

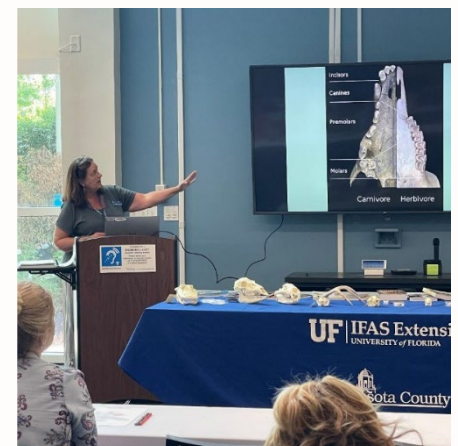
Overview

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 these metrics is the amount of nitrogen entering our waterways, which can come from septic systems, fertilizer, 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 January through June 2024. There is significant collaboration between departments and the community on many of these projects. For more updates, please visit scgov.net/waterquality.

Education and Outreach

- The [Sarasota County Starter Kit](#) launched 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 such as best practices for living around stormwater ponds, Florida-Friendly Landscaping™ and protecting coastal wetlands.
- The 2024 Master Gardener Volunteer Program trainees completed a multi-session training on horticulture, pests and other issues, with 14 new graduates joining the 160-plus active volunteers who are educating the community on sustainable landscaping strategies that protect water quality and reduce resource use.
- Training for “green industry” professionals and horticulture industry representatives was provided on landscaping and fertilizer best management practices.
- Extension provided workforce training for pest control industry professionals on pest and beneficial insect identification and control methods. In addition, pesticide certification exams were administered for lawn/landscape maintenance professionals to support their required licenses and educate on best practices. These programs help reduce chemical use and protect water quality, human health and wildlife.
- Extension provided 11 professionals with in-depth education on freshwater systems ecology, management and water quality protections through the multi-session Florida Master Naturalist Program.
- Extension staff shared freshwater habitat management and protection strategies, alligator biology, and safety-related information with two community groups to reach approximately 85 attendees.
- Extension has continued its comprehensive Florida-Friendly Landscaping™ outreach and education, which results in water quality benefits and reductions in other environmental impacts. There has been significant community and media interest in efforts to restore the rare atala butterfly species.



- Three “Fertilizing Effectively for Suncoast Soils” classes were held around the county in the lead up to the summer fertilizer restriction season. This class is specifically designed for educating the public on how to follow the county’s fertilizer policy, while having a beautiful landscape.
- Extension staff presented Learning in Florida’s Environment (LIFE) programs, focused on freshwater and coastal ecosystems and water quality strategies, with classroom education and field trips to Myakka River State Park and Lemon Bay Park. This program provided hands-on learning activities for nearly 800 Sarasota County fourth and fifth grade students this year.
- 115 students from high schools in Sarasota and Manatee counties participated in the Manasota Envirothon competition, with Extension leading the Aquatics portion, focused on freshwater ecosystems and water quality.
- Extension reached more than 2,000 individuals with sustainability information and tools related to energy and water conservation, solar energy options, “green” living practices, and more. These programs protect water resources through efficiency strategies, but also through reduced atmospheric deposition of air pollutants into water bodies.
- Extension staff presented on Sarasota County’s comprehensive approach to Water Quality initiatives at the national Gulf of Mexico Conference in February.
- Stormwater staff received a Florida Stormwater Association 2024 Outstanding Achievement Award for the [Healthy Ponds Guide](#) in recognition of outstanding and innovative stormwater public education efforts benefiting the environment and local citizenry.
- Stormwater’s [Neighborhood Environmental Stewardship Team \(NEST\) Program](#) presented “Stormwater: The Trickle Down Effect” to Siesta Key residents to teach them about stormwater and how the water quality of our creeks, bays and the Gulf is partially dependent on landscape maintenance.



Habitat Restoration

- Completed the planting of 35 long leaf and slash pines at Caspersen Beach Park as part of an ongoing restoration effort, which will also provide shade for future generations.
- Completed the planting of 11 native trees at Indian Mound Park to help provide additional native habitat and shade.
- Completed the planting of six slash pines at Blackburn Point Park (Center Node) as part of an ongoing park restoration project.
- Completed the following artificial reef deployments:
 - Silvertooth Reef – Six deployments totaling 30.2 tons (material: reef balls)
 - M2 Tom Wallin Reef – 18.75 tons
 - Harts Family Reef* – 4 tons (material: deep covers¹)



- Walker Reef* – 4 tons (material: deep covers)
- Sportfish Anglers Reef* - 4 tons (material: deep covers)

**Harts, Walker and Sportfish reefs are newly re-permitted inshore reef sites and the deployments were in collaboration with Sarasota Bay Estuary Program.*

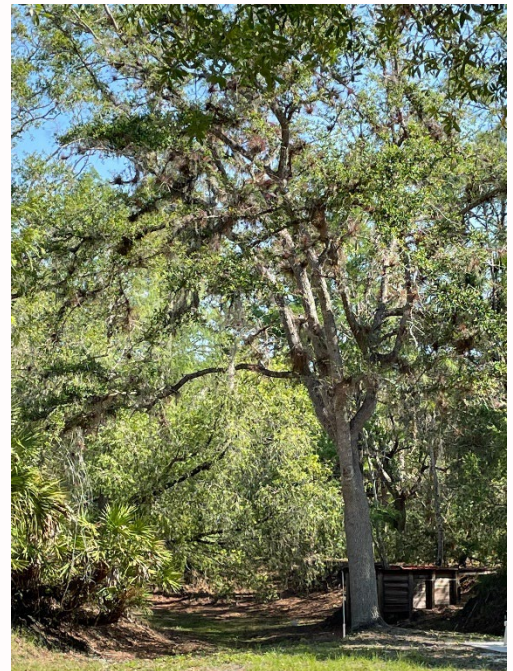
**Deep covers are designed to provide habitat for marine life in deep water, mimicking natural reef features, such as caves and crevices. They can help improve water quality by reducing erosion and providing a surface for filter feeders to grow.*



Land Conservation

- Through the Environmentally Sensitive Lands Protection Program (ESLPP), two land acquisition projects were completed that provide floodplain compensation, groundwater/aquifer recharge and stormwater capture and treatment:

- 43.34 acres located on Woodland Boulevard in North Port. The site is within multiple watersheds (Deer Prairie Slough, Deer Prairie Creek and Myakka River) and is classified as a priority of the Florida Ecological Greenways Network. The site consists of primarily mesic hammock, depression marsh and improved pasture. Native wildlife species present on or near the property are eastern wild turkey, crested caracara, bald eagle, sandhill crane, swallow-tailed kite, red-bellied and pileated woodpecker, gopher tortoise, white-tailed deer, and marsh rabbit.
- 5 acres located at 3905 E. Venice Ave., Venice. The site is within the Myakka River watershed and contains remnant scrubby flatwoods habitat. Wildlife species present on or near the property are various turtle species, gopher tortoise, red shouldered hawk, red-bellied woodpecker, great horned owl, barred owl and bobcat. Native vegetation on the property includes live oak, laurel oak, southern red cedar, cabbage palm, slash pine and pond cypress.



Stormwater Ponds

- Dona Bay Hydrologic Restoration Project Phase 4 (rehabilitation of King’s Gate Weir in Cow Pen Slough) was completed. This project replaced failing control gates and the catwalk used to operate the gates and will allow for proper management of water flow 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).

- Winter rains have brought water levels up in the Dona Bay Watershed. The recently completed Dona Bay Phase 2 project is now functioning and millions of gallons of excess freshwater are being diverted, treated and attenuated through the Dona Bay Phase 1 and the new Dona Bay Phase 2 system instead of flowing to Dona Bay.
- Public Works removed 203,060 pounds of nitrogen and 20,841 pounds of phosphorus from waterways. 3,955 pounds of nitrogen and 990 pounds of phosphorus were removed exclusively from the Dona Bay Hydrologic Restoration project via harvesting of water hyacinth, which is an undesirable plant and contributes to nutrient pollution.
- 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.

Regulatory Compliance and Standards for Development

- The expansion and conversion of the Bee Ridge Water Reclamation Facility to advanced wastewater treatment is progressing on schedule and within budget. The concrete structures are complete, and the installation of piping, electrical equipment, and process equipment is well underway. The project is scheduled for completion in late 2025. Once finished, the facility will enable residents and commercial establishments to irrigate with water containing significantly lower nutrient levels, thereby improving water quality regionally.



- Planning and Development Services' Air and Water Quality (AWQ) staff coordinated with the City of Sarasota to address a growing concern for unauthorized discharges to the stormwater system, which travel directly to Sarasota Bay. Since May 2024, 34 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 BMP recommendations, made aware of potential environmental impacts and county code, and are provided reference materials. In addition, a courtesy notice is sent to each restaurant summarizing the assessment, identifying common concerns, and encouraging the education of restaurant staff. Additional assessments are anticipated in coming months in additional locations.



- The Leachate Tank Aeration System project will reduce the ammonia concentration in the landfill leachate that is being pumped to the wastewater treatment plant. This will ultimately improve the treatment efficiency and quality of the discharge for the wastewater treatment process and improve overall water quality. The intent is to make the landfill leachate easier for the wastewater plant to process. The project will be going into construction starting in August 2024 with anticipated completion in summer 2025.

- The leachate storage ponds will provide storage for the future treatment system such as the reverse osmosis landfill leachate system to allow for storage of the concentrate (the liquid produced by the treatment system) and the effluent (the clean water produced by the treatment system.) The storage capacity will supplement the existing leachate storage tank and the landfill. The project is anticipated to start construction in fall 2024 with completion in fall 2025.
- The Reverse Osmosis Agreement was approved by the county commission in May 2024 and the permitting process began in June 2024. The system will be capable of removing up to 80% of the ammonia in the landfill leachate making it easier for a wastewater treatment plant to process and improving the overall water quality of the treatment plant’s discharge. This project is related to the leachate ponds because the ponds will be used to store the concentrate and effluent from the reverse osmosis treatment process. Additionally, the leachate aeration system in the leachate tank will provide polishing of the treated water to continue to remove ammonia after reverse osmosis treatment.
- In the first six months of 2024, 7,210 creek and bay water quality samples were submitted to Florida Department of Environmental Protection.

Communications

The following metrics highlight communications specific to water quality that occurred in January – June 2024.

Media

- 5 Media Relations Connections

Videos

- 7 videos totaling 414 views on YouTube

Social Media

- Addressing Your Comments and Concerns about Best Tasting Water – Reach 1,251; Engaged Users 16
- <https://fb.watch/tEY-afsDru/>
- February Water Quality Update – Reach 1,196; Engaged Users 9
- <https://fb.watch/tEZ2tcWKP9/>
- Water Quality Annual Report video– Reach 1,000; Engaged Users 11
- <https://fb.watch/tEZ9uwC8DY/>
- 2023 Lookback on Sarasota County Water Quality Initiatives – Reach 1,400 ; Engages Users 7
- <https://fb.watch/tEZ7yhdA6k/>
- April Water Quality Update – Reach 2136; Engaged Users 26
- <https://fb.watch/tEZe4-dW2r/>
- May Water Quality Update – Reach 2,800; Engaged Users 29
- <https://fb.watch/tEZfQu-NgN/>
- June Water Quality Update – Reach 1,032; Engaged Users 16
- <https://fb.watch/tEZOGqnLiW/>
- Water Quality Consumer Confidence Report – Reach 1,300; Engaged Users 12
- <https://fb.watch/tEZHU>

