2021 LONG ISLAND SOUND BEACH REPORT

BASED ON DATA FROM 2018-2020

PRESENTED BY

Save the Sound®

Rocky Neck State Park — East Lyme, Connecticut

TABLE OF CONTENTS

2021 LONG ISLAND SOUND BEACH REPORT

BASED ON DATA FROM 2018-2020

Save the Sound is a member-supported organization. Our mission is to protect and improve the water, land, and air of Connecticut and the Long Island Sound region. We use scientific and legal expertise and bring people together to achieve results that benefit our environment for current and future generations.

www.SaveTheSound.org

1385 Boston Post Road
Larchmont, NY 10538
(914) 381-3140

900 Chapel Street, Suite 2202
New Haven, CT 06510
(203) 787-0646

Save the Sound®

EXECUTIVE SUMMARY

Welcome to Save the Sound's 2021 Long Island Sound Beach Report. We publish beach reports to provide the public and local officials with an analysis of water quality conditions at our region's swimming beaches. Our analysis focuses on how our beaches rank when measured against the state criteria for safe swimming, which is fecal bacteria levels measured weekly during the swimming season. We have combined the beach monitoring data with rainfall data to show how wet or dry weather influences conditions at each beach. Tracking fluctuations in water quality connected to rainfall provides insights to possible pollution sources that can then be investigated, confirmed and addressed. Please read "Water Pollutions Sources and Actions You Can Take" to learn how you can help reduce water pollution and improve the water quality at your favorite beach.

This report and the grades presented here were produced using Save the Sound's online tool www.SoundHealthExplorer.org, which compiles and publishes more than 15 years of beach monitoring data from over 200 Long Island Sound beaches for all to view, download, and share. The beach monitoring data are collected by local and county departments of health in each beach community, in accordance with state recreational water criteria, and posted to a federal water quality database.[1]

East Wharf Beach — Madison, Connecticut

Grantland Beach — Strongs Neck, New York

BEACHES ARE A PUBLIC TRUST

Long Island Sound is encircled by beautiful beaches. Millions of people visit these beaches each year, supporting our coastal economies and forging personal bonds with the Sound estuary. Sadly, most of the coastline of the Sound is privately owned—including many of the best beaches. Of the 204 beaches on the Sound, a full one-third (73) are private. Those are located predominantly in Nassau, Suffolk, and Westchester counties, and New York City. There are 18 beaches in New York that are restricted to local residents only. In Connecticut a successful lawsuit brought by a resident made excluding non-residents from local beaches illegal. This created another class of beaches that are designated "public" but which require visitors to get passes at a different location and in some cases during business hours only, making spontaneous same-day visits difficult. That leaves 113 beaches that are open to all visitors, though most charge a fee for parking and/or entry, and some of those are priced to be out of reach to low income residents, especially those with large families.

As we face a warming climate and an American racial justice reckoning, Save the Sound calls on our coastal communities to do away with local ordinances that make it hard or impossible for the wider public to enjoy the unique pleasures of a day at the beach. Reasonable beach access fees can spread the cost of beach maintenance and staffing across all the people who visit the beach, without overburdening or excluding non-local beachgoers. The beach monitoring and beach replenishment that coastal communities rely on are funded with state and federal dollars, allowing everyone access to the water below the high tide line—but most people don't know this is their "Public Trust Right" including the guards who check passes and collect fees. People who exercise their right to access the "wet beach" are often told they cannot use any of the facilities at the beach.

In an effort to help the public navigate this complex landscape of access requirements and find new public beaches to explore, we have added a "Beach Access" layer on the Sound Health Explorer site. We have also included information on current beach fees, special restrictions due to Covid, and other beach-specific information on each beach page on the site. We hope this supports more people getting out on a beautiful Long Island Sound beach this summer.

WATER QUALITY TRENDS

Data is the key to understanding how we are doing at protecting our coastal waters. Thanks to the ongoing weekly water quality monitoring at our beaches, Save the Sound can review a deep dataset and build an understanding of water conditions and pollution sources and drivers.

BEACH WATER QUALITY IS HYPER LOCAL AND CAN BE HIGHLY VARIABLE

The biggest take-away from our beach data analysis is always how hyper local water pollution impacts are. The mapped grades show how beaches with "A" water quality can be situated within a mile or two of a beach with "C" or "D" water quality. Take for example Seaview Beach in West Haven, CT ("C+") which is less than a mile from Dawson Beach ("A-"), or Crescent Beach ("C-") and Morgan Memorial Beach ("A+") both in Hempstead Harbor, NY. These illustrate how even within the same community you can have a pristine beach and one that suffers ongoing pollution, highlighting the role of the local community in protecting or restoring coastal water quality. If you have recurring high fecal bacteria levels at your beach that is not waste flowing in from another community, it is coming from your coastal watershed. We know this because when fecal bacteria reach coastal waters, they become diluted and dispersed by tides and disinfected by exposure to the sun's UV rays, so they don't generally persist long enough to travel very far from the source in open water.

While some individual beaches consistently have excellent water quality, there is no one region that consistently earned the highest grade every year (Figure 1). Regional beach quality varies by year and all regions have opportunities for improvement. One driver for the variation is how each region is impacted by wet or dry weather, reflecting the differing sources of local water pollution such as the condition or type of wastewater infrastructure and/or the quality of stormwater management.

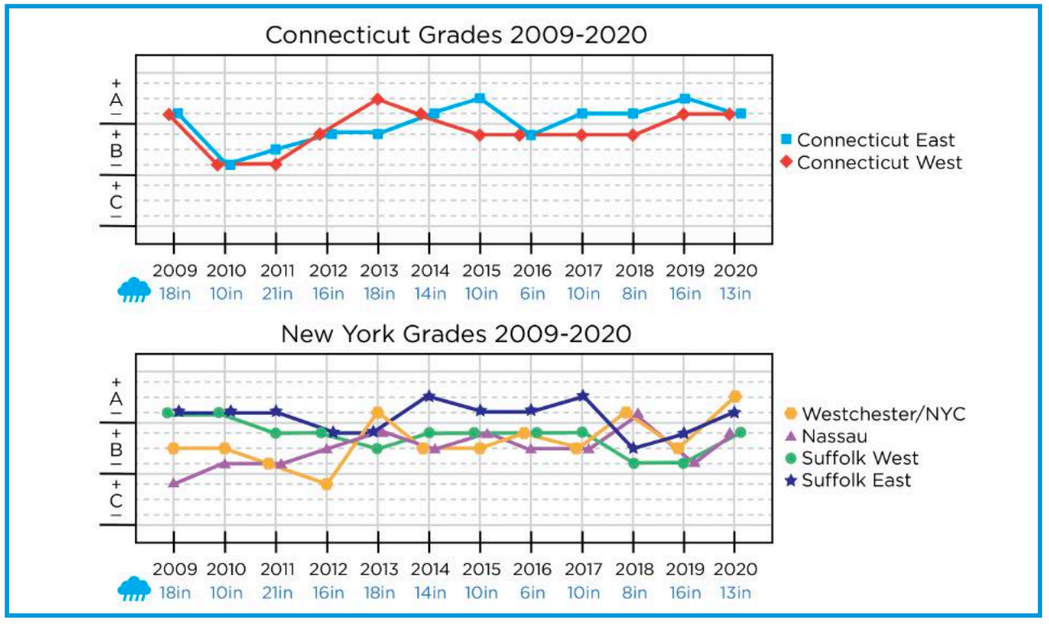


FIGURE 1. THESE CHARTS SHOW THE ANNUAL REGIONAL BEACH GRADES CALCULATED BY AVERAGING ALL THE BEACH GRADES IN EACH REGION THAT YEAR. ALL DATA USED WERE COLLECTED BY LOCAL DEPARTMENTS OF HEALTH AND REPORTED TO EPA.

WET WEATHER TYPICALLY INCREASES WATER POLLUTION

When it rains, bacteria—and pollutant-laden stormwater flows into local streams, rivers, and eventually into our coastal waters—often causing nearby beaches to experience a decline in water quality. In some locations, stormwater drainage pipes discharge directly to a beach, or to an adjacent area of the coast. How long it takes for a given beach to again be clean enough for swimming varies by location and by the amount of rainfall. The variables that determine the speed of recovery include the pollution levels in the streams and stormwater, the volume of water, and how well the beach water flushes with the open Sound. Beaches located inside a bay, where the tidal flushing is moderate, usually will take a longer time to recover from a storm than a beach on the open coastline.

In many locations, a larger storm with more rain will result in less concentrated pollution, while a smaller rain event may result in the delivery of pollution in a more concentrated form. This is because the "first flush" of rain empties out waste built up in storm drains, washes wildlife waste off the nearby landscape, and delivers the pollution on the beach and riverbanks into the water. Once that "slug" of pollution is in the water, additional rain may dilute the contamination and help to push it out into the open Sound. The fact that smaller rain events can be more polluting feels counter intuitive and can lead to poor beach management decisions, especially since real time water quality monitoring is not used at our region's beaches.

Consistent with our prior beach reports, the overall failure rate of beach samples is twice as high in wet weather as in dry weather—jumping from 5.5% to 11.4% (Figure 2). As a result of climate change, the Sound region is expected to experience steadily increasing rainfall over the coming decades.[2]

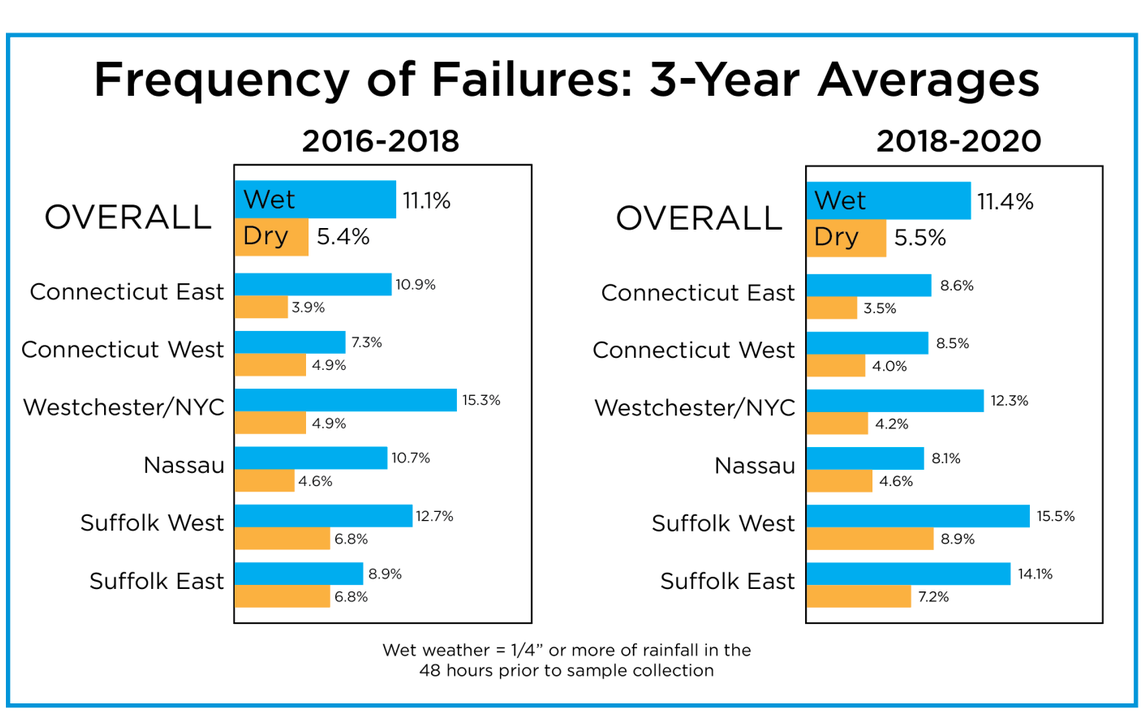


FIGURE 2. THESE CHARTS SHOW THE PERCENT OF SAMPLES THAT FAILED TO MEET STATE SWIMMING CRITERIA, DIVIDED BY WET- WEATHER SAMPLES AND DRY-WEATHER SAMPLES. ON THE LEFT ARE THE TRENDS FROM OUR LAST REPORT (2016, 2017, 2018) AND ON THE RIGHT ARE THE TRENDS FROM THE BEACH DATA IN THIS REPORT (2018, 2019, 2020).

All regions show a decline in water quality after it rains. In our 2019 Beach Report, the Westchester/NYC region—home to New York City's massive combined sewage overflow (CSO) system, millions of people, and heavily built and paved neighborhoods—had the highest rate of wet-weather failure (15.3%). While its wet weather failure rate for this report (12.3%) is still triple its dry-weather failure rate (4.2%), it improved in 2020, bringing down both failure rates. The North Shore regions of Suffolk County, by contrast, had an overall decline in water quality and this year has the highest overall failure rates in both wet and dry weather of any region. The two Connecticut regions and Nassau County's North Shore have similar pollution frequency rates, in wet weather and dry, to one another.

20 BEST PUBLIC SWIMMING BEACHES

All great things are worth sharing with our neighbors! That's why our Best Swimming Beaches list includes only public beaches. Some require a fee for parking and/or entry; call ahead or check www.SoundHealthExplorer.org for more details.

10 BEST BEACHES IN CONNECTICUT: 2018-2020

Beach Name	Town	County
Waterford Town Beach	Waterford	New London
Dubois Beach	Stonington	New London
Westbrook Town Beach	Westbrook	Middlesex
Esker Point Beach	Groton	New London
McCook Point Beach	East Lyme	New London
Eastern Point Beach	Groton	New London
Quigley Beach	Stamford	Fairfield
Woodmont Beach	Milford	New Haven
White Sands Beach	Old Lyme	New London
Burying Hill Beach	Westport	Fairfield

10 BEST BEACHES IN NEW YORK: 2018-2020

Beach Name	Town	County
The Creek Beach	Oyster Bay	Nassau
Southold Beach	Southold	Suffolk
Port Jefferson Beach - West	Brookhaven	Suffolk
McCabe's Beach	Southold	Suffolk
Centre Island — Sound Beach	Oyster Bay	Nassau
Kenney's Beach	Southold	Suffolk
West Harbor Memorial Beach	Oyster Bay	Nassau
Sunken Meadow State Park East	Smithtown	Suffolk
Orchard Beach	Bronx	Bronx
Soundside	Oyster Bay	Nassau

Ocean Beach Park — New London, Connecticut

BEACH GRADES

The grading system used in this report aims to capture for each beach 1) how often water quality was found to be unsafe for swimming (frequency), and 2) how high the level of contamination was (magnitude) on the worst sampling day of the season. Because sources and concentration of contamination can vary with weather, the frequency and magnitude grades are provided for both dry and wet weather conditions.*

NY & CT State Criteria for Marine Swimming Water Quality
Passing Sample = Entero counts 0-104 cfu/100 ml
Failing Sample = Entero counts greater than 104 cfu/100 ml
[Entero = fecal indicating bacteria enterococci;
cfu = colony forming unit; 100 ml = 1/10th of a liter]

* Wet weather samples = equal to or greater than 1/4 inch of rain in the 48 hours before sampling
* Dry weather samples = less than 1/4 inch of rain in the 48 hours before sampling

HOW TO READ THE BEACH GRADES

All four sub-categories (FD, FW, MD, MW) are assigned a score, represented by green, yellow, orange, and red, with green representing excellent water quality and red representing very poor water quality. Additional information on the grading procedures can be found at www.SoundHealthExplorer.org.

45 THE COLOR OF THE CIRCLES INDICATES THE GRADE FOR THAT PARTICULAR LOCATION DURING THE YEAR 2020. THE NUMBER CORRESPONDS WITH THE LOCATION AS INDICATED ON THE MAP.

FREQUENCY DRY (FD):

THE PERCENTAGE OF SAMPLES COLLECTED DURING PERIODS OF PROLONGED DRY WEATHER THAT FAIL TO MEET THE STATE WATER QUALITY CRITERIA FOR SAFE SWIMMING. A HIGH PERCENTAGE OF FD FAILURE WOULD INDICATE A CONSISTENT SOURCE OF POLLUTION THAT IS UNRELATED TO WET WEATHER (E.G. POLLUTED GROUNDWATER DISCHARGE).

MAGNITUDE DRY (MD):

THE HIGHEST CONCENTRATION OF FECAL INDICATOR BACTERIA MEASURED IN ANY SAMPLE COLLECTED DURING PERIODS OF PROLONGED DRY WEATHER. HIGHER BACTERIAL LEVELS ARE ASSOCIATED WITH MORE RISK OF ILLNESS TO SWIMMERS, AND THEREFORE MD REPRESENTS A MEASURE OF WATER QUALITY ON THE WORST DRY WEATHER SAMPLING DAY OF THE SEASON.

FREQUENCY WET (FW):

THE PERCENTAGE OF SAMPLES, COLLECTED AFTER RAIN THAT FAIL TO MEET THE STATE WATER QUALITY CRITERIA FOR SAFE SWIMMING. A HIGHER PERCENTAGE OF FW FAILURE THAN FD FAILURE WOULD INDICATE THE PRESENCE OF POLLUTION SOURCES TRIGGERED BY PRECIPITATION (E.G. CSO OR POLLUTED STORMWATER).

MAGNITUDE WET (MW):

THE HIGHEST CONCENTRATION OF FECAL INDICATOR BACTERIA MEASURED IN ANY SAMPLE COLLECTED AFTER RAIN. HIGHER BACTERIAL LEVELS ARE ASSOCIATED WITH MORE RISK OF ILLNESS TO SWIMMERS, AND THEREFORE MW REPRESENTS A MEASURE OF WATER QUALITY ON THE WORST WET WEATHER SAMPLING DAY OF THE SEASON.

Additional information on the grading procedures can be found at www.SoundHealthExplorer.org.

CONNECTICUT EAST

NEW HAVEN COUNTY

#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
18	Hammonasset Beach SP					C+					A+					C+
19	Pent Road Beach					A+					A+					A+
20	East Wharf Beach					A+					B+					A+
21	West Wharf Beach					A-					A+					B
22	Surf Club Beach					A+					B+					A+
23	Jacob's Beach					A+					B					A-
24	Stony Creek Beach					C+					A+					A-
25	Branford Point Beach					A+					C+					B-
26	Johnson's Beach					C+					C+					C
27	East Haven Town Beach					A					A+					A+
28	Lighthouse Point Beach					B					B+					B+
29	Fort Hale Park Beach					A					A					A
30	Morse Beach					C+					A+					A+
31	Altschuler Beach					A+					C+					A+
32	Oak Street Beach B					C+					C+					A+
33	Oak Street Beach A					A+					A+					A+
34	Rock Street Beach					B					A+					B
35	Seabluff Beach					C+					C+					B
36	Dawson Beach					A-					C+					B
37	Seaview Beach					C+					A+					C
38	South Street Beach					C+					A+					A+

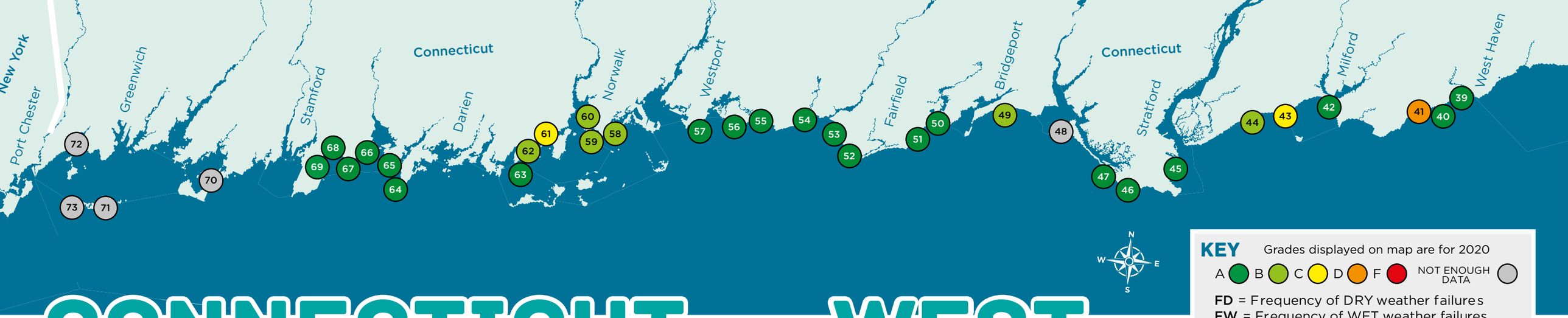
NEW LONDON COUNTY

#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
1	duBois Beach					A+					A+					A+
2	Noank Dock					A+					A+					B
3	Esker Point Beach					A+					A+					A+
4	Eastern Point Beach					A+					A+					A+
5	Green Harbor Beach					D					A-					A-
6	Ocean Beach Park					A+					A+					B
7	Waterford Town Beach					A+					A+					A+
8	Pleasure Beach					B					A+					A+
9	Hole-In-The-Wall Beach					A+					A+					A+
10	McCook Point Beach					A+					A+					A+
11	Rocky Neck State Park					C-					C+					C+
12	Soundview Beach					A-					A-					B
13	White Sands Beach					A+					A+					A+

MIDDLESEX COUNTY

#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
14	Town Beach (Saybrook)					A+					A+					C+
15	Harvey's Beach					A+					B+					B
16	Westbrook Town Beach					A+					A+					A+
17	Town Beach (Clinton)					B+					A+					C+

©2021 SAVE THE SOUND — LONG ISLAND SOUND BEACH REPORT



CONNECTICUT

WEST

KEY Grades displayed on map are for 2020

A B C D F NOT ENOUGH DATA

FD = Frequency of DRY weather failures
FW = Frequency of WET weather failures
MD = Magnitude of DRY weather failures
MW = Magnitude of WET weather failures

FAIRFIELD COUNTY

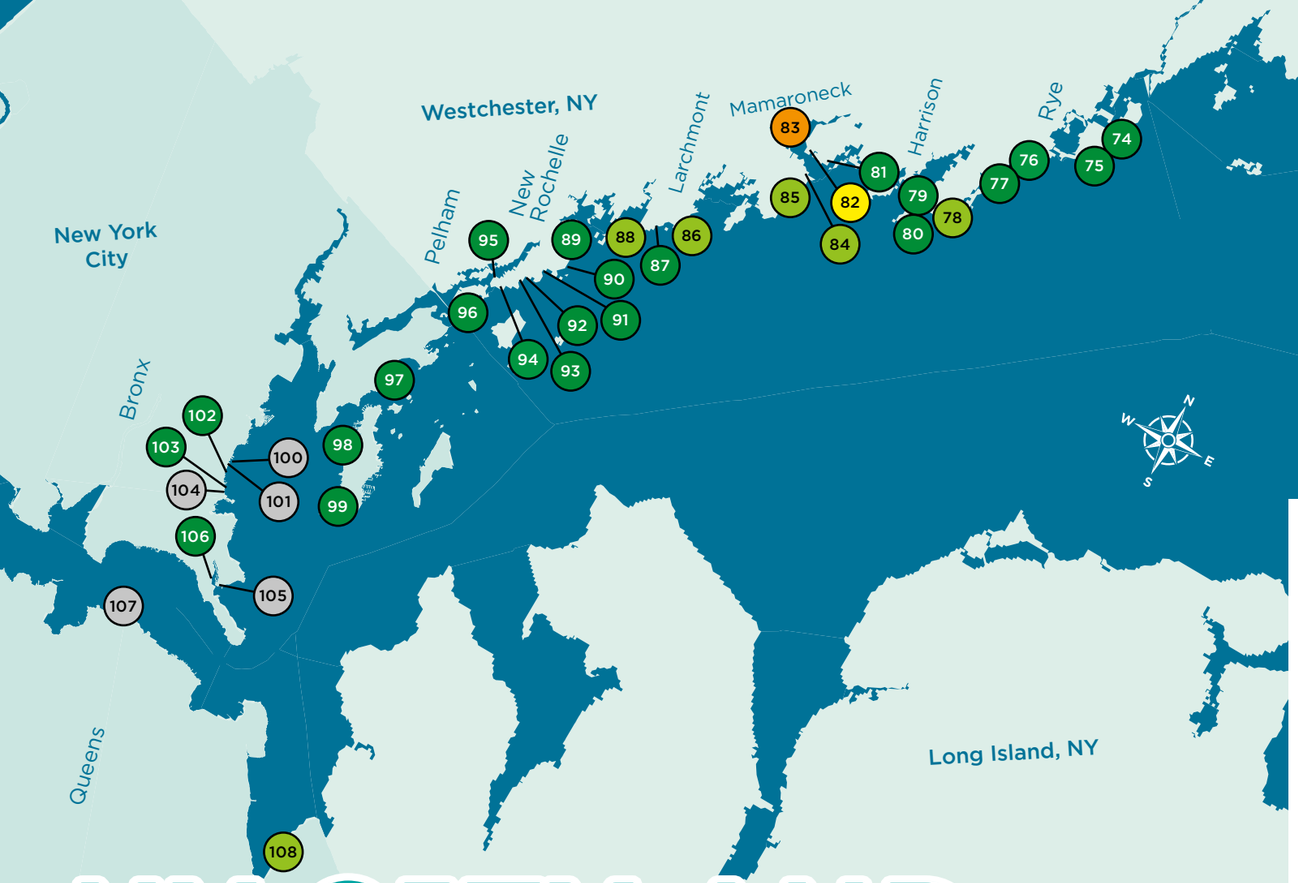
#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
45	Short Beach					A+					A-					B
46	Marnick's Beach					A+					C+					B
47	Long Beach					A+					A					A+
48	Pleasure Beach					NA					B+					A+
49	Seaside Park Beach					B					A-					D+
50	Jennings Beach					A					A+					A+
51	Penfield Beach					A+					A+					A-
52	South Pine Creek Beach					A-					A+					B+
53	Sasco Beach					A					A+					C-
54	Southport Beach					A					A+					C
55	Burying Hill Beach					A+					A+					A+
56	Sherwood Island S P					A+					A+					B+
57	Compo Beach					A+					B					B-
58	Shady Beach					B					D+					C+
59	Calf Pasture Beach					B-					D+					A+
60	Marvin Beach					B+					A-					A-
61	Hickory Bluff Beach					C+					B					C-
62	Rowayton Beach					B					A-					B-
63	Bell Island Beach					A-					A+					A
64	Pear Tree Point Beach					A+					B-					A+
65	Weed Beach					A+					A+					B+

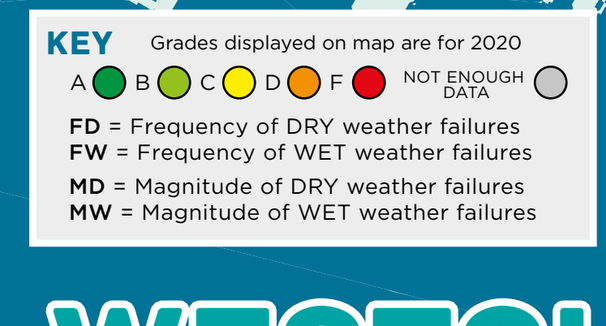
FAIRFIELD COUNTY

#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
66	East Beach (Cove Isd.)					A+					A+					A+
67	Quigley Beach					A+					A+					A+
68	Cummings Beach					A+					A+					A
69	West Beach					A+					A+					A-
70	Greenwich Point Beach					NA					B+					B-
71	Island Beach					NA					A+					A+
72	Byram Beach					NA					D-					D-
73	Great Captain Island Bch					NA					D					B

NEW HAVEN COUNTY

#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
39	Woodmont Beach					A+					A+					A+
40	Anchor Beach #2					A+					A-					A+
41	Anchor Beach #1					D					A+					C+
42	Gulf Beach					A+					A+					B+
43	Silver Sands State Pk					C+					A-					D
44	Walnut Beach					B+					A+					B-





NY CITY AND WESTCHESTER

BRONX

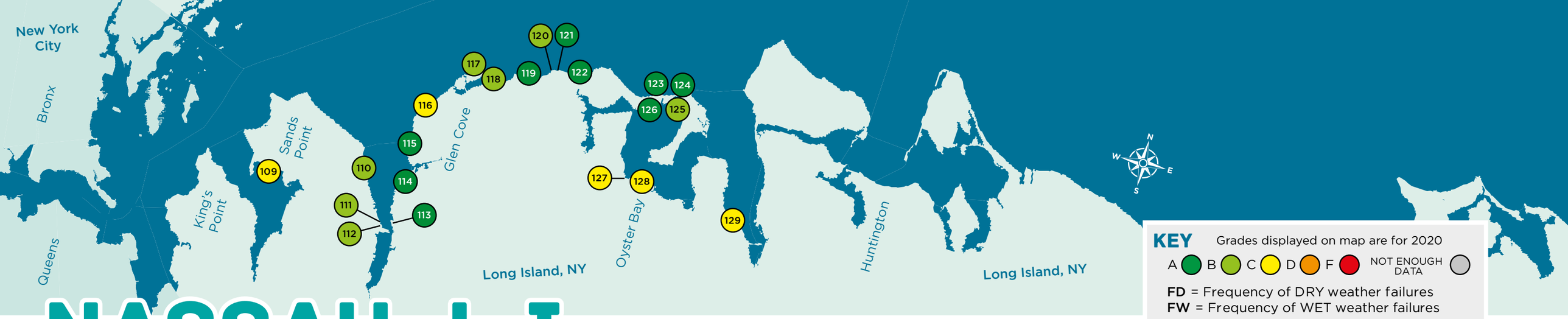
#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
97	Orchard Beach					A-					A+					A+
98	West Fordham St Assoc.					A+					A+					A
99	Morris Yacht & Beach					A+					B+					B
100	Trinity Danish Y.P. Soc.					NA					D+					A+
101	White Cross Fish Club					NA					C					A
102	American Turners					A+					D-					A+
103	Danish Am. Beach Club					A+					C-					A+
104	Manhem Beach Club					NA					C+					A
105	Locust Point Yacht Club					NA					B+					A+
106	Schuyler Hill Civ. Assoc.					A+					D					A+

QUEENS

#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
107	Whitestone Booster					NA					C					A
108	Douglas Mnr Assoc, Bch					B					D-					D+

WESTCHESTER

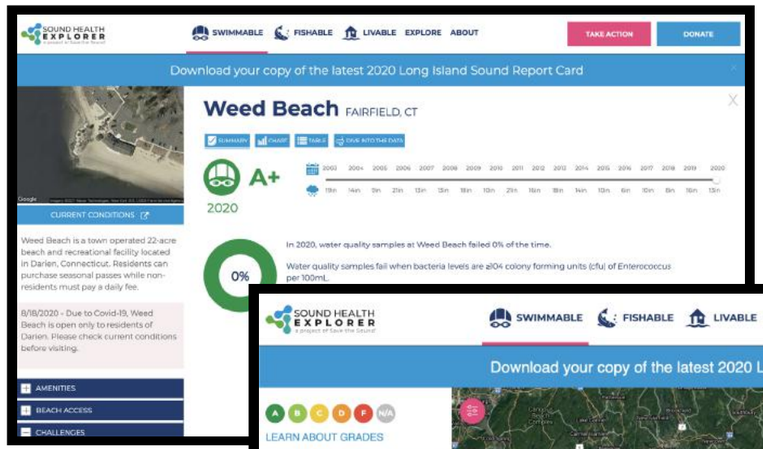
#	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
74	WC Country Club Beach					A+					A+					B+
75	Manursing Island Club					A+					A+					A+
76	Rye Playland Beach					A+					B+					A-
77	Rye Town/Oakland Bch					A+					B					A+
78	Coveleigh Beach Club					B-					D-					C
79	Shenorock Shore Club					A+					A+					B
80	American Yacht Club					A+					A+					A+
81	MMNK Beach & Cabana					A-					C+					C+
82	Shore Acres Club					C+					A+					A+
83	Harbor Island Beach					D+					D					C-
84	Beach Point Club					B					C+					C+
85	Orienta Beach Club					B+					C-					B-
86	Larchmont Manor Park					B+					B+					A+
87	Larchmont Shore Club					A-					A+					A+
88	Echo Bay Yacht Club					B					A+					A-
89	Hudson Park					A					C-					D
90	New Roch. Rowing Club					A+					A+					A+
91	Surf Club					A-					F					B+
92	Davenport Club					A+					D+					A+
93	Greentree Club					A+					C-					A+
94	VIP Club					A+					B-					A-
95	Beckwithe Pointe					A+					A+					A-
96	Glen Island Park					A+					B+					B+

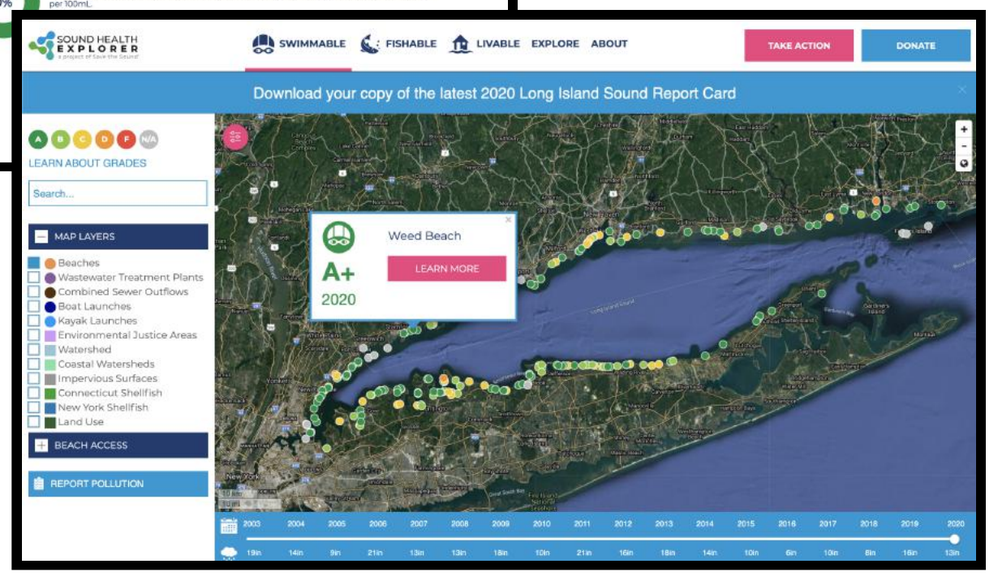


NASSAU, L.I.

NASSAU #	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
109	Manorhaven Beach					C+					C+					A-
110	Village Club @ Sands Pt					B+					C					B+
111	N Hempstead Bar Beach					B					B					A
112	N Hempstead Beach Pk					B+					B-					B
113	Tappen Beach					A+					A-					A-
114	Sea Cliff Beach					A					A-					A-
115	Morgan Memorial Beach					A+					C					B
116	Crescent Beach					C-					D					D
117	Pryibil Beach					B					B					A
118	Lattingtown Beach					B+					A					C+
119	The Creek Beach					A+					A+					A+
120	Piping Rock Beach					B+					B+					A+
121	Stehli Beach					A					A					B
122	Ransom Beach					A+					C+					B+
123	Soundside Beach					A-					A+					A
124	Centre Is. (Sound Beach)					A+					A-					A+
125	Centre Is. (Bay Beach)					B-					B					A-
126	W. Hbr. Memorial Bch					A+					A+					A-
127	Beekman Beach					C-					C-					B+
128	Theo. Roosevelt Beach					C+					C+					A
129	Laurel Hollow Beach					C+					B-					B

DIVE INTO THE DATA AT
WWW.SOUNDHEALTHEXPLORER.ORG





Our free online Sound Health Explorer tool shares all of the data behind the grades and contains sampling data all the way back to 2004.

©2021 SAVE THE SOUND — LONG ISLAND SOUND BEACH REPORT

SUFFOLK, L.I. WEST

SUFFOLK #	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
130	Eagle Dock Comm. Bch					B					C-					C-
131	Cold Spring Hbr Bch Clb					A-					B-					C+
132	Lloyd Harbor Village Pk					A+					C					A
133	West Neck Beach					A					B					A
134	Lloyd Neck Bath Club					A+					A					B
135	Fiddlers Green Assoc.					A+					A					B
136	Lloyd Harbor Estates					A+					C+					C+
137	Gold Star Battallion Bch					B+					C+					C+
138	Wincoma Beach					A+					B					C+
139	Baycrest Assoc. Beach					B					B					C
140	Nathan Hale Beach Club					A-					B-					C-
141	Head of the Bay Club					B					B-					C+
142	Bay Hills POA					A					C+					C-
143	Crescent Bch (Suffolk)					A+					B-					C-
144	Hobart Beach (Bay)					A+					C+					A
145	Hobart Beach (Inlet)					A+					B					A
146	Prices Bend Beach					C					C-					B-
147	Valley Grove Beach					D					D+					D
148	Knollwood Beach					C+					A+					D+

SUFFOLK #	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
149	Fleet's Cove Beach					B+					B-					B-
150	Huntington Bch Assoc.					C+					C-					C-
151	Centerport Beach					B+					A					B
152	Centerport Yacht Club					B-					B-					C
153	Steers Beach					B-					D+					C
154	Asharoken Beach					B-					C-					C
155	Crab Meadow Beach					C-					D					C
156	Callahan's Beach					C					C+					C+
157	Sunken Meadow SP					A-					A+					B+
158	Short Beach					A					C-					B-
159	Nissequogue Point Bch					C+					C					B
160	Long Beach					A-					C-					B
161	Schubert Beach					A+					C+					B+
162	Stony Brook Yacht Club					NA					NA					NA
163	Stony Brook Beach					B-					B-					C-
164	Sound View Bch Assoc.					A+					A-					C
165	West Meadow Beach					A+					C					B+
166	Old Field Club					A+					C+					B+

SUFFOLK, L.I. EAST

SUFFOLK #	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
167	Grantland Beach					B+					B					A-
168	Bayview Beach					B+					C-					A+
169	Indian Field Beach					B+					C+					A-
170	Bayberry Cove Beach					A+					C					D
171	Little Bay Beach					B-					B+					B
172	Belle Terre Beach					A+					B					A-
173	Port Jefferson Beach W					A+					A+					A
174	Port Jefferson Beach E					A+					A-					A+
175	Cedar Beach West					A					A+					A+
176	Cedar Beach East					C					A+					A+
177	Miller Place Park Beach					A-					B-					B-
178	Woodhull Landing					B+					B+					C
179	Scotts Beach					A					B+					D
180	Sound Beach POA West					B					C+					D
181	Sound Beach POA East					A					B-					A-
182	Tides Prop. Own. Assoc.					B-					C+					D
183	Terraces on the Sound					C					B-					C
184	Beech Road Beach					A					A+					B
185	Broadway Beach					C-					B+					A

SUFFOLK #	Beach Name	2020 FD	2020 FW	2020 MD	2020 MW	2020 GRD	2019 FD	2019 FW	2019 MD	2019 MW	2019 GRD	2018 FD	2018 FW	2018 MD	2018 MW	2018 GRD
186	Friendship Beach					B-					B					B
187	Shoreham Village Beach					A-					B+					A-
188	Shoreham Shore Club					A					A+					A-
189	Shoreham Beach					B-					A+					B
190	Wading River Beach					A-					A+					C
191	Camp DeWolfe					C-					C					D+
192	Wildwood SP Bch					B					B					B
193	Baiting Hollow Camp					C+					B					D+
194	Woodcliff Park POA					C+					B+					C-
195	Dorothy P. Flint Camp					A+					A+					A+
196	Reeves Beach					B+					A+					D+
197	Iron Pier Beach					A+					B					A+
198	Mattituck Breakwater					A+					B+					A+
199	Kenney's Beach					A+					A-					A+
200	McCabe's Beach					A+					A-					A+
201	Southhold Beach					A+					A+					A+
202	Hay Harbor Club					NA					NA					NA
203	Island People's Project					NA					NA					NA
204	Fisher's Island C. Club					NA					NA					NA

WATER POLLUTION SOURCES AND ACTIONS YOU CAN TAKE

There are many types of pollution at our beaches—including floatable trash, harmful algae blooms, pharmaceutical waste and all forms of litter —but the primary indicator measured when deciding if a beach should be opened or closed for swimming is fecal bacteria. Exposure to pathogens from human or animal waste can cause a variety of illnesses including viral, parasitic, and bacterial infections.[3] We all bear the responsibility of keeping our coastal waters clean.

When people learn that there is sewage getting into their beach water, they might assume something isn't working at a nearby wastewater treatment plant. This is sometimes the case, but more often the pipes and pumps that deliver our sewage to the treatment plants or the malfunctioning of local septic systems are the problem. These exposures to sewage can occur in a few ways.

SANITARY SEWER OVERFLOWS (SSOs) AND DISCHARGES FROM SEWER LINE BREAKS

When underground pipes crack or collapse, untreated sewage can leak out and reach beaches. When it rains, cracked pipes can fill up, causing a mix of raw sewage and rainwater to flow out of manholes and into the nearest stormwater catch basin or river, ultimately delivering that contaminated water to the coast and possibly to a beach near you. This widespread problem of sewage escaping the collection system before reaching a treatment plant is called a sanitary sewer overflow (SSO).

WHAT YOU CAN DO

IF YOUR PROPERTY IS HOOKED UP TO A MUNICIPAL SEWAGE SYSTEM, BE SURE THAT THE SEWER LINE THAT CONNECTS YOUR HOME OR BUSINESS TO THE MUNICIPAL SEWER LINE IS FREE OF CRACKS. IF YOU NEED TO HAVE A PLUMBER CUT ROOTS OUT OF YOUR SEWER LINE, THEN IT HAS CRACKS THAT CAN ALLOW RAINWATER AND GROUNDWATER IN, AND RAW SEWAGE OUT. NEW TECHNOLOGY AVAILABLE TO HOMEOWNERS CAN REPAIR CRACKED LINES WITHOUT DIGGING UP YOUR PROPERTY—"TRENCHLESS PIPE LINERS" CAN BE INSTALLED FROM INSIDE THE PIPE AT A GREATLY REDUCED COST.

AS A RESIDENT, SUPPORT ALL EFFORTS IN YOUR VILLAGE, TOWN, OR CITY TO INVEST IN YOUR MUNICIPAL SEWAGE COLLECTION AND TREATMENT SYSTEM. TIMELY REPAIR AND MAINTENANCE OF THESE CRITICAL INFRASTRUCTURE COMPONENTS NOT ONLY REWARD YOU WITH CLEAN WATER—THEY SAVE YOU MONEY IN LOCAL TAXES BY AVOIDING MAJOR BREAKS AND REPAIRS.

WHAT WE'RE DOING

Save the Sound works to identify and eliminate sanitary sewer overflows in communities all around the Sound. We have two water quality monitoring labs that can test for fecal bacteria using the same EPA-approved lab method used for beach management. We have used our lab in Westchester County, NY, to successfully identify and get repairs made to broken sewer lines in coastal Westchester County. With the addition of a mobile lab used by our Soundkeeper, we are bringing this pollution track-down technology to communities all around the Sound.

In addition to helping find and eliminate SSOs, our team has successfully lobbied for billions of dollars in state grants and loans for CT and NY communities to invest in repairing and upgrading their local sewage infrastructure to address this problem.


Sanitary Sewer Overflow

COMBINED SEWER OVERFLOWS (CSOs) TRIGGERED BY RAIN

Some older cities on the Sound have combined sewer systems. In combined systems, stormwater runoff and wastewater flow into the same pipe and are treated at a wastewater treatment plant. However, during storms when the combined volume of rain and wastewater is greater than the capacity of the treatment plant's delivery pipes—or is too great for the plant to treat—the excess untreated wastewater and storm runoff gets discharged directly into nearby waterways—an event called a combined sewage overflow (CSO). This toxic brew of raw sewage, household and industrial wastewater, and street runoff causes sudden and often dramatic spikes in fecal bacteria and other pollutants in the water. Swimming near a CSO outfall is not recommended following rainfall (e.g. often within 48 hours of rain), which is why state law in Connecticut and New York requires that each outfall be marked with a sign.

COMMUNITIES ON THE SOUND WITH COMBINED SEWER SYSTEMS

NEW YORK CITY • NEW HAVEN
BRIDGEPORT • NORWALK

SEE THE LOCATION OF EACH CSO OUTFALL ON WWW.SOUNDHEALTHEXPLORER.ORG

GREEN INFRASTRUCTURE

GREEN INFRASTRUCTURE IS AN APPROACH TO WATER MANAGEMENT THAT PROTECTS, RESTORES, OR MIMICS THE NATURAL WATER CYCLE. RAIN GARDENS, GREEN ROOFS, POROUS PAVEMENT, AND OTHER GREEN INFRASTRUCTURE TECHNOLOGIES SLOW THE FLOW OF STORMWATER, FILTER IT, HELP ELIMINATE SEWAGE OVERFLOWS, AND REDUCE LOCALIZED FLOODING. LEARN MORE AT WWW.REDUCERUNOFF.ORG

WHAT YOU CAN DO

IF YOU LIVE IN A COMMUNITY EXPERIENCING CSOS, KEEP THE RAIN THAT FALLS ON YOUR PROPERTY OUT OF THE STORM DRAINS BY ADDING GREEN INFRASTRUCTURE STORMWATER SOLUTIONS. FOR EXAMPLE, CAPTURE PRECIPITATION IN A RAIN GARDEN OR ON A GREEN ROOF, OR RECHARGE IT THROUGH A PERVIOUS DRIVEWAY. YOU ALSO CAN DIVERT GUTTER WATER INTO RAIN BARRELS ATTACHED TO YOUR DOWNSPOUTS. BECOME INFORMED ABOUT THE LOCATION OF CSOS AND ENCOURAGE YOUR COMMUNITY TO UPGRADE YOUR SEWAGE SYSTEM, USING BOTH TRADITIONAL AND GREEN INFRASTRUCTURE.

WHAT WE'RE DOING

Save the Sound is working to eliminate all remaining combined sewage overflows around Long Island Sound. We design and build green infrastructure projects that use the natural power of soil and native plants to divert, collect, and filter rain, keeping it out of the combined sewage and stormwater system. We use our legal expertise to enforce needed improvements in traditional infrastructure, including expanding treatment plant capacities and building retaining tanks.

Sherwood Island State Park Beach — Westport, Connecticut

BOATING WASTE

IT IS ILLEGAL FOR BOATERS TO DUMP ANY WASTE IN LONG ISLAND SOUND.

THERE ARE PUMP-OUT SERVICES OFFERED AT MARINAS AND ROVING PUMP-OUT BOATS AVAILABLE AROUND THE SOUND FOR PROPER DISPOSAL OF HUMAN SANITARY WASTE.

PLEASE USE THEM.

SEPTIC SYSTEMS

There are hundreds of thousands of septic systems and cesspools in communities that drain to the Sound, and they're a common source of fecal bacteria pollution. People who purchase homes with such simple forms of privately owned wastewater infrastructure rarely are fully informed on how to properly maintain them. Few towns provide any oversight. As a result, improperly maintained systems leach pollutants into the groundwater and/or flood in the rain, delivering raw or partially treated sewage to our coastlines or even into our drinking water.

WHAT YOU CAN DO

EDUCATE YOURSELF ON THE TYPE OF SEPTIC SYSTEM OR CESSPOOL YOU HAVE (SEE HTTPS://WWW.EPA.GOV/SEPTIC/TYPES-SEPTIC-SYSTEMS), AND UPGRADE YOUR SYSTEM TO ONE OF THE NEWER TECHNOLOGIES CURRENTLY AVAILABLE! IF YOU LIVE IN SUFFOLK COUNTY, YOU MAY BE ELIGIBLE FOR A GRANT TO OFFSET THE COST (SEE THE SUFFOLK SEPTIC IMPROVEMENT PROGRAM[4]). SET UP A SERVICE CONTRACT FOR YOUR SYSTEM AND COMMIT TO A REGULAR SCHEDULE OF MAINTENANCE TO ENSURE THAT YOUR WASTEWATER IS FULLY TREATED ON YOUR PROPERTY AND NOT CONTRIBUTING TO WATER POLLUTION IN YOUR COMMUNITY.

WHAT WE'RE DOING

Save the Sound has successfully lobbied to reduce the number of coastal properties using septic systems on Long Island, which can be accomplished by connecting more communities to existing wastewater treatment plants and upgrading those plants where needed. Where expanded municipal wastewater treatment is not an option, we promote the installation of new, next-generation septic systems that reduce another priority water pollutant—nitrogen—while also removing more fecal bacteria.

STORMWATER RUNOFF: POLLUTION DELIVERY SYSTEM

Rainwater that has run off of polluted surfaces and traveled through a stormwater drainage system before reaching the coast carries with it a host of pollutants, none of which you want to swim in. The most common pollutant measured for beach management—fecal bacteria—can be abundant in stormwater, depending on the route it has followed to the beach. In addition to animal waste washed off of streets, yards, and parks by the rain, the stormwater also picks up the fecal matter already in stormwater catch basins and pipes. Fecal matter in the drainage system can be naturally occurring from wildlife, such as raccoons or rats that make their homes there, or it can result from dropping dog waste in catch basins by pet owners who don't realize that baggie of poop will end up in the water. Leaking sewer and septic systems can infiltrate stormwater systems in some locations, adding human waste. Rain that falls on streets, parking areas, rooftops, or other hard surfaces picks up oil and grease from vehicles, fertilizers, pesticides, and other harmful chemicals that contribute to water pollution.

WHAT YOU CAN DO

MAKE YOUR HOME AND PROPERTY AS RAIN-FRIENDLY AS POSSIBLE, HELPING WATER ABSORB INTO THE GROUND WITH RAIN GARDENS AND PERVIOUS PAVEMENT, OR COLLECTING IT IN RAIN BARRELS FOR USE AFTER THE STORM. NEVER THROW ANY GARBAGE OR CHEMICALS, INCLUDING ANIMAL WASTE, INTO CATCH BASINS ON THE SIDE OF THE ROAD—THEY DRAIN TO A LOCAL WATERBODY. SUPPORT (OR PROMOTE!) THE CREATION OF A STORMWATER AUTHORITY FOR YOUR CITY. IF ONE OF YOUR BELOVED BEACHES IS NEAR A STORMWATER OUTFALL, LOBBY TO HAVE THAT OUTFALL MOVED OR ITS DISCHARGE REDUCED THROUGH INVESTMENT IN GREEN INFRASTRUCTURE IN THE AREA THAT DRAINS TO IT.

WHAT WE'RE DOING

Save the Sound works on stormwater issues and impacts in every facet of our work. We design and build nature-based solutions that capture stormwater and let it percolate into the ground—keeping rain where it falls and reducing the volume entering stormwater drainage systems. We work on permits and laws that provide better oversight of stormwater management and use our legal skills to enforce them. And we advocate for the funding and policies that communities need to make these Sound-friendly improvements.

Rain Barrel

ANIMAL WASTE

WILDLIFE

High levels of animal waste in the water pose a health threat to swimmers. Some beaches become preferred homes to flocks of large birds, such as geese or gulls, providing a 24/7 source of fecal matter.

LIVESTOCK

Runoff from farms can be a potent source of fecal bacteria. Connecticut has concentrated animal feeding operations (CAFOs) near the Sound, where huge quantities of manure can pose major water quality challenges.[5] (New York State is also home to CAFOs, but none in the Long Island Sound region.) Small farms that don't follow best management practices can also be sources of water pollution. Manure spread as fertilizer on farms and other properties can be washed into waterways and storm drains and end up contaminating beaches in the same manner as street runoff.

WHAT YOU CAN DO

BEACHES CAN BE RAKED DAILY TO REMOVE ANIMAL WASTE AND DISPOSE OF IT PROPERLY AT A LANDFILL BEFORE IT CONTAMINATES THE WATER. THERE ARE A HOST OF DECOYS AND OTHER PHYSICAL DETERRENT PRODUCTS THAT CAN BE PLACED ON BEACHES TO DISCOURAGE WATERFOWL FROM SETTING UP CAMP IN RECREATION AREAS. SEVERAL COMMUNITIES ON THE SOUND ARE HAVING SUCCESS WITH SERVICES THAT BRING TRAINED DOGS TO BEACHES THROUGHOUT THE SWIMMING SEASON TO CHASE OFF GEESE AND DISCOURAGE THEM FROM RETURNING.

IF YOU HAVE LIVESTOCK ON YOUR PROPERTY, FOLLOW BEST MANAGEMENT PRACTICES TO PROTECT YOUR LOCAL WATERWAYS.[6] KEEP LIVESTOCK OUT OF STREAMS. MANAGE MANURE STORAGE AND APPLICATIONS TO PREVENT POLLUTED DISCHARGES FROM YOUR LAND DURING RAIN.

WHAT WE'RE DOING

Save the Sound supports beach communities in tackling animal waste using non-toxic and humane strategies. We encourage local farmers to use best management practices to reduce or eliminate any negative water quality impacts associated with their work.

Beekman Beach — Oyster Bay, New York

Pile of marine debris collected during a Coastal Cleanup event — Tod's Point, Greenwich, Connecticut

MARINE DEBRIS AND PLASTICS

People are waking up to the limited capacity of our oceans to absorb all the waste we are generating. Plastics make up the majority of marine debris in part because we produce it and throw it away in such massive amounts, and in part because it takes so long to break down in the environment. Marine debris is costing society dearly in the environmental harm it is causing, and it costs local coastal economies when littered beaches and water turns away beachgoers.

WHAT YOU CAN DO

STOP USING SINGLE-USE PLASTICS AND STYROFOAM. USE REUSABLE BAGS, CUTLERY, AND CUPS WHENEVER POSSIBLE. TRY TO LIMIT YOUR USE OF TAKE-OUT FOOD AND EAT IN THE RESTAURANT INSTEAD (WHEN SAFE). DON'T BRING-SINGLE USE PLASTICS WITH YOU TO THE BEACH. INSTEAD, BRING A GARBAGE BAG OR BUCKET THAT YOU CAN USE TO COLLECT BEACH LITTER AND BRING IT HOME FOR PROPER DISPOSAL. NEVER RELEASE BALLOONS INTO THE AIR—THEY COME DOWN EVENTUALLY AND CAN KILL WILDLIFE. PLEASE JOIN OUR EMAIL ACTION NETWORK AT WWW.SAVETHESOUND.ORG AND SUPPORT OUR WORK TO ADVANCE STATE AND LOCAL PLASTIC-REDUCTION AND WASTE MANAGEMENT POLICIES IN THE COMING MONTHS AND YEARS!

WHAT WE'RE DOING

Save the Sound has been fighting marine debris on multiple fronts for years. We conduct coastal cleanups at scores of Long Island Sound beaches each year (averaging 60 beaches cleaned/7,000 pounds of litter removed annually) and engage thousands of local residents in this important, ongoing work. Our staff lobbies for state and local bans on harmful plastics, including the single-use plastic bag bans passed in Connecticut and New York State! New York City and Westchester County passed limited bans on Styrofoam.

Harmful Algal Bloom

NUISANCE AND TOXIC ALGAE AND SEAWEEDS

Anyone who has spent time on a beach with an overabundance of seaweed or algae knows how unpleasant it can be to experience. From the smell of rotting seaweed on the shore, to the unwelcome feeling of it in the water, seaweed and algae are big negatives for most beachgoers.

There are a wide variety of seaweeds and algae, which range from highly beneficial (as part of the aquatic food chain) to harmful and even toxic. Harmful algae blooms (known as "HABs") and marine biotoxins have become increasingly menacing on the Sound—threatening important habitat, disrupting food chains for many marine species, and harming economically viable fisheries. New York State and Connecticut both monitor for HABs and marine biotoxins; however, they are not a part of standard beach monitoring and therefore not a focus of this report. For more information on this topic, visit the Take Action section of SoundHealthExplorer.org.

WHAT YOU CAN DO

AS WITH FECAL BACTERIA, NITROGEN POLLUTION HAS VERY LOCAL IMPACTS AND CAN BE IMPROVED WITH LOCAL ACTIONS. ALL PROPERTY OWNERS SHOULD ELIMINATE OR REDUCE FERTILIZER APPLICATION ON THEIR LAWNS AS MUCH AS POSSIBLE. OLD SEPTIC SYSTEMS AND CESSPOOLS SHOULD BE REPLACED WITH NEW SEPTIC TECHNOLOGY THAT TREATS NITROGEN AS WELL AS BACTERIA. REDUCE STORMWATER RUNOFF WITH GREEN INFRASTRUCTURE TECHNOLOGIES, SUCH AS RAIN GARDENS, GREEN ROOFS, AND PERMEABLE PAVEMENT, AND SUPPORT RESTORATION OF NATURAL WETLAND BUFFERS THAT HAVE BEEN DAMAGED BY NITROGEN.

WHAT WE'RE DOING

Save the Sound dedicates significant resources to address nitrogen pollution around the Sound. We have another report, the Long Island Sound Report Card, which covers this important issue in detail. Reducing the amount of nitrogen entering the Sound is a focus of our legal team, which has been instrumental in getting EPA to require nitrogen reduction from New York, Connecticut, and the upstream states in the Sound watershed. Our staff scientists lead a Sound-wide monitoring program, the Unified Water Study, which is identifying the bays and harbors on the Sound that suffer from nitrogen pollution, to target solutions in those areas.

CLIMATE CHANGE HARMS OUR BEACHES

Our coast is the front line for climate change impacts in our region. The most visible change will be the loss of coastal property from a combination of sea level rise, erosion, and major storms, all of which will accelerate in coming years, leading to a complete loss of some beaches.

As a result of climate change, the Sound region is expected to experience steadily increasing rainfall over the coming decades.[7] This trend will pose a challenge to preserving the quality of our beaches. Coastal communities need to start planning now and commit to maintaining clean stormwater drainage systems, rivers, streams, and creeks.

Without improved management and maintenance of infrastructure, increased rain will result in degraded swimming water quality from stormwater runoff and combined sewage overflows. Our local, state, and federal governments need to support local planning and investment in stormwater management now. Green infrastructure should be used to the widest extent practicable as the most cost-effective approach to capturing stormwater and reducing runoff. Our wastewater collection and treatment systems that overflow when it rains need proactive capital improvements so they can handle the increasing precipitation we face.

WHAT YOU CAN DO

CLIMATE POLLUTION IN OUR DAILY LIVES COMES FROM A FEW MAIN SOURCES: TRANSPORTATION, HOME HEATING AND COOLING, ELECTRICITY USE, AND THE PRODUCT AND FOOD CHOICES WE MAKE. TRY COMMUTING BY BUS, TRAIN, OR BIKE—AND IF YOU NEED A PRIVATE CAR, MAKE YOUR NEXT ONE A CLEAN-DRIVING, EASY-TO-MAINTAIN ELECTRIC VEHICLE. EXPLORE ROOFTOP SOLAR, SHARED SOLAR, OR CLEAN POWER PURCHASE OPTIONS IN YOUR AREA, AND TAKE ADVANTAGE OF STATE PROGRAMS THAT CAN WEATHERIZE YOUR HOME OR REPLACE INEFFICIENT APPLIANCES AT LOW COST. WHEN POSSIBLE, CHOOSE FOODS AND PRODUCTS THAT ARE LESS ENERGY-INTENSIVE TO PRODUCE AND SHIP. AND TALK WITH YOUR ELECTED OFFICIALS! THE PEOPLE WHO REPRESENT YOU NEED TO KNOW YOU WANT THEM TO TAKE BOLD ACTION TO SLOW CLIMATE CHANGE AND PREPARE FOR ITS EFFECTS.

WHAT WE'RE DOING

Save the Sound's climate attorneys develop innovative policy, and our organizers build the public support necessary to enact change. We helped craft and pass major laws that have shaped Connecticut's greenhouse gas reduction plans for over 15 years, and engineer on-the-ground projects to prepare for climate impacts.

Through coalition leadership, legal action, and grassroots campaigns, we're bringing solar power within reach for more people, replacing gas-powered cars with clean electric vehicles, protecting programs that reduce home energy costs, and driving energy generation transformations that reduce the pollutants warming our climate and hurting our kids' lungs.

Across the Sound region, we ensure communities have the tools they need to adapt to stronger storms and sea level rise. The projects we design and build—including marsh restoration, green infrastructure, and dam removals—reduce flooding, filter water, and create jobs.

FEDERAL ACTIONS NEEDED

SUPPORTING SCIENCE: FUNDING WATER MONITORING AND RESEARCH

The federal government supports the local cost of monitoring our beaches so the public is not unwittingly exposed to poor water quality that would harm our health. For the past decade, this funding has been under attack in the budget process, though representatives from coastal states fight to keep the funding in place. Federal dollars also are needed to invest in the proper maintenance and operations of our water infrastructure. Properly designed and operated wastewater and stormwater systems are essential if we are to keep our beaches swimmable and open. Save the Sound lobbies every year for increased state and federal funding to support these priorities.

WHAT YOU CAN DO

TELL YOUR SENATOR AND CONGRESSIONAL REPRESENTATIVE HOW IMPORTANT BEACH WATER QUALITY MONITORING IS TO YOU. ENCOURAGE THEM TO INCREASE FUNDING TO THE ENVIRONMENTAL PROTECTION AGENCY (EPA) TO SUPPORT THE DEVELOPMENT OF DNA WATER TESTING THAT WILL ALLOW SAME-DAY MONITORING RESULTS AND IMPROVED SOURCE-IDENTIFICATION TECHNOLOGIES. SUPPORT FEDERAL, STATE, AND LOCAL INVESTMENTS IN WASTEWATER AND STORMWATER INFRASTRUCTURE.

Hammonasset Beach State Park — Madison, Connecticut

Rye Playland Beach — Rye, New York

STATE ACTIONS NEEDED

IMPROVE STATE RECREATIONAL WATER QUALITY CRITERIA

New York and Connecticut both follow an outdated EPA guideline for recreational water quality criteria and beach management practices. EPA published an updated federal guideline in 2012 based on new science related to waterborne illnesses, but there is no federal mandate for New York or Connecticut to adopt it. Save the Sound is lobbying for both states to update their state water criteria and to use EPA's most protective "Beach Action Value" bacteria standard for making beach management decisions. We also work on the state and local level to improve public notification of water pollution at beaches.

WHAT YOU CAN DO

EDUCATE YOURSELF ON THE BEACH MANAGEMENT PRACTICES WHERE YOU SWIM AND ASK YOUR LOCAL AND STATE REPRESENTATIVES TO FOLLOW THE BEST PRACTICES RECOMMENDED BY THE EPA. SIGN UP FOR STATE NOTIFICATIONS OF WATER POLLUTION THROUGH THE SEWAGE POLLUTION RIGHT TO KNOW LAWS IN NEW YORK AND CONNECTICUT (YOU CAN GET EMAIL OR TEXT MESSAGES) AND WHEN YOU LEARN OF POLLUTION, INFORM YOUR NEIGHBORS AND FRIENDS. RAISING AWARENESS OF WATER POLLUTION IS OUR BEST TOOL FOR REDUCING IT!

WHAT WE'RE DOING

Save the Sound lobbies in Hartford, CT and Albany, NY for improved regulations to protect our beaches and our swimmers. We have been instrumental in passing and strengthening the Sewage Pollution Right to Know laws in NY and CT which have been very effective in shining a light on the extent of poor repair in our local sewage collection systems and the heavy environmental impacts of the remaining combined sewage systems in some of our coastal cities. This increased public awareness has driven a steady increase in funding to support the needed repairs but there is much work to be done and an ongoing commitment needed by our state and federal leaders.

HOW YOUR BEACHES ARE MONITORED AND MANAGED

WEEKLY MONITORING

The public often assumes that water quality at swimming beaches is tested daily and that the results are immediately available to determine whether a beach is opened or closed for the day. Unfortunately, this is not the case.

Current standards, funding, and technology generally support only weekly testing for fecal bacteria—the primary pollution indicator used to manage beaches. The EPA-recommended fecal-indicating bacteria used in New York and Connecticut marine swimming beaches are enteroccoci (Entero). The vast majority of beaches in the United States, including most Sound beaches, are tested once a week for Entero during the swimming season. The water collected at the beach is taken to a lab to process and the results are not available until the day after collection.

COMMON REASONS FOR BEACH CLOSURES, ROUGHLY IN ORDER OF FREQUENCY, INCLUDE:

- **EXCEEDANCE** – BACTERIAL INDICATOR LEVELS EXCEED STATE STANDARD
- **PREDICTED EXCEEDANCE: MODEL** – A MODEL BASED ON ENVIRONMENTAL CONDITIONS PREDICTS THAT WATER QUALITY IS POOR
- **PREDICTED EXCEEDANCE: RAINFALL** – BECAUSE OF RECENT HEAVY RAIN, IT IS PREDICTED THAT WATER QUALITY IS POOR
- **HIGH WAVES** – WAVES OR ROUGH CONDITIONS
- **TURBIDITY** – CLOUDY WATER THAT COULD PREVENT LIFEGUARDS FROM BEING ABLE TO SEE SWIMMERS
- **NO LIFEGUARD** – WHEN LIFEGUARDS ARE NOT AVAILABLE
- **COLD WATER** – TEMPERATURES BELOW 50°F

Although weekly sampling is common practice, conditions can change from day to day; beaches with a history of significant or recurring contamination should get more frequent testing to protect public health and to track down pollution sources. Beach managers should be aware of the patterns of when their beach fails state swimming criteria and use preemptive closures whenever those conditions occur. Beaches that consistently fail to meet swimming criteria during and after rain should be closed when it rains and remain closed long enough for water quality to improve. The impact of rainfall on water quality varies by location, so decisions should be informed by prior testing and/or modeling of each beach. For beaches that fail safe-swimming criteria in dry weather, additional water testing should be conducted to identify and eliminate the source of fecal bacteria contamination, be it leaky beach toilets, local goose populations on the shoreline, contaminated groundwater, or failing sewage infrastructure.

WHY YOU SHOULD CARE: WATERBOURNE ILLNESSES

Exposure to pathogen-contaminated water can cause symptoms such as nausea, vomiting, diarrhea, headache, and fever. Illnesses of the upper respiratory tract, and minor skin, eye, ear, nose and throat infections also have been associated with pathogen exposure in polluted water. Individuals with compromised immune systems, the elderly, and children (because of their level of activity and increased opportunities for ingestion of water) are most vulnerable to these illnesses. We recommend swimmers avoid polluted water and wash their hands after swimming and before eating.[8]

WHERE'S MY BEACH?

We used the Environmental Protection Agency (EPA) Water Quality Portal database to retrieve all available water quality data from swimming beaches on Long Island Sound for inclusion in this report. Only beaches that monitor water quality in accordance with state law and the federal Beaches Environmental Assessment and Coastal Health (BEACH) Act are included.[9] If you know of a swimming beach that is not included here, it either is not monitored, or it is independently monitored and the data have not been shared with EPA.

Recreational swimming beach permits require all public and municipal beach operators monitor water quality weekly to confirm that conditions meet state criteria for swimming.[10] Some private beach owners choose not to participate in the federally funded monitoring and reporting program. If your beach isn't listed here, we encourage you to ask your beach manager what type of monitoring they do and how often.

Some beaches in this report have been assigned "N/A" (not available) instead of a grade because those beaches do not have enough samples to be given a grade. We have set the minimum at nine samples per summer, which allows for one sample a week in July and August. Beaches that have less than nine samples are not sampling frequently enough to meet that minimum standard. Assessing beach quality and protecting public health require monitoring data—and more data allow better decision-making. Save the Sound urges all beach managers to monitor water quality at least once a week and make the results available to the public using that beach.

IS THERE REAL-TIME WATER TESTING TECHNOLOGY?

NEW DNA TECHNOLOGY BEING PILOTED AT CALIFORNIA BEACHES CAN PROVIDE SAME-DAY MONITORING RESULTS. WE DON'T KNOW HOW MANY YEARS WE WILL HAVE TO WAIT AND HOW MANY DOLLARS WE'LL NEED TO INVEST BEFORE THAT TECHNOLOGY CAN REPLACE THE 24-HOUR TESTS WE RELY ON TODAY. THE FEDERAL FUNDING TO PAY FOR OUR CURRENT BEACH MONITORING HAS BEEN ON THE BUDGET CUTTING-BLOCK FOR YEARS; ACHIEVING A MAJOR INCREASE IN THAT FUNDING WILL BE AN UPHILL BATTLE. PUBLIC SUPPORT FOR SUSTAINED EPA FUNDING IS CRITICAL TO CONTINUE AND IMPROVE ON OUR BEACH MONITORING PRACTICES.

LEARN MORE ABOUT YOUR LOCAL BEACHES AT

SOUNDHEALTHEXPLORER.ORG

THIS WEBSITE PROVIDES BEACH MONITORING DATA FROM LONG ISLAND SOUND SWIMMING BEACHES DATING BACK TO 2004, AS WELL AS INFORMATION RELATED TO POTENTIAL POLLUTION SOURCES INCLUDING

- DETAILS ABOUT BEACH ACCESS, RESTRICTIONS AND AMENITIES
- BOAT AND KAYAK LAUNCH SITES
- LOCATION AND PERMIT # OF ALL WASTEWATER TREATMENT PLANTS
- LOCATION OF ALL COMBINED SEWAGE OUTFALLS (CSOs) THAT DISCHARGE TO THE SOUND
- COASTAL WATERSHED BOUNDARIES SHOWING THE LOCAL DRAINAGE AREA
- LAND USE AND LAND COVER MAPS
- PERCENT OF IMPERVIOUS SURFACES

West Meadow Beach — Stony Brook,New York

END NOTES

[1] United States Geological Survey, Environmental Protection Agency, National Water Quality Monitoring Council. Water Quality Portal. https://www.waterqualitydata.us/

[2] Anji Seth and Guiling Wang, University of Connecticut: “Temperature and Precipitation Projections: An Update for Connecticut” https://circa.uconn.edu/ct-climate-science/#

[3] Centers for Disease Control and Prevention. Recreational Water Illnesses. https://www.cdc.gov/healthywater/swimming/swimmers/rwi.html#rwi-infections

[4] https://reclaimourwater.info/SepticImprovementProgram.aspx

[5] https://business.ct.gov/-/media/DOAG/Commish_and_Gov/LivestockGuidanceBookWEB-002-FINAL.pdf

[6] Ibid.

[7] Anji Seth and Guiling Wang, University of Connecticut: “Temperature and Precipitation Projections: An Update for Connecticut” https://circa.uconn.edu/ct-climate-science/#

[8] For more information on waterborne illnesses visit https://www.cdc.gov/healthywater/swimming/swimmers/rwi.html

[9] The BEACH Act, an amendment to the Clean Water Act, is designed to “reduce the risk of disease to users of the Nation's coastal recreation waters.” It authorizes federal funding, administered by EPA, for local beach monitoring and public notification. EPA maintains an online database containing the state-reported beach monitoring and notification data. https://www.epa.gov/beach-tech/about-beach-act

[10] New York beach water quality criteria, see 6-2.15 Water quality monitoring: https://regs.health.ny.gov/volume-title-10/1746432786/section-6-215-water-quality-monitoring; Connecticut beach water quality criteria, see Guidelines for Monitoring Bathing Water and Beach Closures: https://portal.ct.gov/DPH/Environmental-Health/Recreation/Public-Beaches.

ACKNOWLEDGEMENTS

Prepared by Save the Sound
Tracy Brown, Save the Sound, *author*
Martin Hain, Save the Sound, *designer*
Laura McMillan, Save the Sound, *editor*
Peter Linderoth, Save the Sound, *science advisor*
Gregory O’Mullan, PhD, CUNY Queens, *science advisor*

All photos by Tracy Brown, Martin Hain and Burns Patterson.

Data Sources
This report was created using the water quality monitoring data posted to the federal EPA Water Quality Portal database. The beach data in Water Quality Portal are collected and posted by departments of health that conduct the beach monitoring.

Precipitation data are from The Weather Company, an IBM Business, History on Demand dataset.

All data contained in this report can be reviewed in detail at www.SoundHealthExplorer.org

Created with generous support from the John and Daria Barry Foundation

More information on Save the Sound and our activities related to improving water quality in Long Island Sound can be found at www.SaveTheSound.org

Sunken Meadow State Park — Kings Park, New York

WWW.SAVETHESOUND.ORG

PRINTED ON A WIND-POWERED PRESS WITH RENEWABLE ENERGY,
POST-CONSUMER RECYCLED PAPER, AND VEGETABLE-BASED INKS
BY PHOENIX PRESS,INC — NEW HAVEN, CONNECTICUT