesspools and septic systems contributed more than 75 percent of nitrogen pollution.

The report also found that households using septic systems or cesspools add 2.1 times to 7.8 times more nitrogen to an embayment than households connected to one of the seven sewage-treatment plants in the area.



Because portions of the North Shore are unsewered, the nitrogen pollution problem there is similar to that of Suffolk County — which is about 75 percent unsewered, said Stephen Lloyd, another researcher at the Nature Conservancy.

“I think people forget that there are areas within Nassau County that aren’t sewerred, which makes this a critical region to study,” Lloyd said.