

Environmental Improvements at The Bay Park

The Bay preserves, restores and transforms 53 acres of precious city-owned land along Sarasota Bay into a blue and green oasis - providing a sustainable bayfront gathering place for the community to experience and enjoy a wide range of park uses, free programs and events.

Nature and Environmental Features of The Bay

The Bay Park Master Plan includes:

- ½-mile waterfront promenades and boardwalks along Sarasota Bay
- ½-mile 10-ft. wide sidewalk around coastal wetland known as the Mangrove Walkway
- Paths and educational decks through the historic oak and cabbage palm hammock on the east end of the Mangrove Bayou
- Botanical gardens at the Sarasota Garden Club and Fountain Garden
- Multiple green lawns and open spaces of various sizes throughout the 53-acre park
- Small natural beaches along the shoreline in several locations of the park
- Conversion of hardened shorelines to natural resilient shorelines, capable of accommodating occasional flooding through storm events
- Removal of 2-3' of polluted silt in the Mangrove Bayou to restore better tidal flow and to facilitate seagrass growth and habitat restoration for a number of native plants and animals.

Additional Reading

Environmental Overview

- One Native's View
- The Bay Park Conservancy: <u>Protecting Our Precious</u>

 <u>Environment</u>

Ecology & Wildlife

- The Bay: An Assist for Mother Nature
- The Bay: It's Good to Be Green
- The Bay: Protecting Our Mangrove Bayou

Water Quality & Resiliency

- The Bay and Mote Marine Laboratory: A Purposeful Partnership
- Our Beautiful Bay
- The Bay: Protecting Our Mangrove Bayou
- The Bay: Hurricane Resilient

Revised: Fall 2023

Water Quality Features of The Bay

Every year, 300+ million gallons of polluted stormwater runoff from nearby N. Tamiami Trail and from the rest of the site flows directly into Sarasota Bay.

The Bay Park includes a "treatment train" that cleans this stormwater through:

- Stormwater treatment ponds and marshes
- 600' x 6' x 6' denitrification trench
- 30 50 ft. native plant shoreline buffers along all waterfront edges of the park
- Stormwater baffle boxes that remove silt and pollutants from onsite and offsite runoff running through stormwater pipes
- Pervious paving at key locations
- Underwater features including clam and oyster seeding
- Underwater reef balls

The first ten acres of park (known as Phase 1) which opened in October 2022 includes the first section of this "treatment train" and cleans ~70 million gallons of run-off each year.

Environmental Education and Recreation Benefits of The Bay

- Public education through interpretive signage and programmed learning opportunities will demonstrate how site enhancements improve the quality of runoff into Sarasota Bay, inspiring children of all ages to become stewards of their community's environment.
- Hands-on and feet-in environmental learning laboratories and experiences throughout the site will immerse park guests and educate about the area's aquatic plant and animal life. A variety of shoreline treatment demonstrations will be utilized, both for evaluation and education.
- Increased opportunity for recreation, improved connectivity to regional trail systems, additional planting and shade, and enhanced access to the water will all result in a site that can improve the overall health of Sarasota's and the region's citizens.

Additional Environmental Benefits of The Bay

- Improved flushing to the Mangrove bayou tidal creek will increase dissolved oxygen, remove stagnant areas prone to mosquito breeding and remove accumulated sediments that get flushed to Sarasota bay resulting in smothered oyster beds, corals and seagrasses.
- Habitat restoration to restore lost or damaged habitat, creating a net increase in intertidal habitat as augmented and interpreted as part of the natural history of the site.
- Exotic vegetation removal along the shoreline resulting in both elimination of exotic plants and removal of the exotic seed source from the region.
- Restoration of historical hydroperiods (alternating periods of flooding and drying) vital to the historical functioning of
 the Sarasota Bay ecosystem. Restoring these variations in water flows and levels is an integral part of the Master Plan.
 This Plan will reduce the harmful water levels that damage the Bay's ecosystems and its shoreline.
- Ecologically friendly design, including elevated structures a minimum of +5 feet above mean high water and/or
 construction of light transmitting materials (grated decking) to allow sunlight to reach the substrate below. Any pilings
 will be of ecologically friendly materials. A commitment to design standards such as Low Impact Development (LID)
 principles and methods and ADaPT toolkit for flood adaptive architecture will be practically applied.