



Nassau County groundwater study needed, legislators say

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By Jennifer Barrios



Assemb. Michelle Schimel (D-Great Neck) and state Sen. Jack Martins (R-Old Westbury) are seeking \$3 million in the state budget for a study of Nassau County's groundwater. Photo Credit: James Escher

Two state legislators are seeking \$3 million in the state budget for a study of Nassau County's groundwater that would yield details about exactly where and how the county's drinking-water source is being overtaken by saltwater.

If successful, the effort by Sen. Jack Martins (R-Old Westbury) and Assemb. Michelle Schimel (D-Port Washington) would grant the money to Nassau, which would work with the U.S. Geological Survey to sink new monitoring wells in the county, then test the wells to provide information about saltwater intrusion and flow in the aquifers.

“We have a responsibility to know what’s happening below the ground,” Martins said. “Unfortunately we haven’t had the benefit of that for perhaps decades.”

Schimel called the study “a campaign for the groundwater of Long Island.”

“Its time has come,” she said. “We need real information, because real information will direct policy.”

Long Island is a federally designated sole-source aquifer region, meaning the Island’s nearly 3 million inhabitants rely entirely on the underground water for their supply.

The study would provide updated details about the state of the aquifer system in the county, said Frederick Stumm, research hydrologist with the USGS New York Water Science Center in Coram, who cowrote the proposal.

“I know it’s kind of crazy, but with the millions of people that rely on the sole-source aquifer system, there is no federal program to do research or to monitor the groundwater quality or quantity or even where the saltwater is located,” Stumm said.

Long Island’s aquifer system consists of several layers, including the Upper Glacial, the Magothy — from which most of Nassau and Suffolk’s water is taken — and the Lloyd, the deepest, purest and most fragile.

Pumping from the aquifers can draw down the amount of freshwater and cause it to be replaced by saltwater, rendering it unfit for public consumption — such as what has happened on parts of the north and south shores.

The need for a study arose after the county began examining New York City's plan to reopen 23 of its shuttered Queens wells that dip into the aquifer system under geographic Long Island during its upstate aqueduct-repair project, Martins said.

While the city has since abandoned that plan, it became clear that there was little current information about the state of the aquifer system under Nassau, or how the pumping in Queens or elsewhere would affect it, said Mindy Germain, executive director of Residents for a More Beautiful Port Washington.

“We have so many unanswered questions about the sustainability of our water supply,” said Germain, whose organization is facilitating the Western Long Island Aquifer Committee, a coalition group focused on water issues. “We need more current data to show us if we keep doing what we're doing, how will that impact the saltwater-freshwater interface?”

What information is available about saltwater intrusion is dated, Stumm said.

“We don't know where the saltwater interface is in the two critical aquifers for Long Island,” Stumm said, adding that the aquifer system on the South Shore — where saltwater intrusion has forced coastal communities to rely on the Lloyd for drinking water — hasn't been studied in over 30 years.

The study would take 2 1/2 years and would cost \$3.2 million. The USGS would provide \$150,000 in matching funds.

“I thank Senator Martins and Assemblywoman Schimel for advocating for funds to conduct a comprehensive groundwater study to protect our drinking water,” Nassau County Executive Edward Mangano said in a statement.

Stumm said the study would include “putting a network of outpost wells, filling in gaps in information, and using the information in a numerical model to make predictions for management. Is the current state of affairs sustainable?”

He said there is more information available about the groundwater under Suffolk County, in part because most of that county is served by the Suffolk County Water Authority, as opposed to the dozens of water purveyors in Nassau.

“They’re very proactive about saltwater intrusion issues and monitoring,” Stumm said of the water authority.

In order for the effort to be funded, both houses of the legislature would have to agree to include the money for the study in the budget, and Gov. Andrew M. Cuomo would have to sign it.

“If we don’t get it, we’re going to have to keep trying,” Martins said. “The county doesn’t have the resources to do it, and if the state doesn’t have the money to do it and the feds are not doing it, we’re left with exactly the same situation we’re in right now, which is frankly unacceptable.”

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