

# WATER QUALITY 2023 ANNUAL REPORT

**Sarasota County Government** is committed to protecting and enhancing water quality wherever and whenever possible. The health of our surface waters is measured in many ways, including total nitrogen, chlorophyll-a, and biological indicators such as seagrass health and scallop population. The primary pollutant affecting all of these metrics is the amount of nitrogen entering our waterways, which can come from septic systems to fertilizer to wastewater discharges, and more. We can all make a difference in reducing nutrient pollution and protecting local water quality.

This report highlights projects and initiatives related to water quality implemented by Sarasota County in 2023. There is significant collaboration between departments and the community on many of these projects. For more updates, please visit [scgov.net/waterquality](https://scgov.net/waterquality).

## Education and Outreach

- BayFest (formerly Seagrass Festival) is a collaboration with the Sarasota Bay Estuary Program that focuses on seagrass, Sarasota Bay and water quality. In 2023, there were 1,200 attendees.
- The EcoSummit and Expo was held in December as a partnership between the Science and Environment Council of Southwest Florida, Sarasota County, and the City of Sarasota. In total, 1,939 people registered for the combined series of events over five days. Residents learned how to save money and improve their homes, while protecting water and air quality and wildlife in our region. They were also connected with local businesses and nonprofits to help them do so.
- Sarasota County sold 364 rain barrels in fiscal year (FY) 23, in combination with a workshop where participants learned about how to use them and the benefits of capturing rainwater for water conservation and water quality.
- Sarasota County staff and partner agencies hosted a Homeowner's Association (HOA) Success Workshop that featured HOA leaders presenting on their successful implementation of stormwater best management practices throughout Sarasota County.
- [The Neighborhoods Best Practices](#) course was developed by Sarasota County Extension to support homeowners' associations in understanding and applying the latest strategies for managing their landscapes, ponds, irrigation systems, and more. The online course includes nine detailed interactive modules and eight new fact sheets, many focusing on water quality benefits.
- The [Water Quality Story Map](#) launched in May showcases 10 different strategies the county implements to protect water quality in an engaging and interactive way.
- The freshwater and the coastal systems modules of the Florida Master Naturalist Program, each 40 hours of instruction, were delivered to participants from government, private and nonprofit



sectors. The courses include field trips to innovative stormwater management pond examples and the Celery Fields for its stormwater treatment and flood prevention benefits.

- Workforce training was provided to marine contractors operating in Sarasota County on planning, installing and maintaining shoreline buffers made with natural resources (“living shorelines”).
- The Sarasota County Master Gardener Volunteer (MGV) Program educated hundreds of residents on topics promoting healthy landscapes that minimize detrimental water and ecosystem impacts through Plant Clinics, demonstration gardens, educational tours, displays, and more.
- The Florida Waters Stewardship Program workshop series provided lectures and field trips focused on water resources, supplies, quality, coastal habitats and and more, helping attendees be effective stewards of local watersheds.
- Extension shared Florida-Friendly Landscaping™ information, tips and techniques for resource protection and water quality benefits, with dozens of homeowners’ associations and hundreds of residents this year through workshops, site visits and consultations.
- Extension provided EcoWalks to Sarasota County residents to teach about the role of coastal and wetland systems and land preservation in water quality protection. During those walks, participants also learned about what they can do to contribute to clean waterways.
- Extension hosted 26 water conservation classes this year, where more than 530 people learned specific water-saving strategies inside and outside the home. In addition, 41 high water users received an onsite [irrigation evaluation](#), which included an assessment of the system and detailed recommendations for irrigation efficiency. In total, these programs and services are estimated to have saved over 1.914 million gallons of water just this year, while also reducing nutrient runoff and erosion.
- Extension educated several thousand youths in classrooms, field trips, 4-H clubs, and more on water quality, pollution reduction, microplastics, and more.
- The online [Bay-Friendly Fertilizing Tools](#) for residential landscapes and golf courses were updated to help individuals assess fertilizer need and application rates and minimize adverse impacts on waters and ecosystems.
- Mangrove Trimming Best Management Practices classes were offered for landscaping professionals, local government and others to support proper mangrove care, protecting the coastline and water quality they support.
- Site visits were provided for homeowner’s associations to answer questions related to best management practices of coastal



properties, including mangrove trimming practices, invasive species removal, and sustainable erosion control techniques.

- Water quality samples were obtained from 1,321 sites in county creeks and bays, with approximately 22,000 parameters analyzed. The information was successfully submitted to the Florida Department of Environmental Protection and the Sarasota County Water Atlas and made available to the public.
- The [Natural Areas Story Map](#) was created to provide an interactive online tool that educates about unique parks and preserves in Sarasota County, including the stormwater and flood prevention functions of the Celery Fields Regional Stormwater Facility.
- Education on Fats, Oils, and Grease (FOG) helped residents better understand how to help avoid blockages in the sanitary sewer system and protect water quality.
- A new “Trees for the Suncoast” course was developed to educate about the benefits of planting trees, the selection of wind-resistant species, and how to plant and care for them. This program is in high demand and was part of the Arbor Day celebrations in April, when over 125 trees were distributed to course attendees. The adopted trees will increase stormwater management, shade, wildlife habitat and protect water quality.
- Through a partnership with Sarasota County Public Works, Solutions to Avoid Red Tide (START) presented on healthy ponds and red tide at community centers, service clubs and schools. They also provided public service announcements for local TV stations on red tide events and partnered with Sarasota Bay Watch to seed another million clams in Sarasota Bay.
- For all Keep Sarasota County Beautiful activities in 2023, 565 volunteers contributed over 1,185 hours of service and removed more than 6.5 tons of litter from county roadways, parks and beaches.
- Sarasota County achieved the Leadership in Energy and Environmental Design (LEED) “Gold” certification and national accreditation from the U.S. Green Building Council, an honor recognizing an array of efforts to increase sustainability across the county, including water quality improvement efforts.
- The Stormwater Environmental Utility was awarded the Florida Stormwater Association’s Outstanding Achievement Award.



## Habitat Restoration

- As mitigation for oyster bags destroyed by Hurricane Ian, 210 oyster bags were deployed at Blackburn Point Park. In addition, a similar pilot program to hang 20 vertical oyster gardens from the dock at Blackburn Point Park occurred. The oyster bags and gardens help filter pollutants from the water column, providing improved water quality.
- In 2023, 753 pounds of floatable trash was removed via the WaterGoats initiative. On average, 90% of the material was recyclable, with



single-use plastics and styrofoam as the two largest contributors.

- In 2023, Public Works staff removed 91,809 pounds of nitrogen and 25,577 pounds of phosphorus from waterways, through monthly vegetation management within the drainage system (ditches and canals.)
- The county received a \$14.6 million grant for the construction of the Alligator Creek Stream Restoration Project from the National Oceanic and Atmospheric Association (NOAA). Design and permitting is ongoing.



## Land Conservation

- In 2023, through the voter-approved Environmentally Sensitive Lands Protection Program and Neighborhood Parkland Acquisition Program, the county acquired six properties totaling 351.65 acres along the Wild and Scenic Myakka River, Warm Mineral Springs Creek, Curry Creek, and Little Sarasota Bay. These acquisitions help protect our estuaries from pollutant runoff while also providing floodplain protection and aquifer recharge.
- Working with developers through the county's development review process, 366 acres of native habitat were protected.



## Stormwater Ponds

- The [Healthy Ponds Guide](#) was developed in a partnership between Sarasota County, START, the Science and Environment Council, and Barancik Foundation. This guide is intended to help neighborhoods and homeowners maintain their stormwater ponds in accordance with Best Management Practices.
- Workshops, site visits and consultations provided education and technical support to neighborhoods across the county on best practices in managing stormwater ponds including erosion control, stormwater runoff, plantings, buffers and more to optimize water quality and ecosystem health.
- The Healthy Ponds Collaborative is in its third year of supporting neighborhoods with grants for native plants to restore pond health, with 23 in the first two years and six in 2023. A demonstration project at Bobby Jones Nature Park, provided plants for a 20-acre wetland already inhabited by 23 species of birds and a pair of otters, along with educational signage.
- With the Healthy Pond Collaborative, START and Sarasota County staff:
  - Visited 40 county communities with advice on enhancing their ailing stormwater ponds.



- Reached 28,626 residents.
- Funded 37,600 aquatic plants for these communities.
- Created 7.1 miles of newly planted pond shoreline in the county.

## Regulatory Compliance and Standards for Development

- Four request for proposals responses were received for the Reverse Osmosis Leachate Treatment Services. Evaluation meetings were completed in October 2023 and the project is moving toward contract.
- Cleanup of eight petroleum contaminated sites occurred this year restoring ecological and economic value to these previously impacted sites.
- 175 petroleum storage tank systems were installed this year, which are subject to monitoring and compliance, ensuring that they meet applicable standards for water quality and soil protection.
- Staff inspected stormwater water quality at industrial facilities at 100 sites.
- Staff inspected 85 domestic wastewater treatment facilities ensuring regulatory compliance.
- The county commission approved an ordinance to regulate sources of sanitary sewer inflow and infiltration from private collection systems and to address inflow and infiltration from privately owned gravity sewer systems that flow into the county's sanitary sewer collection system.
- Resolution No. 2006-182 was amended to establish irrigation days and times for lawns and landscaping relating to landscape watering restrictions.
- The county commission amended the ordinance for Chapter 22, Article VI, of the County Code, the Water Efficient Landscaping Regulations Code.
- The Bee Ridge Water Reclamation Facility expansion and conversion to advanced wastewater treatment is progressing on schedule. The concrete structures are in place. Piping, electrical equipment, and process equipment are currently being installed. Completion is scheduled for late 2025, which will remove significant nutrients from the wastewater, improving water quality.
- Staff completed the National Association of Sewer Service Companies (NASSCO) training.
- The Florida Department of Environmental Protection (FDEP) audit of the county's National Pollutant Discharge Elimination System permit activities was successfully completed with no requests for additional information.
- A Groundwater Nutrients Evaluation Study to identify nitrogen and phosphorus hot spots throughout the county is underway. The final report will include recommended best management practices and projects to reduce the groundwater pollutant load to creeks and bays to reduce the severity and longevity of harmful algal blooms and red tide events.
- Dona Bay Hydrologic Restoration Project Phase 2 was completed. More than one mile of 72-inch stormwater pipe was installed between the Phase



1 wetland rehydration area and the Dona Bay Surface Water Storage Facility that will be the source of water for Phase 3.

- Dona Bay Hydrologic Restoration Project Phase 4 was completed. Rehabilitation of the gated weir structure in Cow Pen Slough adjacent to the Kings Gate community allows for better control of the freshwater input into Dona and Roberts bays, which will help stabilize the freshwater/saltwater dynamics and may lead to recovery of oysters and seagrasses.
- Solicitation of a consultant for the Little Sarasota Bay Watershed Management Plan was successfully completed.
- A new Water Quality Level of Service was adopted by the county commission. This will be used for planning water quality projects and tracking water quality trends rather than used as a regulatory tool.



## Communications

- The following metrics highlight communications specific to water quality that occurred in 2023.

### Media

- Nine media releases
- 69 media pitches
- Eight media contacts

### Videos

- Nine videos totaling 458 views on YouTube

### Social Media

- World Water Day – Reach 2,980; Engaged Users 171
- February Water Quality Update – Reach 1,021; Engaged Users 34
- January Water Quality Update – Reach 1,013; Engaged Users 40
- Water Quality Story Maps – Reach 2,170; Engaged Users 151
- April Water Quality Update – Reach 1,207; Engaged Users 42
- June Water Quality Update – Reach 1,212; Engaged Users 18
- July Water Quality Update – Reach 1,297; Engaged Users 23
- August Water Quality Update – Reach 2491; Engaged Users 25
- October Water Quality Update – Reach 1512; Engaged Users 32
- December Water Quality Update – Reach 1,019; Engaged Users 17

