

ENVIRONMENT

Sarasota Bay losing vital seagrass, research shows

[Patricia McKnight](#) Sarasota Herald-Tribune

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The past two years have been especially brutal on seagrass populations in Southwest Florida waterways, seagrass mapping surveys show.

Between 2018 and 2020, Sarasota Bay lost 18% of its seagrass, which equates to roughly 2,313 acres, according to preliminary research by the Southwest Florida Water Management District. It's a high percentage scientists haven't seen in decades.

"In 2018, we saw the second of two really wicked red tides," said David Tomasko, executive director of the Sarasota Bay Estuary Program. "And that ride tide gave us the biggest single seagrass loss in 30 years."

Red tide, also known as harmful algal blooms, occurs nearly every summer along Florida's Gulf Coast. When it grows out of control, it can produce toxic or harmful effects on people, fish, shellfish, marine mammals and birds.

After Hurricane Irma in 2017, red tide brutalized portions of Florida before finally dissipating in the winter of 2018-19. The water management district's chief scientist, Chris Anastasiou, says the ensuing seagrass loss was worse than anticipated.

"We didn't know the extent to that red tide, but based on a lot of the reports we were getting from local fishing guides, from just citizens out on the water, and also from our partners, it was pretty evident that we weren't going to have a necessarily a good year," Anastasiou said. "We didn't know the magnitude of the loss, but we did anticipate that it was coming."

Sarasota Bay isn't the only estuary suffering. Tampa Bay similarly recorded a 13% seagrass loss, about 5,411 acres between 2018 and 2020. The bulk was in Old Tampa Bay.

Maya Burke, assistant director for the Tampa Bay Estuary Program, attributes most of the loss to poor circulation and algae blooms.

"When you have these recurring algae blooms that are blocking the light from reaching the seagrasses, it can be challenging for the seagrasses to grow," said Burke. "So we think that's a big piece of what's going on and what's driving losses."

Scientists and researchers agree that water quality is the basis for a healthy habitat. Between algae, red tide and man-made structures, Old Tampa Bay's seagrass faltered.

"We've known for a few years now that the water quality in Old Tampa Bay isn't as good as it was," said Anastasiou. "Water quality definitely drives what we see in terms of the seagrass distribution and the total acreage of the habitat."

While there is no easy solution to reverse the decline, scientists say residents can slow the losses by making certain lifestyle changes, including reducing or eliminating fertilizer use on lawns. The excess nutrients from fertilizer can cause harmful algae blooms in fresh and saltwater, which will eventually disrupt seagrass growth, like in the Tampa Bay Estuary.

Wastewater is another nutrient pollution that hurts seagrass growth, and the Sarasota Bay Estuary Program would like to see more wastewater transplant upgrades from local government officials to reduce spills. Wastewater contains nitrogen and phosphorus from human waste, food and certain soaps and detergents, according to the U.S. Environmental Protection Agency.

In June, nearly 800,000 gallons of raw sewage spilled into Sarasota Bay after a pipe broke. Tomasko said that the spill — and several other major wastewater spills in recent years — had an adverse impact on seagrass and water quality.

"We need to do a better job of our wastewater infrastructure," Tomasko said. "That's probably the primary thing."