The Independent

## Blue-Green Algae Blooming

## Bacteria found in East Hampton and Southampton ponds

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Stony Brook University sampling has found the presence of new blue-green algae blooms in Southampton's Mill Pond and East Hampton's Wainscott Pond.

Due to these findings, health officials are asking residents not to use or swim in these waters, and to keep pets and children away from the area. Contact with water that appears scummy or discolored should be avoided, but if it does occur, rinse off area with clean water immediately. Side effects could include nausea, vomiting, or diarrhea; skin, eye or throat irritation; or allergic reactions or breathing difficulties.

These algae blooms, known as cyanobacteria, are naturally present in lakes and streams in low numbers, and become abundant with a high presence of nitrogen and phosphorous. The blooms form in shades of green, blue-green, yellow, brown, or red, and may produce floating scums on the surface of the water or may cause the water to take on "paint-like appearance," according to the Suffolk County Department of Health.





Blue-green algae, known scientifically as cyanobacteria, has been detected at high levels in Southampton's Mill Pond and East Hampton's Wainscott Pond, forcing closures to protect public health. Independent/Stephen J. Kotz

"The role of Suffolk County Department of Health Services is to protect public health," said Grace Kelly-McGovern, public relations director for the organization. "Therefore, when we receive notification about harmful algal blooms from the state or other reports, we issue an advisory notifying the public to avoid contact with the water."

Her group, along with the New York State Department of Environmental Conservation and the Southampton Town Trustees put up warning notices along access points. For trustee environmental analyst James Duryea, it's important to put notices on the opposite side of Mill Pond, where there's a waterfowl sanctuary. It's typically where residents access the pond. Signs were also posted along Deerfield Road.

"It's no surprise to anyone Mill Pond is facing a host of water quality issues," said Southampton Town Chief Environmental Analyst Marty Shea. "These are ongoing issues, and there's no easy solutions with Mill Pond."

The decline in water quality is due to several sources: the watershed for the pond is a big farming district and has a legacy of farming that goes back historically for hundreds of years, the town has been wrestling with road runoff issues, and there are residential homes around the immediate shoreline contributing excessive nitrogen with septic system

waste. Many properties also have fertilized lawns that extend down to the edge of the pond, and chemicals from them are seeping into the underlying groundwater table every day.

To counter these, the town has taken several measures following the funding of various studies looking into water quality improvement of the pond. Drainage work was done along Deerfield Road under town Director of Municipal Works Christine Fetten over the last few years, and board members are encouraging homeowners to upgrade their septic systems and add native vegetative wetlands and non-fertilized buffers when coming in for permits for upgrades.

But there are also other factors that complicate the situation. The pond is relatively shallow, so it heats up quicker than a lot of other ponds and lakes, and there's a large carp population. Carp are known to wallow in the mud and bring up a lot of the sediments and nutrients — phosphorous and nitrogen — that are in the pond bottom into the water column making it more advantageous for algal blooms to occur, according to Shea. He added the town trustees are seeking Community Preservation Fund money to address the carp component of the equation. These funds are also being used to purchase surrounding developed and non-developed parcels around the pond. Any that are developed are being razed and returned to their natural state.

"Even if we were to buy out every single property within the entire watershed and restore every single property back to natural vegetation, which is certainly desirable from a water quality improvement perspective, it would still take as long as 50 years to see marked improvement," Shea said.

Mill Pond is situated in the upper watershed of Mecox Bay system and has a naturally-occurring inlet that's been open for four months. Continuous flow of water does help in some respect to flush out waters, although the solution to pollution is not dilution, Shea said. The algal bloom will also have a definite impact on Mill Creek, a system of smaller ponds, and Mecox Bay, which the creeks flow into. Mecox Bay has a very productive oyster and clam population.

"We have been trying to do everything we can," Shea said. "There is no chemical we can add, no overnight fix, so the more we can put into preservation particularly with respect to the immediate waterfront properties, the better shape we'll be in trying to minimize additional water quality impacts."

On the North Fork, health officials have asked residents not to swim or wade in Laurel Lake in Laurel after Stony Brook University confirmed the presence of a new blue-green algae bloom in the waters.





