

WATCHDOG

Suffolk septic proposal

County weighs costlier system to curb pollution

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Suffolk County homeowners who build or renovate their residences would have to install high-tech septic systems that can cost double the amount of a traditional system, according to a proposed water quality initiative by County Executive Steve Bellone.

Bellone's proposed sanitary code amendment, on which county legislators will vote Wednesday, is the first step in a \$4 billion subwatersheds wastewater plan to phase out aging septic systems and cesspools over 50 years. The proposal aims to reduce nitrogen pollution that officials have blamed in part for fish kills, algal blooms and beach closures.

But critics have said that concerns about nitrogen pollution are overstated and that county officials have yet to prove the systems, which cost about \$20,000 to install plus yearly \$300 maintenance costs, are effective at improving water quality.

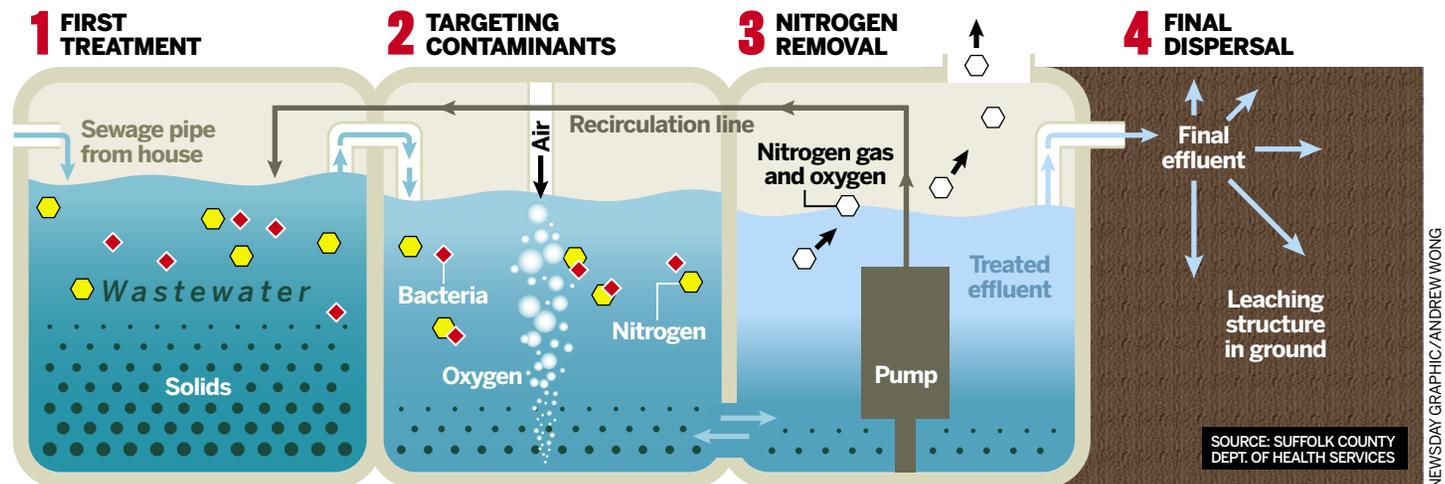
"You're going to tell me I have to drop \$20,000 into the ground and then have to pay for it every year? If you showed me this was something really having an impact and is necessary, I'll come up with the money," said Royal Reynolds, a former county engineer who is part of a coalition of engineers and scientists who have questioned the subwatershed plan.

Deputy County Executive Peter Scully, the county water quality czar, said that Suffolk has a stringent certification process for the systems and that computer models show they would help improve water quality in 10 years.

"You don't want to continue to put old technology in the ground," Scully said.

About 75% of Suffolk is unserved, and there are about 380,000 properties with outdated cesspools or septic systems, county officials said.

ADVANCED SEPTIC SYSTEM Many models exist. Here's how they generally work in reducing nitrogen in wastewater.



Wastewater enters the first chamber, where **solids** and sediment are allowed to settle. The water then moves on to the next stage.

Air is pumped in, feeding **oxygen** to "good" **bacteria** in the water so they can begin the process of converting **nitrogen** contaminants into nitrogen gas and oxygen.

A **pump** recirculates remaining solids and **treated effluent** to complete the process, resulting in **nitrogen gas** and **oxygen** being vented into the atmosphere.

The **final effluent**, which represents a 70% reduction in total nitrogen, is released into a **leaching structure** and dissipated into the ground.



Julia Ballas and son Eric outside their Mastic Beach home.

The proposed amendment would require innovative alternative, or IA, on-site wastewater treatment systems in new residential and commercial construction, as well as in residential renovations that increase the number of bedrooms, starting in July 2021. The proposal is expected to affect 1,000 homes and 200 commercial properties a year, officials said.

The measure also would allow more flexibility for sewage treatment plants in downtown areas, which officials said could help with redevelopment efforts in areas such as Mattituck.

The Suffolk Board of Health approved the amendment in July.

Supporters, including local environmental groups and a builder association, hailed the proposal, saying it is backed by "rigorous science" and would improve water quality while creating jobs.

"Sewage from failing and outdated septic systems is polluting our bays, harbors and drinking water, and we must take action to preserve our way of life and protect public health," Bob DeLuca, president of the Group for the East End, said in a statement.

While environmentalists and Bellone's administration have expressed concern that nitrogen pollution is harming Long Island's drinking water supply,

nitrogen is not an issue for Suffolk County Water Authority wells, according to spokesman Tim Motz, who said the agency supports Bellone's initiative.

East Hampton, Southampton, Shelter Island and Brookhaven Towns already require low-nitrogen septic systems in at least some new construction. More than 1,000 such systems have been installed in Suffolk, and homeowners have received state, county and town grants to replace existing septic systems, a process that costs about \$25,000 on average, officials said.

But homeowners would likely have to install the systems at their own expense in new construction. Scully said officials are working to get grant funding for lower- to median-income households and noted the systems are less expensive than sewer connections.

Traditional systems cost between \$5,000 and \$10,000 to install on average but release at least triple the amount of nitrogen, according to data provided by the county. The county has given provisional approval to eight innovative systems, six of which are meeting a threshold of releasing 19 milligrams of nitrogen per liter, according to data provided by the county.

Bayport resident Patricia Lay-

ton said the IA septic system's high cost has created challenges for her sister-in-law, Julia Ballas, who became homeless after superstorm Sandy in 2012 and who is finally rebuilding her Mastic Beach home with the help of New York Rising. Because the home is near water, Brookhaven Town code requires she install an IA system, but it is expected to cost \$40,000, Layton said.

Ballas cannot afford that. She is eligible for a county grant, but it would count as taxable income under an Internal Revenue Service decision, which the family fears will cause her to lose eligibility for benefits such as food stamps and Medicare.

"It's so much aggravation," said Layton, 68, a self-described housewife.

County officials are working with Layton and appealing the IRS ruling, Scully said.

Costs also can go up because of the system's electric use. County officials said they are recommending generator hookups in areas prone to power outages because toilets may not flush after three days without power.

"I support this bill but I have a serious issue with what it's going to cost people to do this," Legis. Anthony Piccirillo (R-Holtsville) said in an environmental committee Monday.

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