A photograph of the Stepping Stones Lighthouse, a brick building with a white lantern room, situated on a rocky island in the Long Island Sound. The lighthouse is surrounded by a green chain-link fence. In the background, a city skyline is visible across the water.

LONG ISLAND SOUND REPORT CARD 2022

Stepping Stones Lighthouse,
Long Island Sound off Kings Point, New York



Save the Sound[®]
Action for our region's environment.

Western Narrows

Received an F (51%). Although an increase from 2019 (44%), the 14-year trend remains variable. This basin is in fluctuation,

hopefully toward overall improvement, with chlorophyll α , water clarity, and dissolved oxygen grades in a variable state while DOC is improving.



Eastern Narrows

Received a C (75%), similar to 2019 (74%). The Eastern Narrows remain in a variable state after seeing notable improvement from 2008 to 2017. Dissolved oxygen received a D- (62%) in 2021 which is indicative of a stressed aquatic environment in need of further measures to restore water quality.

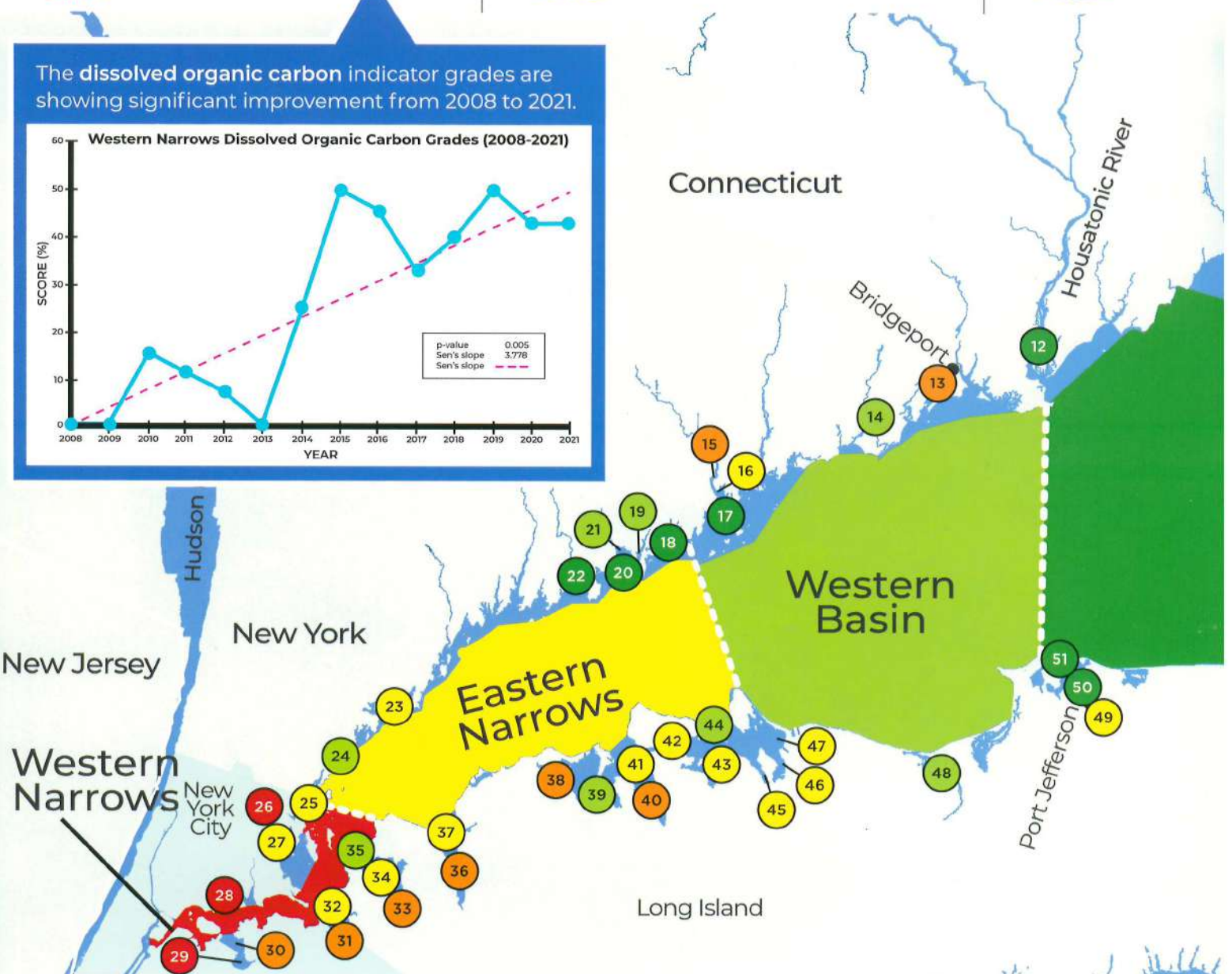
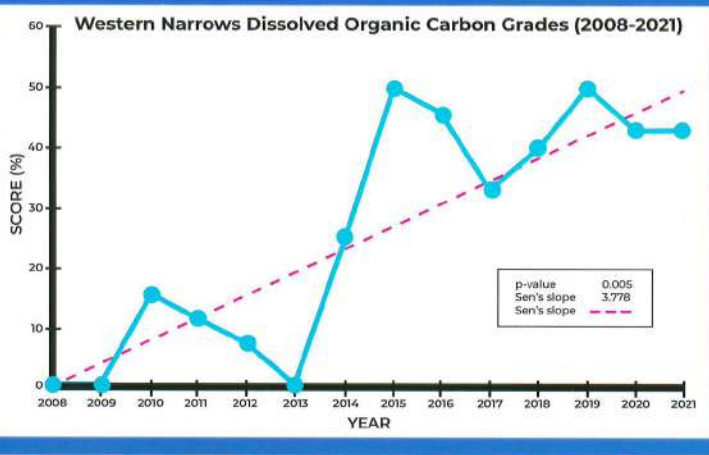


Western Basin

Received a B+ (88%), similar to 2019 (88%), with a variable 14-year trend. This basin received a C (74%) which is indicative of a stressed aquatic environment in need of further measures to restore water quality.



The dissolved organic carbon indicator grades are showing significant improvement from 2008 to 2021.



Finding Encouragement in an F

The Western Narrows once again received an F on its overall grade. But there's good news. Dissolved organic carbon, a measure of the nutrient concentration in the water in relation to human sources, is red, having a score of 43 (F). But that number is up from a 0 in 2008. It is the one indicator in the Western Narrows where the 14-year trendline qualifies as improving. DOC can be viewed as the leading edge of long-term change, and if the hard work to reduce excess nitrogen entering this portion of the Sound continues, we may be seeing the first steps in the long road to ecological recovery.

KEY

2021 Season Grades

A	(90-100%)
B	(80-90%)
C	(70-80%)
D	(60-70%)
F	(0-60%)

Western Basin ↗

Similar to 2019 (86%), trend. Dissolved oxygen was the lowest in the basin. This area is developed than the others but is still densely populated and showing signs of climate change impact.

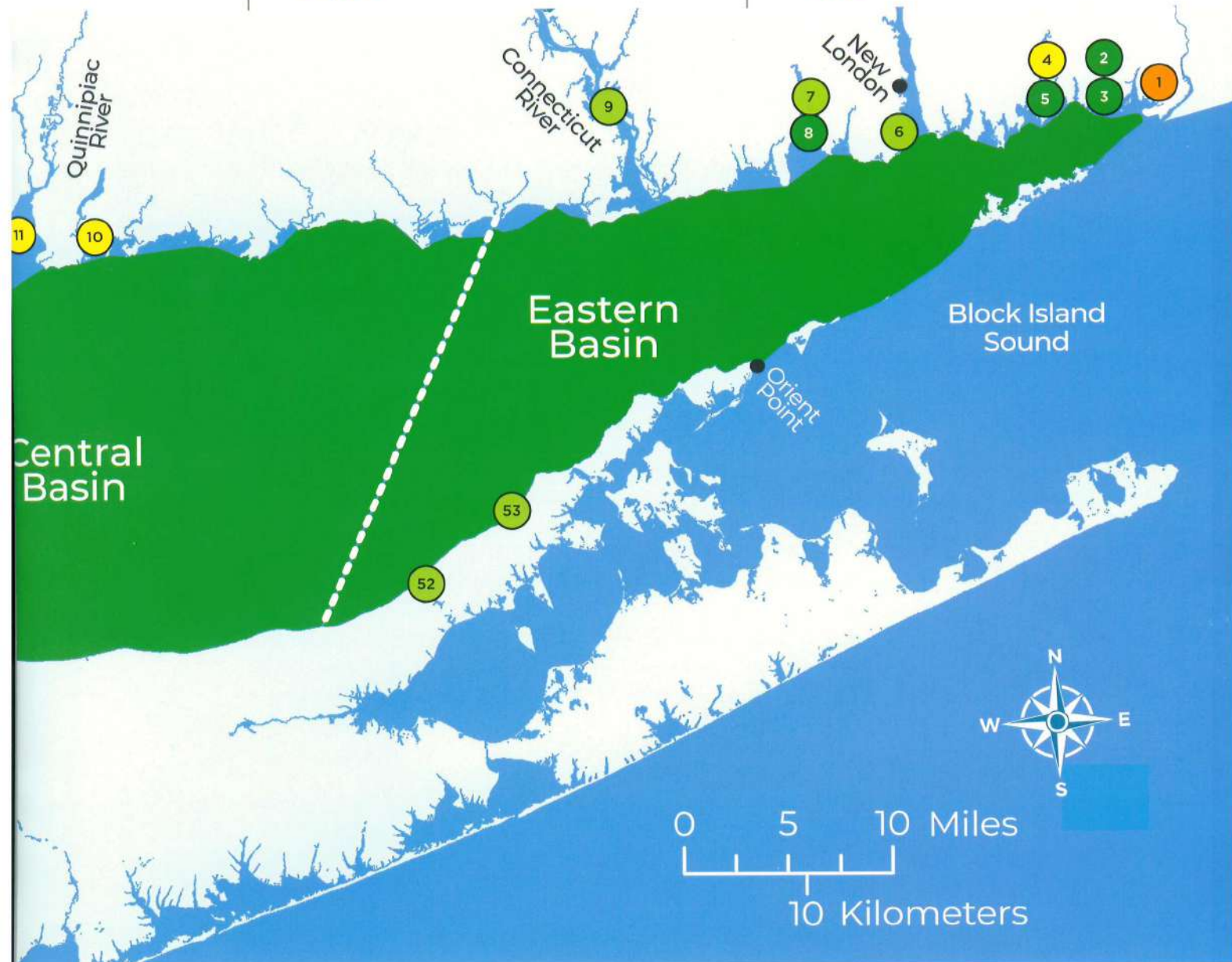
Central Basin ↗

Received an A (93%), similar to 2019 (95%). Water quality has been stable over the past 14 years and is consistently supportive of marine life. It is the largest area of open water contained in the Report Card and is well-flushed with water from the Atlantic Ocean.




Eastern Basin ↗

Received an A+ (99%), the same as 2019 (99%). Water quality has been stable over the past 14 years, never dropping below an A. This region has a much lower coastal population with large tracts of undeveloped land. It has strong tidal exchange, being next to the Atlantic Ocean.



14-Year Trend

-  Improving
-  Stable
-  Variable
-  Declining

How Are the Scores Calculated?

Save the Sound and its science advisors grade water quality indicators using scientifically derived scales developed with a Technical Advisory Committee of scientists and water managers from agencies around the Sound. Some indicators are used for both the Sound and the bays, while others are unique to the deeper Sound or the shallower bays, reflecting the differences in these types of systems. For more information on the scoring methods, visit: www.soundhealthexplorer.org/fishable

Bay Grades



Clean Up Sound & Harbors



1	Wequetequock Cove	Red	Yellow	Green	Yellow	Red	D-
4	Mystic River	Red	Yellow	Green	Yellow	Green	C
5	Mystic Harbor	Green	Green	Green	Green	Green	A

New England Science & Sailing Foundation

2	Inner Stonington Hbr	Green	Green	Green	Green	Green	A-
3	Outer Stonington Hbr	Green	Green	Green	Green	Green	A
6	Alewife Cove	Green	Green	Green	Green	Green	B+

Save the River — Save the Hills

7	Inner Niantic River	Green	Green	Green	Yellow	Red	B-
8	Outer Niantic River	Green	Green	Green	Yellow	Green	A-

Connecticut River Conservancy

9	Connecticut River	Green	Green	Red	Green	Green	B
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Friends of the Farm River Estuary

10	Farm River	Yellow	Green	Yellow	Green	Red	C
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River Advocates of South Central Connecticut

11	New Haven Harbor	Green	Green	Green	Red	Orange	C+
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Town of Stratford Conservation Department

12	Outer Housatonic River	Green	Green	Yellow	Green	Green	A
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Ash Creek Conservation Association

13	Black Rock Harbor	Green	Yellow	Green	Red	Red	D+
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Town of Fairfield Conservation Department

14	Mill Rvr (Southport Hbr)	Green	Green	Green	Yellow	Red	B-
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Harbor Watch

15	Inner Norwalk Harbor	Orange	Red	Green	Green	Red	D-
16	Middle Norwalk Harbor	Green	Green	Green	Red	Green	C+

The Maritime Aquarium at Norwalk

17	Outer Norwalk Harbor	Green	Green	Green	Orange	Green	A-
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Town of Darien

18	Scott Cove	Green	Green	Green	Green	Yellow	A-
19	Darien Harbor	Green	Green	Green	Green	Yellow	B+
20	Cove Harbor	Green	Green	Green	Green	Green	A-

SoundWaters

21	Holly Pond	Green	Yellow	Yellow	Yellow	Green	B-
22	Stamford Harbor	Green	Green	Green	Yellow	Green	A-

Derecktor Shipyards

23	Mamaroneck Harbor	Green	Yellow	Green	Red	Yellow	C
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Save the Sound

24	New Rochelle Harbor	Green	Green	Green	Green	Red	B-
25	Hunter Island Bay	Green	Yellow	Green	Green	Red	C-
26	Inner Eastchester Bay	Red	Red	Green	Green	Red	F
27	Outer Eastchester Bay	Green	Red	Green	Green	Orange	C

Bronx River Alliance

28	Bronx River	Red	Red	Red	Green	Red	F
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Guardians of Flushing Bay

29	Inner Flushing Bay	Red	Green	Yellow	Orange	Red	F
30	Outer Flushing Bay	Red	Green	Yellow	Green	Red	D+

Interstate Environmental Commission

31	Inner Little Neck Bay	Green	Orange	Orange	Yellow	Red	D+
32	Outer Little Neck Bay	Green	Yellow	Green	Orange	Orange	C
33	Inner Manhasset Bay	Green	Red	Yellow	Yellow	Red	D+
34	Middle Manhasset Bay	Yellow	Orange	Yellow	Green	Green	C+
35	Outer Manhasset Bay	Green	Yellow	Green	Green	Orange	B

Coalition to Save Hempstead Harbor

36	Middle Hempstead Hbr	Orange	Red	Green	Orange	Yellow	D
37	Outer Hempstead Hbr	Green	Orange	Green	Orange	Orange	C+

Friends of the Bay

38	Mill Neck Creek	Green	Orange	Red	Red	Red	D
39	Oyster Bay	Green	Orange	Green	Yellow	Green	B
40	Inner Cold Spring Hbr	Green	Red	Green	Green	Red	D
41	Outer Cold Spring Hbr	Green	Orange	Green	Yellow	Green	C+

Cornell Cooperative Extension of Suffolk County Marine Program

42	Lloyd Harbor	Orange	Yellow	Green	Yellow	Green	C
43	Huntington Harbor	Red	Red	Orange	Green	Green	C-
44	Huntington Bay	Green	Green	Green	Yellow	Green	B
45	Centerport Harbor	Green	Red	Green	Red	Green	C+
46	Northport Harbor	Green	Red	Yellow	Green	Red	C
47	Northport Bay	Green	Orange	Green	Orange	Green	C+

Salonga Wetland Advocates Network

48	Nissequogue River	Green	Green	Green	Orange	Green	B-
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Setauket Harbor Task Force

49	Inner Port Jefferson Hbr	Green	Green	Green	Red	Green	C
50	Middle Port Jefferson Hbr	Green	Green	Green	Green	Green	A-
51	Outer Port Jefferson Hbr	Green	Green	Green	Green	Green	A-

North Fork Environmental Council

52	Mattituck Creek	Yellow	Green	Green	Orange	Green	B-
53	Goldsmith Inlet	Green	Green	Green	Orange	Green	B-

Bay data provided courtesy of the organizations listed above each location.