

Environmental Improvements at The Bay Park Summer 2022

Nature and Environmental Attractions of The Bay Park

Features of our Bay Park Master Plan include:

- ½ mile plus waterfront promenades and boardwalks along Sarasota Bay
- ½ mile 10-ft. sidewalk around coastal wetland known as the Mangrove Walk
- Paths and educational decks through the historic oak and cabbage palm hammock on the east end
 of the Mangrove Bayou
- Botanical garden 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 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 facilitate seagrass growth

Water Quality Features of The Bay Park

Existing conditions include approximately 300+ million gallons of onsite/offsite polluted stormwater that flows directly into Sarasota Bay. At buildout, The Bay Park "treatment train" will clean this stormwater through:

- Storm water 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

Additional Environmental Benefits of The Bay Park

• 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 the 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 the exotic plant 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.

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 facility
 will educate visitors about our 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.