

Clean Water Is Next Great Battle for Long Island

New initiatives take on a pressing problem: the nitrogen from septic waste

By Joanne Pilgrim | April 28, 2016 - 2:11pm



County Legislator Bridget Fleming, center, was among the officials who support County Executive Steve Bellone's proposal for a referendum to tax water bills to create a water pollution abatement fund. *Suffolk County Executive's Office*

Based on scientific theory and the unfortunate events that have borne it out — algal blooms, fish kills, shellfish die-offs, and other evidence of polluted waterways — researchers, environmentalists, and policymakers have agreed that Long Island's ground and surface waters are in trouble. And now they agree on something else — that the time to study the problem is over. The culprit, excessive nitrogen from septic waste, has been identified, and the course of correction is clear.

Better wastewater treatment to reduce the nitrogen seeping into the aquifer and into surface waters is the key.

Researchers, academics, environmentalists, government officials, and industry and other private sector groups across Long Island have all turned their attention to the problem, and two efforts to raise money from taxpayers to pay for clean water initiatives are proposed for the November ballot.

Voters in the five East End towns will cast ballots this fall on whether to extend the Peconic Bay Region Community Preservation Fund, which receives income from a 2-percent tax on most real estate transactions, through 2050. The ballot will also ask voters to approve allowing 20 percent of the fund, which is earmarked for land preservation, to be spent on efforts to maintain water quality.

In addition, at a press conference on Monday, Suffolk County Executive Steve Bellone announced a plan to raise money for water quality efforts by adding a surcharge to water bills for customers of the Suffolk County Water Authority and other water providers. If approved by county voters, the tax, \$1 on every 1,000 gallons of water used, could raise \$75 million annually for Suffolk's Reclaim Our Water initiative, Mr. Bellone said, and expedite efforts to move away from the use of cesspools and septic systems and toward state-of-the-art treatment systems that remove nitrogen pollution.

Kevin McDonald, a conservation policy advisor at the Nature Conservancy in East Hampton, recently expressed confidence that the nitrogen pollution crisis will prove a turning point. "My prediction is, a few years from now it will be said, 'This is what we used to do?'"

Mr. McDonald said in a recent interview that "a tremendous amount" of efforts across the board are coming together to address the questions of "technology, funding, implementation, and incentive" that must be solved to stem the pollution of Long Island waters, and called this "an exciting time."

"I've been doing this for 30 years," he said. "We've never been able to have the conversation. This is absolutely amazing."

“The evidence [of the problem] is overwhelming,” he said. “The technology is being looked at, the industry is being changed, and government is trying to manage all this.”

According to county officials, a recent report showed that nitrogen concentrations in one aquifer rose by 40 percent between 1987 and 2013, while levels in the deeper Magothy aquifer rose by 80 percent during that time span.

“We cannot have a bright, prosperous future without protecting our water quality,” Mr. Bellone told reporters during a conference call on Monday.

“We know what the problem is, and largely we know what the answer is.” The new fund, he said, could pay for water-quality infrastructure. Different things might be needed in varying parts of the county. “We recognize that there is not a one-size-fits-all solution.”

That could mean sewers in some parts of Suffolk, or, as is likely on the East End, underwriting a program to help homeowners replace outmoded septic systems or cesspools with state-of-the-art wastewater treatment systems that can remove a much larger percentage of nitrogen.

“We are open to every idea, the best ideas out there, to address this water-quality crisis,” he said. It is a problem that developed over decades, he said, “ultimately over a failure to implement the infrastructure needed to prevent it. A lot of the problems that were predicted are here.”

If the surcharge is approved, an average water district customer would pay about \$70 more a year. At present, those who rely on well water, like many in East Hampton who are without public water, would not be taxed for the fund, but Mr. Bellone said that discussions are taking place to tap into those residents for contributions. “We think it’s important for everybody to contribute,” he said.

Mr. Bellone said that there are 360,000 houses in the county with individual cesspools or septic systems that do not effectively treat wastewater and release unacceptable levels of nitrogen into the environment.

In a survey conducted for East Hampton Town's comprehensive wastewater management plan, Pio Lombardo, the consultant who prepared the plan, concluded, based on an analysis of factors such as the age of a house, that a large number of residences in East Hampton have substandard septic systems.

The wastewater management plan is being used by town staffers to prepare a blueprint for how community preservation fund money might be used on water-quality projects, should voters approve that idea.

The plan is slated for completion by June, said the town's natural resources director, Kim Shaw, but outstanding information, such as which new septic systems the county will approve for future use and specific details about the scope and range of the nitrogen problem here, presents a challenge in making decisions now about what initiatives the town might undertake.

The sense of urgency and determination to tackle the nitrogen pollution problem begins at the top of state government, with Gov. Andrew M. Cuomo taking the lead, according to Mr. Bellone.

Governor Cuomo created a Long Island Nitrogen Action Plan task force and funded the establishment of the Center for Clean Water Technology at Stony Brook University, a think tank for technological advancement developed by Southampton's former town supervisor, Anna Throne-Holst.

On the county level, establishing a stable revenue source for wastewater and nitrogen-reduction improvements was a key recommendation of a 2015 county water resources management plan and of a report on water resources prepared for the county by IBM.

"I see every level of government stepping up to the plate," Richard Amper, the executive director of the Long Island Pine Barrens Society, said during Monday's conference call. "The environmental and the economic challenge is the greatest one in the history of Long Island," he said. "We're going to fight this battle on . . . different fronts. . . . Nothing that is causing groundwater contamination is off the agenda."

Mr. Bellone said the county plan had been developed through discussions among civic leaders, environmental advocates, elected officials, and members of the business and labor communities.

A bipartisan group of elected officials, along with representatives of environmental groups including the Citizens Campaign for the Environment, the New York League of Conservation Voters, and the Nature Conservancy, and trade industry groups such as the Long Island Builders Institute and the Long Island Contractors' Association, flanked Mr. Bellone as he made the announcement about the referendum on Monday.

“Traditional septic systems were not designed to remove nitrogen,” East Hampton Town Supervisor Larry Cantwell said in a recent interview.

But, while improvements are needed, he said, “our hands are bound a little by the county’s approval of new technology.” The town is working on other pollution-abatement fronts — preserving wetlands and testing barrier systems that could protect water bodies from pollution, for example — “but then it’s nitrogen,” he said. “And nitrogen is septic systems.”

The County Health Department is testing systems that can drastically reduce the nitrogen emitted in wastewater, and technology that can reduce it even further, by 75 to 80 percent, is reportedly being worked on at the Stony Brook center. The improved systems are expected to be made available at a cost comparable to that of traditional systems.

According to county health officials speaking on Monday, approval of several new systems now in trials could come in late summer or early fall, and a second phase of trials will begin. Installing the new technology would no longer require individual review and approval, they said; permits could be issued “as of right” for approved systems.

The difficulty in obtaining Health Department approval for modern-technology septic systems that better treat wastewater has long been a frustration for Kevin McAllister, the founder of the environmental group

Defend H2O, who has been urging individual municipalities to adopt their own, stricter septic system standards.

“We’ve reached the tipping point. We have to start somewhere,” he said. Mr. McAllister has also urged East Hampton to adopt a law similar to one in the Town of Brookhaven setting strict standards for nitrogen emissions in particular waterfront or water protection zones. Though set for a public hearing by the town board, it was withdrawn for revision and a hearing has not yet been rescheduled.