

## ENVIRONMENT

# ‘Playbook’ from Gulf Coast Community Foundation offers a guideline for healthy waterways

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VENICE – The pathway to clean water and a healthy Sarasota Bay ecosystem may be found in a water quality playbook released online Thursday morning by the Gulf Coast Community Foundation.

But what authors David and Jennifer Shafer of Shafer Consulting and Steve Suau, principal of Progressive Water Resources, offered up in 10 chapters, David Tomasko – the new executive director of the Sarasota Bay Estuary Program – summarized in a sentence.

“Basically, the bay needs to go on a nutrient diet,” Tomasko said, as he took time for a phone interview between dive sites Wednesday morning in Sarasota Bay. “We’ve loaded the bay with too much nutrients, we have too much algae in the bay and we’re losing our important seagrass habitat.

“We view the playbook as extremely important for us to figure out how to fix the problems we’re having in Sarasota Bay,” he added.

The Community Playbook for Healthy Waterways, colloquially referred to as the water quality playbook, can be accessed for free by visiting [waterqualityplaybook.org](http://waterqualityplaybook.org).

The 10 chapters cover central wastewater systems, septic systems, biosolids, fertilizer, atmospheric deposition, stormwater design, stormwater partnerships, habitat and wildlife, coordination and monitoring.

It’s possible to make PDF tearsheets from the document to hand out and reference.

The playbook uses Sarasota County as an example but the methodology is meant to apply everywhere, noted Jon Thaxton, senior vice president for Community Investment at the Gulf Coast Community Foundation.

Gulf Coast has been working on water quality concerns prior to the 18-month-long red tide bloom that overwhelmed the area in 2017 and 2018, but the occurrences solidified the resolve to find solutions.

“At the time, red tide was on everybody’s mind because it was also in everyone’s lungs and it was just wreaking havoc on our health, our economy and our quality of life,” Thaxton said. “The evidence points to the human-based nitrogens not creating the red tide but causing a natural red tide outbreak to be much more intense, cover a larger area of shoreline and last for considerably longer periods of time.

“Even without the link to red tide, having healthy waterways, where you can eat the shellfish, feel comfortable about letting your children swim and all of these other factors – beach closures, etc., etc., etc., it was simply the right thing to do.”

Thaxton noted that Shafer came up with the playbook format, which can be continually updated to remain relevant.

Suau and Thaxton previewed the playbook in a March 2020 meeting of the Nokomis Area Civic Association and again in a presentation to the Sarasota County Commission.

Then, Suau referenced the Indian River Lagoon on the east coast of Florida, where algae blooms have thwarted the growth of healthy seagrass.

Tomasko quickly pointed out that with much of Sarasota Bay surrounded by residential development, the quest is to reduce the nitrogen and phosphorous footprints of residential property owners.

The bay was actually doing pretty well in the early 2000s. But between 2014 and 2017, water quality took a nosedive.

“We used to be one of the big success stories in seagrass recovery but we’ve lost a lot of that,” Tomaso said.

Everyone needs to do their part, he added, from residents curbing their use of fertilizer, to counties and municipalities that operate sewer systems and larger stormwater drainage networks, to homeowners with individual septic systems.

Thaxton noted that one of the most critical pieces uncovered in the study that produced the playbook was documentation that in Sarasota County the central wastewater systems were contributing more to nitrogen pollution than septic systems.

“What we advocate for in the playbook is that basically all septic tanks are not created equal,” he added.

There are three key factors in determining the effectiveness of a septic system. When was it built, which can give an indication as to how well it was designed; how far is it from a surface water body and how far above the water table the drain field is.

“If you know those three things, you can prioritize those septic tanks that are the culprits for nutrient loading and focus on them first,” Thaxton said. “You’re not going to have enough money to take all of the 40-plus thousand septic tanks in Sarasota County and anytime soon put them on a centralized wastewater system.

“The data shows that the septic tanks that are correctly designed, out of the water table and a good distance from a surface water do a very good job at nutrient removal,” he added “That’s a different approach than we’ve had in the past but the data speaks very very convincingly to that direction rather than one size fits all.”

Sarasota County is already in the process of converting its wastewater treatment plants to AWT standards by removing nitrogen, which is something the city of Sarasota already does at its treatment plant.

On an individual level, people can reduce energy use, Thaxton said, then added that just as internal combustion engines produce excess carbon, it produces excess nitrogen.

He praised Palmer Ranch for no-mow areas near stormwater retention ponds that have helped improve water quality and brought back wildlife.

Meanwhile, though Sarasota County has an ordinance prohibiting fertilizer use during the rainy season, he noted that big box stores catering to homeowners still sell fertilizer during that time period.

Ideally, Thaxton said, there would be point-of-sale information that note the dangers of using fertilizer in the rainy season, as well as how overuse even in the months when fertilizer is allowed can lead to water pollution.

Tomasko noted that people should be aware of whether they use reclaimed water – which is already nitrogen-rich – to irrigate their lawns, in which case no fertilizer may be needed at all.

Each person has a role to play in helping to bring about this recovered Sarasota Bay we all

“It’s serious,” he added. “We need to do more than what we have. The health of the bay is at a crossroads; it’s up to us for what it becomes.”

## **Interested?**

- To read the Community Playbook for Healthy Waterways, visit [bit.ly/2XzvjWK](https://bit.ly/2XzvjWK).