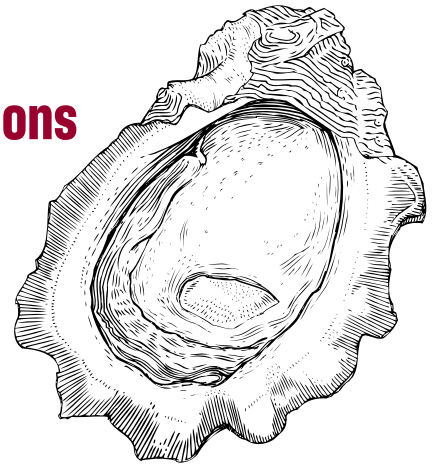
From Science to Solutions



Where do we go from here?

That is the question about 70 scientists, engineers, conservationists and researchers from across Florida and the United States asked themselves at the fourth annual Technical Conference on Coastal Water Quality, TechCon, Sept. 28.

The daylong conference, hosted by Florida Tech's Indian River Lagoon Research Institute and organized by professors Robert Weaver and Kelli Hunsucker, explored a potential fix for the ailing lagoon centered on five themes: combating coastal degradation; muck removal and control; novel approaches to water quality improvements; policy, permitting and planning, governance; and nutrient removal.

Keynote speaker Lew Linker from the Chesapeake Bay Program discussed similar restoration efforts in the Chesapeake Bay watershed, covering commonalities between what is the largest estuary in the United States and the Indian River Lagoon and how researchers can learn from the multigenerational challenges faced in both watersheds.

> "We know that there are a lot of groups out there doing remarkable research to understand the Indian River Lagoon. It's important to keep studying the system, but our goal with TechCon is to combine technology with that research to develop solutions to the issues that our coastal waterways are facing."

"We know that there are a lot of groups out there doing remarkable research to understand the Indian River Lagoon," Hunsucker said. "It's important to keep studying the system, but our goal with TechCon is to combine technology with that research to develop solutions to the issues that our coastal waterways are facing."

While researchers at TechCons past have discussed potential solutions to the lagoon's problems, this year, they've implemented some. In 2016, Brevard County voters approved a half-percent sales tax that in 2017 brought in about $44 million. This year's TechCon included brief "Tech Teaser" presentations about some of the projects implemented with the tax money.

"I know a lot of people were really excited to see what was being done with the money and how we're moving forward," Hunsucker said.

Other TechCon presentations included innovative techniques to remove muck, methods to replace plastic utilized in oyster reef restoration, enhanced septic tank technologies, defining indicators for the health of the Indian River Lagoon, comparing hydrodynamic characteristics of oyster reefs of different ages, climate-based vulnerability assessments and Indian River Lagoon septic policies.

"A lot of times, people hear about what's happening in the lagoon, and it seems very daunting and overwhelming," Hunsucker said. "To me, the presentations from TechCon seem very hopeful. So many people are pushing solutions from different angles. We all have different approaches, but they're all to help improve coastal water quality."

Lagoon-Friendly Lawns

While you might not be on the brink of inventing a revolutionary muck-removal device or developing a groundbreaking waterway restoration technique, you can do your part to clean up the Indian River Lagoon, too! Follow these simple tips from Keep Brevard Beautiful's Lagoon Friendly Lawn program to reduce your nutrient pollution at home.

FRUGAL ON FERTILIZER: Follow local fertilizer ordinances and apply phosphorous only if a soil test shows it is needed. When you do fertilize, use at least 50 percent slow-release nitrogen fertilizer, and don't apply more than 1 pound of nitrogen per 1,000 square feet.

PASS ON GRASS: Reduce the amount of turf on your property. The less grass in your yard, the lower your nutrient inputs will be. Instead, install a garden or mulched flower beds.

ABSORB IT: Replace impervious surfaces (like poured concrete) with surfaces that allow water to flow through: pavers, crushed concrete, mulch beds. This can reduce the stormwater runoff that flows into the lagoon, carrying nutrients with it.

GO NATIVE: Replace exotic, invasive plants in your yard with native landscaping that is perfectly adapted to our area, requiring less, if any, watering or fertilizer.