

No question: Experts say nitrogen overloading waterways

by [Jen Nuzzo](#) 06/15/15

Mystery — if there was really a question — solved.

County lawmakers, scientists and environmentalists all agree nitrogen overloading in local waterways is the main contributor to the recent die-off of fish and turtles in the Peconic estuary.

There's also no question, according to the consensus of experts, that aging septic tanks and failing cesspool systems are mostly to blame for brown and red tides.

The public's reliance on fertilizers in farming and landscaping is also serious problem.

Dead bait fish in their thousands began washing ashore around Flanders Bay and in the creeks around Aquebogue and Jamesport a few weeks ago. Experts said the die-off of bunker fish, caused by a combination of a lack of oxygen in the water and a bloom of red tide algae in the creeks, is unprecedented. The pollution has also been blamed for an unprecedented die-off of diamondback terrapin turtles last month.

To address the crisis, Legislator Dr. William Spencer (D-Centerport), chairman of the Suffolk County Health Committee, assembled a meeting June 11 in Hauppauge.

Panelists included: Dr. Alison Branco, director of the Peconic Estuary Program, Adrienne Esposito, director of the Citizens Campaign for the Environment, Dr. Christopher Gobler, a biologist at Stony Brook University and Walter Dawydiak, director of the Suffolk County Health Department Division Of Environmental Quality.

Mr. Dawydiak listed several initiatives the county has already undertaken addressing water quality concerns, including helping to develop the New York State Center for Clean Water Technology at Stony Brook University.



All well and good, Ms. Esposito said, but she stressed more needs to be done — immediately. Local lawmakers' top priority should be updating Long Island's comprehensive water quality report, which was completed in 1978 under the Federal Water Pollution Control Act and commonly referred to as the "208 study," Ms. Esposito said.

"It's going to be an unpleasant process," she said. "But if we don't do that our waters will continue to degrade."

Ms. Esposito added there's \$8 million in state funds available for water quality improvement projects and volunteered to help the county secure more grants.

When Dr. Spencer questioned how \$8 million will fix the current nitrogen overloading problem, Ms. Esposito described the sum as "seed money."

"It's certainly not all we need," she said. "But it's the beginning, as we figure out the best way to transition from septics and cesspools to the newer wastewater technology."

Dr. Spencer also asked if aerating or dredging methods would help solve the problem, but panelists responded that mechanical fixes would only work in small waterways, unlike the Peconic Estuary.

"The best thing that we can do is to address the main source of the problem, which is our nitrogen," Dr. Branco said.

Dr. Gobler agreed available funds should be used for "planning and generating a consensus" on the issue.

He estimates there are about 360,000 septic tanks across Suffolk County that need to be replaced. Estimates is the key word. Shelter Island is now going through a process of trying to identify and map existing septic systems.

"In the event that it seems overwhelming, we probably don't have to address all 360,000 systems but there are some in dire need," Dr. Gobler said, describing systems nearest to waterways as the highest priority.

On Thursday, the Suffolk County Health Department said Stony Brook University officials had confirmed the presence of cyanobacteria at Lake Marratooka in Mattituck, leading health officials to warn against swimming there.

"In discussions with the DEC, that lake has some of the highest phosphorus concentrations they've ever seen," Dr. Gobler said, adding he believes the heavy nutrient loading is from a combination of farms and homes.