

A new program in Sarasota County aims to minimize the impact of stormwater runoff

WUSF Public Media - WUSF 89.7 | By [Cathy Carter](#)

Published October 1, 2021 at 5:00 AM EDT



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UF/IFAS University Of Florida /

A retention pond in the city of North Port in Sarasota County stores stormwater runoff.

Karenia Brevis, the tiny organism responsible for red tide, feeds on chemicals like nitrogen and phosphorus. Those nutrients make their way into coastal waters from stormwater runoff that often flows out of retention ponds.

Up to 65 percent of the nitrogen in Sarasota Bay comes from from stormwater runoff, according to Solutions To Avoid Red Tide, or [START](#), a local non-profit environmental group.

On average, Florida gets about 50 to 60 inches of rainfall each year. Sarasota's more than 6,000 man-made retention ponds help filter that stormwater.

But, these man-made bodies of water only operate at 40-60 percent efficiency, said Abbey Tyrna, water resources agent for UF/IFAS Extension & Sustainability Sarasota County.

"Anytime rain falls on a developed area throughout the state, it's going to pass through a stormwater pond before heading downstream to our rivers, streams and creeks," Tyrna said. "So, what happens to the water when it enters these stormwater ponds is extremely important to the quality of our downstream waters. And nitrogen and phosphorus are two nutrients that we're really concerned with because they also drive algal blooms."

The [Healthy Pond Collaborative](#), a new program in Sarasota County, will work with neighborhood groups to upgrade these man-made systems and will also pay for some of those improvements with a \$250,000 grant from the Charles & Margery Barancik Foundation.

A major component of the project will include installing aquatic plants.

"A large majority of stormwater ponds are very shallow, so they're less than 12 feet deep," Tyrna said. "They naturally contain high levels of nutrients such as nitrogen and phosphorus. So, if you have a lot of nutrients in the system and you don't have plants taking it up, then what you're going to have is algae. And that's why we're trying to put more plants in these ponds to take up those nutrients."

The plants also reduce erosion and prevent the need for expensive engineered projects to dredge and restore these ponds, Tyrna said. And they create a habitat for birds and other wildlife.

Tags

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Cathy Carter

As a reporter, my goal is to tell a story that moves you in some way. To me, the best way to do that begins with listening. Talking to people about their lives and the issues they care about is my favorite part of the job.

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