EASTERN LONG ISLAND BLUE WATER TASK FORCE

WATER QUALITY

R E P O R T

2023

bwtf.surfrider.org

BROUGHT TO YOU BY:







Front Cover: Sampling in Noyac, by Heidi Oleszczuk

Inside Cover: Sampling at Georgica Pond in East Hampton, by Surfrider Foundation Eastern Long Island Chapter

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BLUE WATER

THANK YOU TO OUR VOLUNTEERS AND PARTNERS

The Blue Water Task Force aims to provide year-round water quality information to the public to supplement seasonal monitoring by the Suffolk County Department of Health. This data is used to inform safe beachgoing and water recreation on Eastern Long Island.

Our first samples were collected in Montauk on June 6, 2013, so in 2023, we celebrated ten years of water quality monitoring. Over that decade, we have collected over 11,900 samples with the help of over 80 people. We are thankful to the volunteers, partners, and supporters of the Blue Water Task Force on Eastern Long Island, which includes the Surfrider Foundation Eastern Long Island Chapter, Concerned Citizens of Montauk, and Peconic Baykeeper. Your support and commitment make this program possible.

THANK YOU to our 30 volunteers and interns for your help with our 2023 sampling:

2023 EASTERN LONG ISLAND BLUE WATER TASK FORCE SAMPLERS

Megan Barron Charlie Boyar Carol Brown Kevin Cirincione Patrice Dalton Annabelle Dominguez Megan Fowkes Patrice Foronjy Christine Ganitsch Gretchen Gargano Sharon Kelly Linsey Kromer Albert Labrozzi Jim Lubin Victor Masnyj Sarah Matos John McLane Paul Kuzman Peter Meeker Wendy Niceberg

Heidi Rain Oleszczuk Tom Oleszczuk Larissa Potapchuk Gregg Robinson Pauline Rosen Brian Shah William Sharp Viktoria Skobodzinski Waban Tarrant Jane Weissman

For more information about volunteering, please contact bwtf@easternli.surfrider.org

Fort Pond Bay in Montauk. Photo: CCOM.

INTRODUCTION

The Blue Water Task Force (BWTF) is the Surfrider Foundation's volunteer water quality monitoring program that generates critical water quality information in coastal communities around the country to inform safe beachgoing. With a national network of nearly 60 BWTF labs, Surfrider chapters use this program to raise awareness of local pollution problems and to bring together communities to implement solutions.

On the East End of Long Island, the Surfrider Foundation Eastern Long Island Chapter partners with two other nonprofit organizations – the Concerned Citizens of Montauk (CCOM) and Peconic Baykeeper – to perform year-round water quality monitoring. In 2023, we had 83 sampling locations on the East End. Our Blue Water Task Force team samples weekly during the summer, biweekly during the fall and spring, and monthly during the winter.

The BWTF water quality information augments the data provided by the

Suffolk County Department of Health Services through their seasonal beach program. The County only monitors lifeguarded bathing beaches during the summer swimming season, while the Blue Water Task Force covers a variety of popular recreational areas including ocean and bay beaches, estuaries, and coastal ponds, which may not have lifeguards present. The Blue Water Task Force also tests stormwater outflows and creeks as they can carry pollution into recreational waters.

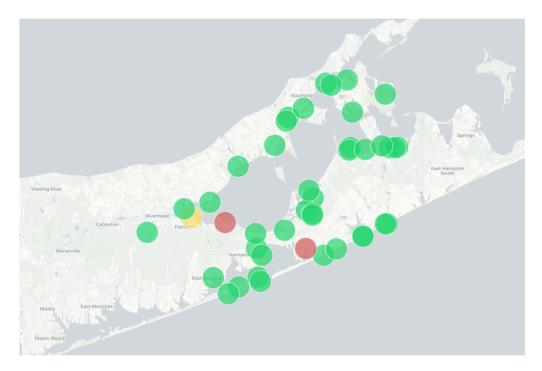
Water quality samples are tested for the presence of enterococcus, a type of fecal bacteria that indicates the presence of human or animal waste in the water. Elevated levels of enterococcus increase the likelihood that other pathogens are present in the water, which can potentially make people sick. Water quality results are compared to the health standard used by New York State and Suffolk County, specifically 104 colonyforming units of enterococcus per 100 milliliters (104 cfu/100mL). Our water quality data is posted online at **bwtf.surfrider.org**. We encourage everyone to check the most recent test results before heading out for a swim.



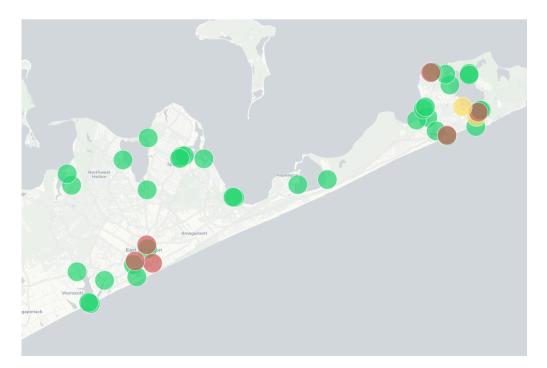
WHERE WE TEST

For the full list of sample locations and results, visit the interactive maps on the Blue Water Task Force website: **bwtf.surfrider.org**

NORTH FORK AND SOUTHAMPTON:



EAST HAMPTON AND MONTAUK:



PROGRAM UPDATES

Our number of sampling locations grew from 80 to 83 sites in 2023. The new locations were added around Shelter Island, listed to the right.

These sites were added in the summer of 2023, so they did not have as many samples as the more established sites, but we still included them for analysis. We are so grateful to all our dedicated volunteers who made this expansion possible.

In 2023, we were awarded funding by the Long Island Community Foundation to develop and implement a Quality Assurance Project Plan (QAPP) for the Eastern Long Island Blue Water Task Force. This QAPP will describe the sampling and analysis methods, quality assurance protocols, and training practices that all three partner organizations will follow to ensure that our program is producing reliable data that can

NEW SITES IN 2023:

- Shelter Island: Coecles Harbor Anchorage
- Shelter Island: Dering Harbor
- Shelter Island: West Neck Harbor Anchorage

be used by a growing audience of data users - local agencies and elected officials, other NGOs and community groups, academics and the general public. We look forward to finalizing our QAPP this year and have already held our first training sessions to ensure consistency in methodology across our wide network of participating volunteers and staff.

In 2023, we also started translating our BWTF social media captions to Spanish so we could offer updates in both languages.



The Shelter Island Marine Police arriving at Windmill Beach in Sag Harbor to drop off samples to volunteers. Photo: Heidi Oleszczuk, Surfrider Foundation Eastern Long Chapter.

The Eastern Long Island Blue Water Task Force monitors bacteria levels at 83 locations from East Quogue to Montauk and on the North Fork and Shelter Island. Water samples are collected at popular recreational sites, including ocean and bay beaches, estuaries, and coastal ponds. We also test stormwater and other freshwater flows that discharge at the beach. Water samples are processed in the labs at the offices of Concerned Citizens of Montauk or Peconic Baykeeper.

In 2023, trained volunteers and staff collected 1,813 samples from 83 sampling sites located across the East End.

Tables 1-5 below provide summary statistics for all water quality results obtained during 2023. The tables show the percentage of samples collected at each site that resulted in enterococcus bacteria counts that exceeded the state health standard of 104 cfu/100mL seawater. This translates to a percentage of high bacteria measured for each site as an indication of safety for recreational use.

MONTAUK	Site Type	2023 Sample Count	% High Samples, 2023
Ditch Plains: East of Jetty	Ocean Beach	27	4%
Fort Pond: Industrial	Pond	24	25%
Fort Pond: Ramp	Pond	25	36%
L I Sound: Fort Pond Bay at Navy Rd	Bay Beach	26	12%
L I Sound: Fort Pond Bay at Tuthill Rd	Bay Beach	23	9%
L I Sound: Soundview Drive Beach	Bay Beach	6	0%
Lake Montauk: Causeway South	Harbor	12	0%
Lake Montauk: East Creek	Harbor	23	65%
Lake Montauk: Harbor	Harbor	12	33%
Lake Montauk: Little Reed Pond Creek	Harbor	23	22%
Lake Montauk: Nature Preserve Beach	Harbor	23	22%
Lake Montauk: South Beach	Harbor	25	20%
Lake Montauk: Stepping Stone	Harbor	11	9%
Lake Montauk: West Creek	Harbor	16	31%
Surfside Place: Ocean Beach	Ocean Beach	26	4%
Tuthill Pond	Pond	23	30%

TABLE 1. SUMMARY OF RESULTS FOR MONTAUK SITES IN 2023.

TABLE 2. SUMMARY OF RESULTS FOR EAST HAMPTON SITES IN 2023.

EAST HAMPTON	Site Type	Sample Count 2023	% High Samples 2023
Accabonac Harbor: Louse Point Beach	Bay Beach	20	10%
Accabonac Harbor: Shipyard Ramp	Harbor	20	10%
EH Town Pond	Pond	16	6%
Fresh Pond: Beach	Bay Beach	24	13%
Fresh Pond: Creek	Creek	22	18%
Georgica Beach Assoc./ Third Jetty	Ocean Beach	26	0%
Georgica Pond Beach-side	Pond	26	50%
Georgica Pond: Cove Hollow Access	Pond	25	72%
Georgica Pond: Rte 27 Kayak Launch	Pond	25	72%
Hook Pond South	Pond	18	11%
Hook Pond: Dunemere Lane	Pond	18	83%
Napeague Harbor: East	Harbor	25	16%
Napeague Harbor: West	Harbor	24	17%
Northwest Creek: Ramp	Harbor	23	13%
Three Mile Harbor: Folkstone Drive	Harbor	21	5%
Three Mile Harbor: Head of the Harbor	Groundwater	20	15%



Stormwater runoff at Haven's Beach in Sag Harbor. Photo: Surfrider Foundation Eastern Long Chapter.

TABLE 3. SUMMARY OF RESULTS FOR SOUTHAMPTON SITES IN 2023.

SOUTHAMPTON	Site Type	Sample Count 2023	% High Samples 2023
East Quogue: Tiana Bay Park	Bay Beach	24	8%
East Quogue: Triton Lane	Ocean Beach	24	0%
East Quogue: Weesuck Creek Boat Ramp	Bay Beach	23	22%
Flanders: Long Neck Boulevard	Bay Beach	25	16%
Flying Point: Mecox Bay	Bay Beach	26	46%
Flying Point: Scott Cameron Beach	Ocean Beach	26	0%
Hampton Bays: Argonne Rd. East	Bay Beach	25	8%
Hampton Bays: Lynn Ave	Bay Beach	22	5%
Hampton Bays: Meschutt Beach	Bay Beach	21	0%
Hampton Bays: Old Ponquogue Bridge- Marine Park	Bay Beach	25	4%
Hampton Bays: Ponquogue Beach	Ocean Beach	25	0%
Hampton Bays: Red Creek	Pond	25	16%
North Sea Harbor, Noyac Rd.	Harbor	22	14%
North Sea: Big Fresh Pond	Pond	27	0%
North Sea: Little Fresh Pond North	Pond	26	46%
North Sea: Little Fresh Pond West	Pond	26	35%
North Sea: Towd Point	Bay Beach	23	0%
Noyac: Circle Beach	Bay Beach	26	0%
Noyac: Circle Beach Estuary	Harbor	26	4%
Sag Harbor: Havens Beach	Bay Beach	26	4%
Sag Harbor: Little Northwest Creek	Creek	23	61%
Sag Harbor: Long Beach	Bay Beach	26	4%
Sag Harbor: Windmill Beach	Harbor	26	27%
Sagg Main Beach	Ocean Beach	25	8%
Sagg Pond	Pond	26	69%
Southampton: Gin Lane/Bathing Corp.	Ocean Beach	26	0%
Southampton: Heady Creek	Creek	24	21%
Southampton: Old Town Beach	Ocean Beach	26	0%
Tuckahoe: Cold Spring Pond South	Pond	23	26%

TABLE 4. SUMMARY OF RESULTS FOR NORTH FORK SITES IN 2023.

NORTH FORK	Site Type	Sample Count 2023	% High Samples 2023
Cutchogue: Wickham Creek	Creek	26	12%
North Fork: Bay Ave, Mattituck	Bay Beach	26	19%
North Fork: S. Jamesport Ave.	Bay Beach	26	12%
Shelter Island: Coecles Harbor Anchorage	Harbor	19	5%
Shelter Island: Dering Harbor	Harbor	17	12%
Shelter Island: West Neck Anchorage	Harbor	19	0%
Southold: Breezy Point Inlet	Bay Beach	23	9%
Southold: Conkling Point Inlet	Bay Beach	23	0%
Southold: Goose Creek	Creek	26	35%
Southold: Richmond Creek East	Creek	26	23%
Southold: Richmond Creek West	Creek	26	54%
Riverhead: Indian Island County Park	Bay Beach	26	15%
Riverhead: Wildwood Lake	Lake	25	8%

TABLE 5. SUMMARY OF RESULTS FOR STORMWATER SITES IN 2023.

STORMWATER	Site Type	2023 Sample Count	% High Samples, 2023
Accabonac Harbor: E of Old Stone Hwy Culvert	Stormwater	8	13%
EH Fithian Lane: South Drain	Stormwater	26	92%
EH Methodist Lane Bioswale	Stormwater	5	100%
EH Village Green Bioswale	Stormwater	1	100%
Lake Montauk: Benson Dr. Culvert	Stormwater	19	95%
L I Sound: Soundview Drive Culvert	Stormwater	1	100%
Northwest Creek: Culvert	Stormwater	16	56%
Surfside Place: Outfall Pipe	Stormwater	12	50%

*Note: These sites have fewer samples because they are only collected when water is flowing. The bioswales remained dry for most sampling days this year as the native plants soaked up the excess stormwater that previously flooded the area.

Our 2023 results are consistent with trends detected in previous years. Each year our water quality results continue to indicate that many sites on the East End frequently experience bacteria levels that exceed health standards. Ocean and bay beaches generally test clean, seldom showing high bacteria levels because of the high volumes of water exchange and mixing that occur at these sites. However, bacteria can occasionally be elevated during the busy summer tourist season or after heavy rainfall or storm events, especially at bay beaches that are more sheltered and have less mixing than in the ocean.

The more chronically polluted locations include creeks, ponds, and outfalls that receive high volumes of stormwater runoff. Examples include Little Fresh Pond in North Sea and Fort Pond in Montauk. Smaller stagnant water bodies with high populations of birds and waterfowl also show frequent high bacteria levels, as seen in Hook Pond at Dunemere Lane.

These trends are clearly demonstrated in the data analyses presented below in the Key Outcomes section. You can also visit **easternli.surfrider.org** for additional tables that show how bacteria rates have fluctuated at some of our sampling sites since 2013.

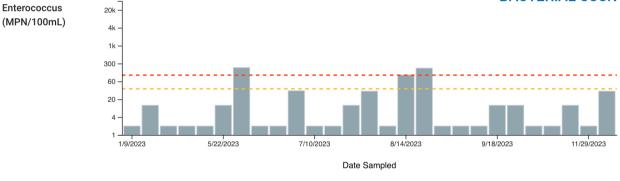
Photos: Some of the summer 2023 interns sampling, by Surfrider Foundation Eastern Long Island and CCOM.



KEY OUTCOMES

FORT POND BAY AT NAVY ROAD

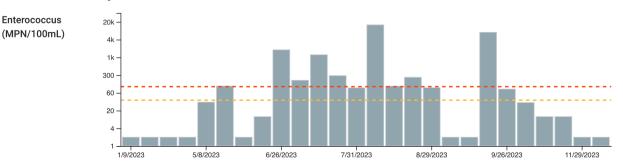
This East Hampton Town Beach is known as Navy Beach, due to its long naval history. While it is not lifeguarded, it is a popular spot for families and people of all ages to enjoy the calm bay water, watch the sunset, or have dinner and listen to music at the waterfront Navy Beach Restaurant. **12%** OF SAMPLES IN 2023 EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS



Fort Pond Bay: Navy Road Results

FORT POND: RAMP

Fort Pond is a freshwater pond in downtown Montauk frequently used for paddle boarding, fishing, and pedal boats. While there is no official bathing beach, children who attend a summer camp located on the Pond do like to swim here and the Mightyman Montauk Triathlon has hosted its swimming leg in the Pond as well, before high bacteria reading and harmful algal blooms made it too risky for competing athletes. Nearby septics and cesspools, stormwater runoff, and waterfowl all contribute to the pollution problems in Fort Pond. **36%** OF SAMPLES IN 2023 EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS



Date Sampled

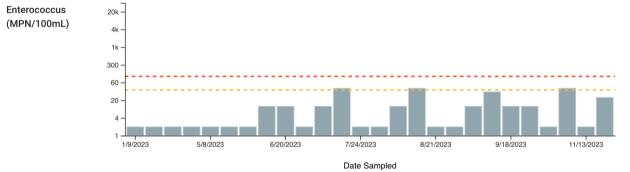
Fort Pond: Ramp Results

KEY OUTCOMES

GEORGICA BEACH ASSOCIATION/THIRD JETTY

Georgica Beach Association is a private beach next to the popular surf spot, Third Jetty. The public can access this beach by walking or driving east from the nearby public beach at Beach Lane in Wainscott. Occasionally, the cut at Georgica Pond is opened to encourage exchange with ocean water to reduce nitrogen levels that encourage algae growth and low dissolved oxygen levels in the pond (see below). U Y/O OF SAMPLES IN 2023 EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS

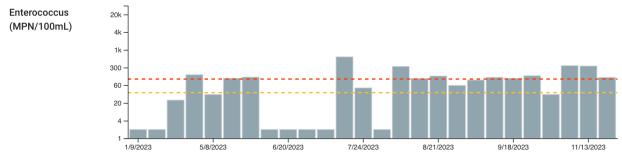
Georgica Beach Association/Third Jetty Results



GEORGICA POND: BEACH-SIDE

Georgica Pond is a 290-acre brackish pond that sits between East Hampton and Wainscott. It has long been a treasured recreational spot by the local community for sailing, paddling, fishing, and shellfishing. This recreational activity, however, has been diminished in recent years as the Pond has struggled with high bacteria levels and harmful algae blooms caused by septics and cesspools in the watershed, runoff from stormwater and agriculture, pet waste, and waterfowl. Always check <u>water quality reports</u> and <u>algae bloom advisories</u> before entering or fishing in Georgica Pond. **50%** OF SAMPLES IN 2023 EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS



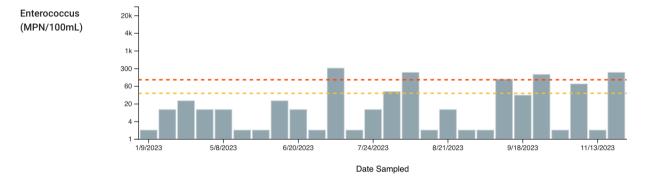


Date Sampled

KEY OUTCOMES

NORTH FORK: BAY AVE, MATTITUCK

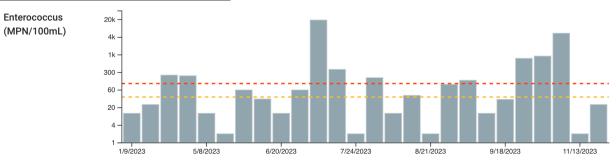
TThis is a Peconic Bayfront beach located at the end of Bay Avenue in Mattituck, next to the popular Veteran's Memorial Park. Bay Avenue Beach is a popular dog beach and launch site for various paddle activities. Beach erosion is a problem here, but dredge fill material has changed the beach profile over the past two years, creating a more shallow swimming area. It's also a popular spot for birders with a highly visible osprey nest. **19%** OF SAMPLES IN 2023 EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS



North Fork: Bay Ave, Mattituck Results

SOUTHOLD: GOOSE CREEK

Goose Creek is a freshwater creek that empties into Southold Bay. It is a popular access point for paddling in a more sheltered waterway than nearby Southold Bay. With known water quality problems most people do not swim in the creek, and the Town of Southold has worked with the Peconic Estuary Partnership to close up several stormwater outfalls that previously emptied into the creek. **35%** OF SAMPLES IN 2023 EXCEEDED HEALTH STANDARDS FOR BACTERIAL COUNTS



Date Sampled

Southold: Goose Creek Results

STOP SEWAGE POLLUTION

Outdated cesspools and septic systems are the biggest sources of water pollution on the East End of Long Island. Neither system adequately treats sewage from our homes or businesses; instead, they allow nitrogen and fecal pathogens to leach into our groundwater supply and surface waterways. This puts human health at risk and has caused massive problems with harmful algal blooms in our bays and coastal ponds since sewage pollution carries excess nutrients to our waters. Stormwater runoff also carries animal waste from pets and wildlife into our surface waters.

New advanced treatment septic systems are now available and approved for use in Suffolk County. These advanced systems provide better treatment of wastewater than regular septic systems, including a nitrogen removal rate of up to 90%. There are several incentive programs available to help encourage, require, and fund the installation of these new systems on Eastern Long Island.

Suffolk County residents can receive up to \$30,000 of non-taxable funds towards their septic upgrades through a combined county and state incentive program. To find information on how to apply for these grants, visit the <u>Reclaim Our Water Septic</u> <u>Improvement Program</u> website. Homeowners who live in the Towns of East Hampton or Southampton are eligible for an additional non-taxable \$20,000 - \$25,000 grant available through the <u>East End Septic Improvement Program</u>.

A coalition of environmental organizations - including all three BWTF partners - has been working to advocate for a new source of funding in Suffolk County to help pay for wastewater infrastructure upgrades, extensions, and maintenance. Our goal is to get a proposal on the ballot in 2024 asking for voters' support in establishing an additional 0.125% sales tax to pay for this new fund to reduce the impact of sewage and failing wastewater infrastructure on water quality in Suffolk County.



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CLEAN WATER SOLUTIONS

All three NGOs that collaborate to perform local Blue Water Task Force water testing also lead restoration projects to help improve water quality conditions on Eastern Long Island.

FLOATING WETLANDS

2023 was the third and final year of the Concerned Citizens of Montauk's floating wetland remediation pilot project in Fort Pond. Each year over 7,200 native plants, specifically chosen for their ability to thrive in Fort Pond's environment, were secured in custom mats called Beemats Floating Wetlands. As the plants matured, their roots absorbed excess nitrogen and phosphorus from the pond. The goal was to reduce the nutrient load in the pond and consequently reduce the extent and severity of the harmful algal blooms (HABs) that have plaqued Fort Pond for years. Nutrient analysis of the plants from 2023 is currently being performed by the Gobler Lab at Stony Brook University in Southampton.

OYSTERS IN ACTION

With permission from the Southampton Town Trustees, Peconic Baykeeper has operated a Community Oyster Restoration Program in Southampton's Cold Spring Pond since 2020. This project is designed to grow up to 150,000 oysters per year for water quality improvement and shellfish enhancement in Southampton Town Waters. Peconic Baykeeper has been scaling up every year to reach that annual goal. Since the project's inception, approximately 163,000 second-year oysters have been grown and seeded in Southampton Town. In addition to water quality improvement and shellfish enhancement, the program serves as an outreach hub with volunteers helping with maintenance and educational programs offered throughout the field season. Peconic Baykeeper also worked with the Southampton Town Trustees to establish two new shellfish sanctuary areas in 2023. This will help support a new "seed to sanctuary" goal for the program. Those interested in participating can email Peconic Baykeeper at info@peconicbaykeeper.org.



Photo: Close-up of the native plant growth in the floating wetland, by CCOM.



Photo: Pete Topping with oysters, by Peconic Baykeeper.

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CLEAN WATER SOLUTIONS

OCEAN FRIENDLY GARDENS

The Surfrider Foundation Eastern Long Island Chapter is addressing runoff that flows into Hook Pond with two Ocean Friendly Garden Bioswales installed in East Hampton Village one at the Village Green (planted in 2017) and the other at Methodist Lane (planted in 2021). Both sites were formerly large grass lawn areas that frequently flooded when it rained. As both gardens have grown over the last few years, they have performed really well to absorb and filter pollution from the massive amounts of stormwater and runoff that each site receives when it rains. By reducing the flow of polluted runoff, the garden is also helping to reduce the inputs of nutrients, pathogens and sediment into Hook Pond. Our chapter is currently bringing different community groups to this site to learn about its benefits. We have also worked with Piazza Horticultural and the Ladies Village Improvement Society board to develop a more sustainable lawn maintenance plan to reduce water waste even further.

HOW YOU CAN HELP

- 1. Upgrade your septic to an Advanced Treatment System. This is the most important action that residents can take to help stop water pollution throughout Suffolk County.
- 2. Use Ocean Friendly Gardening practices to maintain your yard. Skip chemical fertilizers and pesticides. Plant more natives.
- 3. Pick up your pet's waste.
- 4. Stay safe at the beach:
- Check water quality results here before heading to the beach.
- Swim at ocean or bay beaches with lifeguards on duty.
- Avoid swimming 24-48 hours after it rains, especially in ponds and enclosed bay and lake sites. Keep your kids out of streams and runoff at the beach.
- Do not enter the water where there are Blue-Green Algae Bloom signs posted, and do not let your dogs in the water either!
- Rinse with freshwater before you eat or leave the beach.



THANK YOU TO OUR SUPPORTERS

Our 2023 results are made possible thanks to generous donations from:

- Town of East Hampton Community Preservation Fund, Water Quality Improvement
- The Kate W. Cassidy Foundation
 Long Island Community Foundation
 The Walrath Foundation

We'd also like to thank our dedicated volunteers for their continued efforts to inform our community about our local water quality.

This report is brought to you by the Surfrider Foundation Eastern Long Island Chapter.

easternli.surfrider.org

Photo of sampling at Georgica Pond by the Surfrider Foundation Eastern Long Island Chapter.

FORCE

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