

Concerned Citizens of Montauk monitors East End water quality for bacteria and harmful algal blooms

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Only in Newsday

On a summer Monday morning, 17-year-old Natalie Yellen recorded the time at Navy Beach in Montauk before she kicked off her Birkenstock sandals and walked into Fort Pond Bay.

Once knee deep, she pulled out a “thermogun” from her back shorts pocket and took the bay’s temperature. From her other pocket, she pulled out a small plastic baggie and filled it with water, carefully sealing the edges once it was full.

Only a few miles away at Nature Preserve Beach, Jessica James, 70, walked into the waters of Lake Montauk. Her knee-high rubber boots kept her Carhartt overalls dry as she also filled a plastic baggie with water, discovering an oyster, or “nature’s filters,” as she called them, at the bottom of the sand.

But oysters alone won’t be able to clean the waters on the East End. After last month’s historic rainfall, the nonprofit Concerned Citizens

of Montauk reported extremely high levels of bacteria and algal blooms. It's part of a more consistent pattern of degraded water quality the group has seen in recent years, executive director Kay Tyler said.

WHAT TO KNOW

- **A small team of staff, interns and volunteers** at the nonprofit Concerned Citizens of Montauk collects water samples from 31 test sites in East Hampton and Montauk every Monday morning throughout the year.
- **The group has reported extremely high levels** of bacteria and algal blooms recently, part of a more consistent pattern of degraded water quality it has seen in recent years, executive director Kay Tyler said.
- **The concerning trends** drive the nonprofit to spread awareness of the results by publishing data each week, helping the Town of East Hampton and a Stony Brook University lab monitor water quality.

"These results are through the roof," she said of recent readings.

The concerning trends drive the nonprofit to conduct the testing and spread awareness of the results by publishing data each week, helping the Town of East Hampton and a Stony Brook University lab monitor water quality.

Staff, volunteers, interns

Yellen, a high school intern, and James, board vice president and co-outreach committee chair, are just two of the small team of staff, interns and volunteers who collect water samples from 31 test sites in East Hampton and Montauk every Monday morning throughout

the year.

Jessica James, of Concerned Citizens of Montauk, holds an oyster she found while taking water samples in Montauk on Monday. Credit: Tom Lambui

Samples are taken from both bathing and nonbathing areas and tested at the nonprofit's office in downtown Montauk for enterococcus — a bacterium that can indicate the presence of potentially dangerous bacteria in the water like E. coli — and algal blooms that can harm people and pets.

The data is published on its website. Tyler said that the Town of East Hampton uses this data as well, to monitor the health of local waters and post signs where needed. The nonprofit also shares samples with the Gobler Lab at Stony Brook Southampton, which then shares bloom occurrences with the state Department of Environmental Conservation.

Chris Gobler, a marine and atmospheric sciences professor at Stony Brook University, said the lab collects data from hundreds of

samples per day from the Suffolk health department, along with those collected by about 50 groups, including Concerned Citizens of Montauk.

While the health department focuses on bathing beaches, Concerned Citizens of Montauk takes samples from nonbathing beaches as well.

"They are doing a great job at adding additional information and sampling," he said. Testing nonbathing beach areas "is useful, because sometimes those are the sources of bacterial contamination to other sites."

Yellen, of Montauk, said, "I thought it was important to do this type of thing, to protect the water and make sure people stay safe."

Tyler said many Montauk residents are unaware of the water quality issues and how they directly could impact their health. She herself had lived with her family in Montauk for 12 years before joining CCOM last year, and only recently learned of the issues.

"As a parent, that really bothers me," said Tyler, who has three children. "In Montauk ... we're small enough that we can do innovative things and try to do something about it, rather than just follow the antiquated system."

More hazardous blooms

One of the testing sites, South Beach at Lake Montauk, had been closed to the public since 2005 due to high levels of bacteria. This year the town opened the area to residents, constructing a parking lot, installing a new septic tank in the public bathroom and adding native plants on the walkway to the beach, James said.

In addition to the sites tested for enterococcus, the nonprofit samples water from eight spots at Fort Pond for toxic algal blooms.

Gobler said these blooms create biotoxins that can be a "threat to animals or people if they go swimming near them."

For the past four weeks, Fort Pond tested as high-risk for algal blooms, which occur when they receive a combination of sunlight, warm water temperatures and nutrients such as nitrogen and phosphorus, James said.

Tyler said that in previous years, each location would have one hazardous bloom a year, usually in September or at the end of the summer season. But this season, she's seen at least three, beginning in June.

"That's what's alarming to me," she said. "That's why ... I feel more of an urgency now."

Last year, the swimming portion of the Mightyman Montauk Triathlon was canceled due to high algal bloom levels in Fort Pond, the race's traditional location, after heavy rainfalls.

Weekly testing

CCOM was founded in 1970 and has sought to protect Montauk's environment by focusing on coastal resiliency and environmental sustainability, in addition to water quality.

The nonprofit partnered with Surfrider Foundation's nationwide Blue Water Task Force in 2013 to test East End waters and publish data each week to the public. Along with another nonprofit, Peconic Baykeeper, they conduct testing from Riverhead to Montauk every

Monday.

Rebecca Holloway, 24, staff scientist at Concerned Citizens of Montauk, prepares a plastic baggie for water sample collection. Credit: Tom Lambui

Tyler said that testing only one day a week doesn't always give a full picture of what is going on in the waters.

For example, Aug. 19's testing occurred right after Long Island's historic rainfall, which destroyed infrastructure and damaged homes and buildings on the North Shore. Seeing higher bacteria levels after rainfall is common, she said.

"Something catastrophic could be happening in the water, but we won't know, because we're not testing on those days."

'Struggle' to keep it going

Since they have a small staff, Tyler said it's not feasible to test 31 locations every day. During the summer months, which is when bacteria levels are at their peak, the nonprofit relies heavily on high

school and college interns to help with testing.

In June, the nonprofit installed two monitoring systems in Fort Pond to measure weather conditions and other parameters every 20 minutes. In September, bacteria and HAB sensors will be added to the monitors, and the data will be accessible to the public.

Monitors cost about \$30,000 each, Tyler said. With fundraising they hope to add more monitors at more locations.

A small portion of the water-monitoring program is funded by Blue Water Task Force from grants it receives. The rest is funded privately by CCOM donors through fundraising, Tyler said. She said it's "very tricky to try to obtain grant funding for this because we don't exactly fit the requirements" for many grants.

"We struggle to keep this going, but we consider it to be one of the most important things we do for our community," she said.

