

WATER WORRIES IN NASSAU

NYC plans to reopen Queens wells, prompting concern about impact on LI groundwater

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A WELL OF ANXIETY

- NYC plans to reopen wells in Queens and pump water from under Nassau
- Critics fear move will harm LI groundwater, increase saltwater intrusion on shorelines

BY JENNIFER BARRIOS

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New York City is seeking to reopen dozens of its wells in Queens, pumping millions of gallons of drinking water from the aquifers under Long Island — a move that some policymakers and environmentalists say could harm Nassau County's access to its only source of water.

"The city will be de facto taking Nassau water once they turn those wells on," said Sarah Meyland, director of the Center for Water Resources Management at the New York Institute of Technology in Old Westbury.

The city plans to reopen as many as 52 of its 68 shuttered wells in Queens as part of its "Water for the Future" program, a \$1.5 billion project by the city's Department of Environmental Protection to repair leaks in the city's upstate aqueduct system.

While part of the aqueduct is closed for repairs, estimated to begin in 2021 and take as long as 10 months, the city plans to make up the loss in



Pumping water from NYC wells, such as this one in Laurelton, Queens, could affect Nassau.

NEWSDAY / ALEJANDRA VILLA

water supply by pumping more than 33 million gallons a day from the aquifer system that lies under geographic Long Island by rehabilitating the currently dormant wells.

The city has maintained state permits to operate the wells, some of which have not been operated for nearly two decades, and plans to conduct public hearings on the environmental impact of the pumping this fall, a source said. Work to reopen the wells is expected to start in 2016.

The city has yet to release more data on the plan's effect, but documents show that it is eyeing the wells as a continued

source of water, even after the aqueduct project is completed.

The move has caused alarm among some in Nassau County, who fear the city's pumping will cause increased saltwater intrusion on the county's north and south shores, a shift in the direction of underground plumes of contamination, and a general drawdown of the aquifer system, the sole source of water for Nassau's nearly 1.4 million residents.

"There is a natural tendency for water to want to flow from Nassau into Queens," Meyland said. "As soon as those wells come on, you're going to increase the natural

loss of water from Nassau into the Queens part of the aquifer system."

Suffolk County, which also relies on the aquifers as its sole source of water, wouldn't likely see an effect, since the underground topography keeps water in Suffolk from flowing into Nassau, she said.

State Sen. Jack Martins (R-Mineola) wrote to state Department of Environmental Conservation Commissioner Joe Martens last month, urging him to ensure the city does a full analysis of the environmental impacts of its plan — including the effect on Nassau County.

"Water doesn't know politi-

cal boundaries," Martins said. "So we have these rules and requirements to make sure one side doesn't take risks at the expense of everyone else. And if there's one thing we're never going to risk, it's going to be the integrity of our groundwater here on Long Island."

Martins said he also asked the DEC to consider suspending the city's permits to operate the wells pending review.

"It's the equivalent of having a blank check out there that the Department of Environmental Protection can come and cash at any time without consequence, without concern about the potential environmental impacts on western Nassau County," he said.

The city did not make a representative available for comment.

Ron Busciolano, supervisory hydrologist in the Coram program office of the U.S. Geological Survey's New York Water Science Center, said when the Queens wells were operating, the water levels were lowered by as much as 30 feet in some areas.

A 1986 DEC report on Long Island's groundwater found that pumping at the then-ac-



Contractors work to build a bypass tunnel to repair NYC's Rondout-West Branch aqueduct tunnel in Newburgh.

AP / JEFF GOULDING

tive Queens wells resulted “in serious effects on the aquifer in that area and in underground water flow across the border from Nassau.”

Those levels have rebounded since the pumping stopped, but resumed pumping in Queens could cause underground contaminants to move and increase saltwater intrusion on the shores, Busciolano said.

“I think western Nassau County, if they [the city] start pumping, would be the area you would see the effect,” Busciolano said.

Some water authorities in Nassau County are alarmed.

“Saltwater intrusion is a major, major concern of ours with the activation of the Queens wells,” said Greg Graziano, superintendent of the Water Authority of Great Neck North. “Changing flow direction is a concern. There may be plumes out there that have not impacted our wells.”

The Water Authority of Great Neck North penned a letter last month to the DEC opposing the reopening of the wells until a full environmental review is done, a position echoed by Assemb. Michelle Schimel (D-Great Neck), who issued a statement May 1 expressing her own concerns about the project.

But Michael Tierney, superintendent of the Water Authority of Western Nassau, which the city approached in 2012 under a now-abandoned proposal to purchase water

AQUIFERS UNDER LONG ISLAND

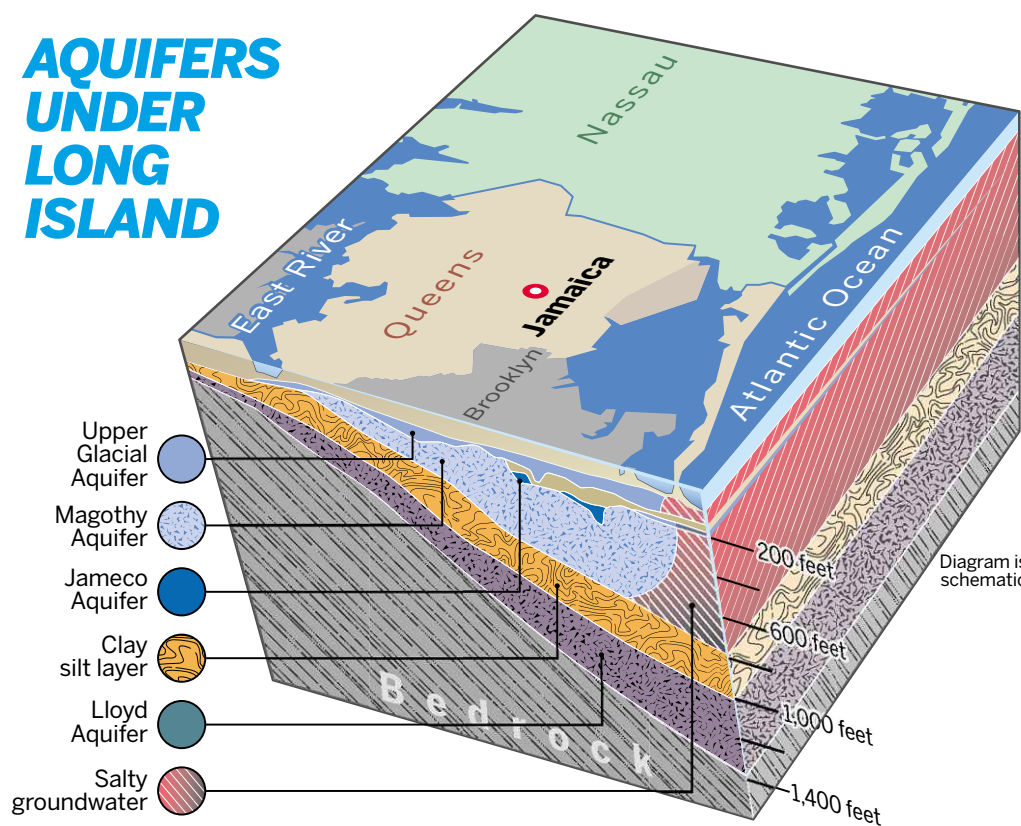


Diagram is schematic

from two Nassau providers in addition to reopening the Queens wells, said he didn't believe there would be an impact on Nassau.

“I really do not see the drastic issue on the water supply,” Tierney said. “They are not trying to impact us or anybody else in Nassau County or Suffolk County.”

Andrew DeMartin, chair-

man of the board of the Manhasset-Lakeville Water District, said he wanted to reserve judgment until the city's plans were firmed up.

“Until I see the science behind what effect it will have on the aquifers, I don't necessarily think there's a reaction to it,” DeMartin said. “I think the people of Queens are allowed to the water under

their property, just as the people in Nassau are.”

Joe Martens, commissioner of the DEC, one of the agencies that would oversee the reopening of the wells, pledged to monitor the situation.

“We're concerned any time there's an impact on groundwater, so we're going to be involved,” Martens said. “I think the city will be more than

happy to cooperate with us and provide us all the information we feel like we need in order to evaluate the impacts on groundwater.”

Nassau County did not respond to a request for comment on the city's plans. But in February 2012, Susan King, then-director of environmental health programs for the Nassau County Department of Health, wrote a four-page letter in response to the city's draft environmental impact statement, in which she expressed concerns about the plan. She urged the city to describe how it planned to analyze the effect of its pumping on the aquifers.

It “would be expected to have a dramatic effect on the water table elevation in eastern Queens and western Nassau,” King wrote. “The potential drawdown of the water table could have a substantial impact to Nassau County water suppliers and should be thoroughly studied and modeled prior to implementation.”

The final environmental impact statement the city issued in 2012 did not address the full effects of reopening the Queens wells; a second environmental impact statement or review on the well project is expected to come out this fall.

“The question is, what's that impact going to look like?” Meyland said. “That is a black hole right now. The city's not talking about it. And there's no one in Nassau County capable of mounting opposition to this.”