Long Island Sound: better today, but always a work in progress By Judy Benson

"NEVER FINISHED" MIGHT BE THE NAME OF A NEW CHAPTER IN *THIS FINE PIECE OF WATER*, TOM ANDERSEN'S 2002 BOOK ABOUT THE ENVIRONMEN-TAL HISTORY OF LONG ISLAND SOUND.

As a follow-up to the book's final five chapters (titled "Sprawling Suburbs," "The Brink of Disaster," "Sewage," "The Cleanup," and "The New Sound"), this new section would recount the progress made in the last 16 years as well as the continuing challenges.

"For years we got away with doing nothing, and then there was this low point," said Andersen, who began gathering material for the book in the late 1980s, when he was a newspaper reporter in Westchester County, N.Y. That low point came just as Andersen was starting

the book, when raw sewage discharges and mass fish die-offs in oxygen-starved waters prompted lawsuits and public outcry.

"That was the crisis that got everyone's attention, when it started to turn around," said Andersen, now communications director for the Connecticut Audubon Society.

Today, 30 years later, hypoxia – when dissolved oxygen levels are depleted and marine life suffocates – happens only in small areas of the far western Sound. That's because of the millions of dollars invested in sewage treatment plants from Greenwich to Stonington. The investments modernized the plants with equipment that removes more of the nitrogen fueling the algal blooms that consume all the dissolved oxygen. Along with that,



Maps prepared by Save the Sound for its Long Island Sound Report Card 2018 show a trend of improving water quality in most of the estuary from 2008 to 2017. The 2018 report gave a grade of A+ to the Eastern Basin; A to the Central Basin; Ato the Western Basin; B- to Eastern Narrows; and an F to the Western Narrows. That area is heavily impacted by nitrogen pollution from human waste and stormwater runoff, dense development, high population and little exchange with the Atlantic Ocean. The grades are calculated based on these indicators: dissolved organic carbon.



Source: Long Island Sound Study

more than 1,000 acres of tidal wetlands and coastal forests have been restored, and dams removed to allow migratory fish to swim upriver to spawn.

As Connecticut Sea Grant marks its 30th anniversary year, taking a look at the last three decades on the state's signature water body seems a fitting way to mark the occasion. Profiles of three areas of the Sound – Norwalk Harbor in the west, New Haven Harbor in the center, and Niantic Harbor in the east – tell stories of substantial progress, but also ongoing challenges.

"It's a problem that's never going to be fixed," said Andersen.

Mark Tedesco, Long Island Sound Office director for the Environmental Protection Agency, said that while there is much to be proud of when comparing the Sound today with 30 years ago, the work is far from over. True, sewage treat-

ment plants have improved, but now the attention is on reducing polluted runoff from urban stormwater and fertilizers that are degrading water quality in the harbors, bays, coves and other embayments of the estuary.

And there are the new threats – warming waters from climate change, sea level rise and invasive species, to name a few.

"We're grappling with how to become resilient to climate change, environmental justice, sustainability and increasing green infrastructure" that filters pollutants before they reach the Sound, Tedesco said.

As an urban sea continually under stress from the 8 million people who reside in the Sound's watershed, it needs the people who live, work and play on it to keep paying attention.

"As soon as you say you can stop trying to solve the problem, you get behind," said Andersen.