

Water Quality Report: Defunct inland golf course part of Sarasota Bay's improvements

WVCU | By Tom Bayles

Published January 5, 2024 at 7:22 AM EST



City Of Sarasota / WVCU

A wetland alongside a defunct City of Sarasota golf course has been reclaimed and is now an integral part of water quality improvements in Sarasota Bay by processing runoff from eight miles of neighborhoods keeping 4,000 pounds of nitrogen from entering the bay

WATER QUALITY REPORT FOR DEC. 31, 2023

For those of us who live in Southwest Florida, and still love it, it can be tough to **watch the environment take such a beating** as it has in recent years.

A century of misguided Everglades "control" has resulted in the ongoing multi-billion-dollar, multi-decadal restoration to undo what was done. Invasive species are wreaking havoc on the native flora and fauna. And the prospects for beloved but endangered species such as the Florida panther are bleak.

So when a success story comes to pass, it's as if I have an internal mandate to make a

in the 1980s and '90s all-but impossible — is a big deal, indeed.

And who knew that **a long-forgotten wetland at the edge of an inland, aging city golf course** called Bobby Jones would end up being a key part of the success?

I lived in Sarasota for more than 20 years, and while raising three sons and working as the environmental reporter at the Sarasota Herald-Tribune, I didn't have a lot of free time. But when I did, more often than not, I'd be plying the waters of Sarasota Bay in my boat fishing, sightseeing, showing guests where some celebrity lives, or just tooling about.

I went everywhere and learned the entire watershed from Bradenton to Venice, including traveling up Phillippi Creek, Whitaker Bayou, Bowlees Creek, and countless dead ends.

It was during those trips, coupled with hundreds of stories I wrote for the newspaper on all sorts of aspects of the bay ecosystem, that the **breadth and depth of the water quality problems in the bay became apparent.**

This ingenious project takes half of a slightly downsized golf course and turns it into an offline treatment wetland that retrofits eight square miles of watershed ... which should keep 4,000 pounds of nitrogen out of our bay —
Dave Tomasko, director of Sarasota Bay Estuary Program

It boils down to this, which is by no means inclusive of everything that has polluted the bay over past decades:

- Tens of thousands of **septic tanks were leaking** into the watershed
- Creeks leading into the bay have been **dumping grounds** for the byproducts of dry cleaners, car repair shops, and even highly toxic chemicals used by early incarnations

of the newspapers in town. **Those chemicals remain hopelessly embedded in the muck** underneath the tributaries

- Manmade changes to the coastal environment **forever changed the flushing action necessary for a bay the size of Sarasota to remain healthy**. Two examples are the creation of Bird Key by circus magnate John Ringling, who dredged up some of the most productive sea grass meadows in Big Pass to create the island of million-dollar homes, and the filling in of Midnight Pass to save two homes built too close to the meandering inlet
- Pump stations, which transfer human sewage to treatment plants, were not designed to keep up with the city's growth. Mechanical failures due to poor maintenance and overwhelmed systems lead to **raw sewage leaks** time and again
- The **rampant growth led to rampant home building**, which meant thousands of new homeowners were fertilizing their lawns with nitrogen, phosphorus, and other elements designed to foster the growth of plants. But most of it just washed right into the bay with every afternoon thunderstorm

All of this “nutrient pollution” was destroying Sarasota Bay’s fisheries, killing its sea grasses, and making life all-but impossible for the animals that rely on a healthy bay like manatees and dolphins.

Throughout those years, and since, efforts of individuals and agencies like the Mote Marine Laboratory and Aquarium and the Sarasota Bay Estuary Program **never ceased**.

Many well-intentioned efforts were devised and undertaken to reduce the nutrient pollution that killed the bay's flora and fauna, to increase the health of the seagrass meadows, and to restock popular gamefish. But the efforts were start-and-stop, successes unsustainable mainly due to a lack of the millions it would take to get serious about clearing the waters.

Then environmental awareness became a thing, perhaps due to the United Nations decision in the early 1990s to **accept the reality of planet-warming greenhouse gases** and the agency's warnings of the grave consequences to come. Several **monster red tide blooms in the bay**, too, didn't hurt public perception that something needed to be done.

The solution began with significant investments in dollars to upgrade lift stations,

sewer system, and thousands of volunteer hours replanting seagrasses and clearing away trash. Since about 2020 the **water quality in Sarasota Bay has improved so that it is now better than at any time over the past 10 to 15 years.**



City Of Sarasota / WGCU

The wetland reclamation at the old Bobby Jones golf course in Sarasota didn't take up all the land: a new 18-hole course awaits golfers

And then, during a discussion by Sarasota's leaders on what to do with the shuttered Bobby Jones course, **a forgotten wetland** mostly buried on the eastern edge of the fading fairways and greens was rediscovered – and it's turning out to be a big part Sarasota Bay's water quality improvements.

Dave Tomasko, the director of the Sarasota Bay **Estuary Program**, tells it best on social media:

"We have more people per square mile in our watershed than either Tampa Bay or Biscayne Bay, so it's hard to find locations where a regional stormwater project can be placed," Tomasko wrote. "This ingenious project takes half of a slightly downsized golf course and turns it into an offline treatment wetland that retrofits eight square miles of watershed that was developed before modern stormwater regulations and which **should keep 4,000 pounds of nitrogen out of our bay.**"

"These improvements have not been easy or cheap to bring about, but we are seeing the benefits of over \$300 million worth of ongoing wastewater upgrades and stormwater retrofit projects, including this neat project at the City of Sarasota's 100-year-old Bobby Jones public golf course."

Today segments of Sarasota Bay, Roberts Bay, Little Sarasota Bay, and Blackburn Bay **are being taken off the list of water impaired by nutrient pollution.**

At Bobby Jones, a new course awaits golfers. A 307-acre green space is being preserved in perpetuity.

And the successful wetland reclamation on-site that **helps purify the waters of Sarasota Bay a mile away is a big deal, indeed.**

RED TIDE

The Florida Department of Environmental Protection is reporting the red tide organism, *Karenia brevis*, was not observed in samples collected statewide over the past week.

No reports of fish kills related to red tide were received over the past week, but the agency is currently investigating a few reports of dead or lethargic fish from Monroe County.

Respiratory irritation was not reported in Florida over the past week.

BLUE-GREEN ALGAE

In recent days there have been 39 water samples collected and tested for elements of blue-green algae. Results were positive in samplers at four of the sites, but none in Southwest Florida.

Satellite images of Lake Okeechobee in late December show scattered, low-to-moderate bloom potential primarily in nearshore waters along the northwestern and southeastern shores of the lake.

Satellite images of the Caloosahatchee **Estuary** show very scattered, low-to-moderate bloom potential in both upper and lower reaches of the **estuary**.

The FDEP says it is important to remember the blue-green algae potential is subject to change due to rapidly changing environmental conditions or satellite inconsistencies.

What is red tide?

Red tide is one type of harmful algal bloom caused by high concentrations of the toxic dinoflagellate *K. brevis*, which is a type of microscopic algae found in the Gulf of Mexico.

Red tide typically forms naturally offshore, commonly in late summer or early fall, and is carried into coastal waters by winds and currents. Once inshore, these opportunistic organisms can use nearshore nutrient sources to fuel their growth.

Blooms typically last into winter or spring, but in some cases, can endure for more than one year.

Is red tide harmful?

K. brevis produces potent neurotoxins that can be harmful to the health of both wildlife and people. Wind and wave action can break open *K. brevis* cells and release toxins into the air. This is why you should monitor conditions and stay away from beaches where red tide is in bloom.

People in coastal areas can experience varying degrees of eye, nose and throat irritation during a red tide bloom. Some individuals with chronic respiratory conditions like asthma or chronic lung disease might experience more severe symptoms.

Red tide toxins can also affect the central nervous system of fish and other marine life, which can lead to fish kills.

What causes red tide?

A red tide bloom develops naturally, but recent studies have discovered mankind's infusion of other nutrients into the mix can make the red tide last longer or get stronger. But biology (the organisms), chemistry (natural or man-made nutrients for growth) and physics (concentrating and transport mechanisms) interact to produce the algal bloom. No one factor causes the development of a red tide bloom.

What is blue-green algae?

Blue-green algae, also known as cyanobacteria, are a group of organisms that can live in freshwater, saltwater or brackish water.

Large concentrations, called blooms, can change the water color to blue, green, brown, orange or red. Some cyanobacterial blooms can look like foam, scum, or mats on the surface of freshwater lakes and ponds. As algae in a cyanobacterial bloom die, the water may smell like something with a naturally unpleasant odor has now started to rot, too.

Is blue-green algae harmful?

Different types of blue-green algal bloom species can look different and have different impacts. However, regardless of species, many types of blue-green algae can produce toxins that can make you or your pets sick if swallowed or possibly cause skin and eye irritation.

The FDEP advises staying out of water where algae is visibly present as specks or mats or where water is discolored. Pets or livestock should not come into contact with algal bloom-impacted water or with algal bloom material or fish on the shoreline. If they do, wash the animals right away.

What causes blue-green algae?

Blue-green algae blooms occur when the algae that are typically present grow in numbers more than normal. Within a few days, a bloom can cause clear water to become cloudy.

Winds tend to push the floating blooms to the shore where they become more noticeable. Cyanobacterial blooms can form in warm, slow-moving waters that are rich in nutrients. Blooms can occur at any time, but most often occur in late summer or early fall.

If any major type of water quality alert is issued, you can find the details **here in WGCU's Water Quality Report**.

Environmental reporting for WGCU is funded in part by [VoLo Foundation](#), a non-profit with a mission to accelerate change and global impact by supporting science-based climate solutions, enhancing education, and improving health.

Sign up for WGCU's monthly environmental newsletter, the [Green Flash](#), today.

WGCU is your trusted source for news and information in Southwest Florida. We are a nonprofit public service, and your support is more critical than ever. Keep public media strong and [donate now](#). Thank you.

Tags

Environment

Water Quality Report

Sarasota

Big Sarasota Pass

Water Quality Report

Water

Sarasota Bay

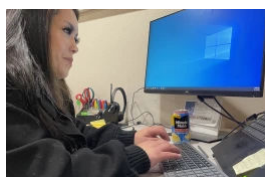


Tom Bayles

tbayles@wgcu.org

[See stories by Tom Bayles](#)

Latest Stories

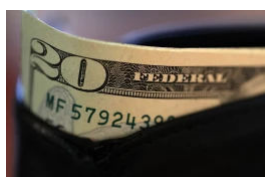


Health advocates criticize New Mexico governor for increasing juvenile detention



Government & Politics

Conservative on spending? Time will tell with the Florida legislature



As car insurance continues to rise, U.S. inflation ticks up in December



Ron DeSantis wanted to be like Trump. Now he's trying to prove he's not to win Iowa

© 2024 WGCU News



