

# WATER QUALITY 2024 ANNUAL REPORT

## Water Quality 2024 Annual Report

Sarasota County Government remains committed to protecting and enhancing water quality across Sarasota County.

This report showcases the initiatives, projects and partnerships in 2024 to safeguard water quality in Sarasota County. Collaboration between county departments, community members and stakeholders played an important role in these efforts. For more information, please visit [scgov.net/waterquality](https://scgov.net/waterquality).

## Education and Outreach

In 2024, Sarasota County implemented numerous programs to educate residents and business owners about water quality:

- Sarasota County staff shared tips and techniques for water quality and resource protection, stormwater pond management best practices, Florida-Friendly Landscaping™ and irrigation efficiency with dozens of homeowners' associations (HOA), reaching hundreds of residents through workshops, site visits, and consultations. Videos and other online educational materials reached thousands more residents and HOA members.
- The [Sarasota County Starter Kit](#) was created to help newcomers and existing residents acclimate to the region through a series of webinars, blog posts and related content. Courses included significant content related to water quality including best practices for living around stormwater ponds, Florida-Friendly Landscaping™ and protecting coastal wetlands.
- The Sarasota County Master Gardener Volunteers (MGV) educated hundreds of residents on topics promoting healthy landscapes that protect water quality and reduce resource use through Plant Clinics, demonstration gardens, educational tours, displays, and more. Training resulted in 14 new graduates who joined the 125+ volunteers.
- Trainings for “green industry” professionals and horticulture industry representatives were provided on landscaping and fertilizer best management practices.



- UF/IFAS Extension provided workforce training for pest control industry professionals on pest and beneficial insect identification and control method best practices. Pesticide education and certification exams were given for lawn/landscape maintenance professionals. This supported their required licenses. These programs help reduce chemical use and protect water quality, human health and wildlife.

- UF/IFAS Extension provided EcoWalks to Sarasota County to educate residents about the role of wetlands, coastal systems and sustainable landscaping in water quality protection. During those walks, participants learned how they can contribute to clean waterways.



- The freshwater and the uplands modules of the Florida Master Naturalist Program, each 40 hours of instruction, provided important workforce training opportunities on water quality-related issues for professionals from government, private and non-profit sectors.

- Sarasota County sold 215 rain barrels in 2024, 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.

- In advance of the summer fertilizer restriction season, online education and in person classes including “Fertilizing Effectively for Suncoast Soils” helped the public understand how to follow the county’s fertilizer policy, while having a beautiful landscape.

- Stormwater staff provided education and awareness about the upcoming Alligator Creek stream restoration project at multiple community events.

- Extension helped hundreds of households save money and reduce air and water pollutants through workshops and outreach promoting energy efficiency in homes and vehicles.



- Staff educated thousands of students in classrooms, field trips, 4-H clubs, summer camps, and more, on water quality, pollution reduction, and microplastics.

- At the 19th Annual Sustainable Communities Workshop, experts delivered information about water quality, sustainability, waste reduction, and quality of life. The workshop reached an in-person and online audience of 170.

- Student artists were recognized for their submissions to the 2025 Neighborhood Environmental Stewardship Team (NEST) calendar. The theme of “Ready When It Rains” encouraged practices to reduce stormwater pollution including picking up trash, starting a rain garden, and reducing fertilizer.

- 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.
- The Sarasota County [Healthy Ponds Guide](#) received a Florida Stormwater Association 2024 Outstanding Achievement Award in recognition of outstanding and innovative stormwater public education efforts benefiting the environment and local citizenry.



## Habitat Restoration and Water Quality Monitoring

- 12 artificial reef deployments were completed at five sites, including 129 modules/reef balls weighing over 66 tons. Artificial reefs play a crucial role in enhancing water quality by providing habitats for filter-feeding organisms including oysters and sponges that remove particulates and improve water clarity. They also help stabilize sediments, reduce turbidity and prevent erosion.
- Following a very active hurricane season, roughly 3.34 million tons of non-vegetative debris and 3,583 tons of vegetative debris were removed from Sarasota County waterways by County staff, with efforts continuing into 2025.
- In 2024, Public Works staff removed 257,647 pounds of nitrogen and 33,942 pounds of phosphorus from waterways, through monthly vegetation management within the drainage system (ditches and canals.) 7,636 pounds of nitrogen and 1,912 pounds of phosphorus were removed exclusively from the Dona Bay Hydrologic Restoration project via harvesting of 6,981 tons of water hyacinth, which is an undesirable plant and contributes to nutrient pollution.
- For all Keep Sarasota County Beautiful activities in 2024, 1,163 volunteers contributed over 2,018 volunteer hours and removed more than 7.84 tons (15,680 pounds) of litter from county roadways, parks, and beaches.
- 582 pounds of floatable trash were removed from stormwater canals and waterways via the WaterGoats initiative in 2024.
- In August, staff removed garbage from the mangroves that surround the Nokomis Boat Ramp, filling an entire truck bed and protecting mangrove health, which is an important part of water quality.



- Tree plantings were completed at multiple parks to restore native habitat and provide shade and water filtration. Projects included: 45 mangroves at North Lido Beach Park, 85 long leaf and slash pines at Caspersen Beach Park, 11 native trees at Indian Mound Park, and six slash pines at Blackburn Point Park.



- 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 was made available to the public.

- Stormwater staff and volunteers conducted oyster monitoring, scallop monitoring and a seagrass survey, which evaluated these keystone species at various points throughout the bays. The data is used to assess water quality and guide decisions about project implementation.



- In July, Parks, Recreation, and Natural Resources staff installed nearly 80 Vertical Oyster Gardens (VOGs) at Osprey Fishing Pier. VOGs are designed to provide additional substrate for oysters and other filter-feeding organisms to grow on, contributing to water quality.

## Land Conservation

- In 2024, Sarasota County purchased or protected over 703 acres of land through the Environmentally Sensitive Lands Protection Program (ESLPP), with parcels in multiple watersheds. Conserving this land helps reduce stormwater runoff, recharge the aquifer, provide flood protection and protect habitat for wildlife.
- Working with developers through the county's development review process, 123 acres of native habitat were protected.

## Stormwater

- Design and permitting for the Alligator Creek Stream Restoration Project has been ongoing in 2024, with a goal of completing the project in 2027. Pre-construction fish monitoring was also completed. The project is funded through a \$14.6 million grant from the National Oceanic and Atmospheric Association (NOAA).



- The recently completed Dona Bay Hydrologic Restoration Project Phase 2 is now functioning, and millions of gallons of excess freshwater are being diverted, treated and attenuated through the system instead of flowing into Dona Bay.
- Dona Bay Hydrologic Restoration Project Phase 4 (King’s Gate Weir rehabilitation in Cow Pen Slough) was completed in 2024. This project allows for proper water flow management from Cow Pen Slough to Dona and Roberts bays. During the rainy season, the gates are closed unless storm conditions require their opening, and all water from Cow Pen Slough is routed through the hydrologic restoration project sites (Phases 1 and 2).
- Pre-design work continued for the Phillippi Creek Northwest Tributaries Natural Systems Restoration project.
- A Groundwater Nutrients Evaluation Study to identify nitrogen and phosphorus hot spots throughout the county is underway. Monitoring wells have been installed, and the sampling program has started. The final report will include recommended best management practices and projects to reduce the groundwater pollutant load to creeks and bays.
- Staff conducted maintenance of the Beach Road Stormwater Treatment System outfall structure in the Gulf of Mexico.
- In 2024, Sarasota County adopted the Stormwater Environmental Utility [Incentive Rebate Program](#), which provides financial incentives to property owners who implement projects on their properties that will improve the quality of stormwater leaving their property.
- Workshops, site visits and consultations provided educational and technical support to neighborhoods across the county on best practices managing stormwater ponds including erosion control, stormwater runoff, plantings, buffers and more to optimize water quality and ecosystem health.
- Sarasota County received a Florida Stormwater Association 2024 Excellence Award for the Dona Bay Restoration Phase 2 Surface Water Storage Facility Project in recognition of outstanding commitment to stormwater management practices providing benefits to the environment and local citizenry.

## Exceeding Regulatory Compliance and Implementing Standards for Development

- The expansion and conversion of the Bee Ridge Water Reclamation Facility to an Advanced Wastewater Treatment (AWT) facility are on track to treat wastewater to AWT standards by the end of 2025. Public Utilities is currently testing the salinity barrier well, an integral part of the facility's overall function. Completing this project will result in regionally improved water quality due to the advanced treatment changes, resulting in significantly lower nutrient levels.



- Planning and Development Services' Air and Water Quality (AWQ) staff coordinated with the City of Sarasota to address unauthorized discharges to the stormwater system, which travel directly to Sarasota Bay. Since May 2024, 50 joint assessments of restaurants in downtown Sarasota have been conducted, evaluating their use of Best Management Practices (BMPs) related to used cooking oil and grease, greywater from cleaning activities and liquid discharges from dumpsters. Restaurant managers are given recommendations, informed of potential environmental impacts and county code and provided reference materials. A courtesy notice is sent to each restaurant summarizing the assessment, identifying concerns and encouraging the education of restaurant staff. Additional assessments are anticipated in the coming months at additional locations.
- This year, 12 petroleum-contaminated sites were cleaned up, restoring ecological and economic value to these previously impacted sites.
- Five petroleum storage tank systems were installed this year, which are subject to monitoring and compliance to ensure they meet applicable standards for water quality and soil protection.
- Staff inspected stormwater water quality at industrial facilities at 242 sites.
- Staff inspected 20 domestic wastewater treatment facilities, ensuring regulatory compliance.
- In collaboration with the Department of Health in Sarasota County, 783 beach water quality samples were collected and evaluated for biological and chemical environmental hazards.
- 1,840 septic systems were inspected for public health and environmental standards, and 686 well inspections were conducted to ensure drinking water safety.
- Several projects are underway to improve the quality of the landfill's leachate that is sent to the wastewater treatment system, ultimately improving overall surface water quality. The installation of the Leachate Tank Aeration System began in November 2024 and is scheduled for completion in April 2025. The leachate storage ponds project, which will provide storage for the future treatment system, started construction at the end of 2024, with completion anticipated in fall 2025. The reverse osmosis project was approved by the Sarasota County Board of County Commissioners in May 2024 and is in design and permitting, with construction and operation anticipated in 2025. The system can remove up to 80% of the ammonia in the leachate.



## Communications

The following metrics highlight communications specific to water quality that occurred in 2024:

### Media

- 26 Media Relations Engagements

### Videos

- 14 videos totaling 884 views on YouTube

### Social Media

- [Addressing Your Comments and Concerns about Best Tasting Water](#)
  - Reach 1,251; Engaged Users 16
- [February Water Quality Update](#)
  - Reach 1,196; Engaged Users 9
- [Water Quality Annual Report Video](#)
  - Reach 1,000; Engaged Users 11
- [Addressing Your Comments and Concerns about Best Tasting Water](#)
  - Reach 1,251; Engaged Users 16
- [February Water Quality Update](#)
  - Reach 1,196; Engaged Users 9
- [Water Quality Annual Report Video](#)
  - Reach 1,000; Engaged Users 11
- [2023 Lookback on Sarasota County Water Quality Initiatives](#)
  - Reach 1,400 ; Engaged Users 7
- [April Water Quality Update](#)
  - Reach 2,136; Engaged Users 26
- [May Water Quality Update](#)
  - Reach 2,800; Engaged Users 29
- [June Water Quality Update](#)
  - Reach 1,032; Engaged Users 16
- [Water Quality Consumer Confidence Report](#)
  - Reach 1,300; Engaged Users 12
- [July Water Quality Update](#)
  - Reach 1,988; Engaged Users 13
- [November Water Quality Update](#)
  - Reach 2,634; Engaged Users 25
- [December Water Quality Update](#)
  - Reach 3,439; Engaged Users 24

