Healthy wetlands, both freshwater and saltwater, provide a number of environmental benefits to Sarasota Bay and its watershed. Healthy wetlands provide food and shelter for aquatic life, birds, and wildlife. Freshwater wetlands are excellent at storing stormwater and filtering harmful pollutants before they reach the Bay. Saltwater wetlands are especially effective in protecting shorelines from erosion, particularly in the face of rising sea levels.

An early Sarasota Bay Estuary Program evaluation of wetland status and trends in 1993 estimated that the Sarasota Bay watershed lost roughly 40 percent of its total wetland acreage from 1950 to 1995, an average of 40 acres per year. During this same period, the average wetland size shrank from 22 acres to 5.6 acres. As wetlands shrink and become fragmented, their susceptibility to weeds, pests, and other infestations increases.

Historic land-use trends account for the majority of reported wetland loss within the Sarasota Bay watershed. In Manatee County, for instance, land development and agricultural practices began on the upstream freshwater reaches of the Manatee River, then slowly worked their way westward to Sarasota Bay. This resulted in the destruction of many freshwater wetlands early on, but spared mangrove wetlands along the Bay before statewide protections were put in place. On the other hand, growth in Sarasota County started along the Bayfront, eventually leading to the destruction of 80 percent of the natural mangrove shoreline but sparing many freshwater wetlands.

This scenario closely mirrored statewide trends in wetland loss, whereby saltwater mangroves suffered preferential loss compared to other habitats. As a result, the Florida Legislature enacted the Mangrove Trimming and Preservation Act in 1996, which regulated the trimming of mangroves statewide. While the act recognizes a riparian right to a viewscape, in some instances property owners may not be able to legally obtain the view they desire. The height to which a mangrove may be trimmed depends on the species and condition of the tree. Mangroves generally may not be trimmed lower than six feet. Mangrove trimming must not result in defoliation, destruction, or removal of a mangrove. Environmental permits are required for mangrove trimming in most cases. Check with your County environmental permitting department before doing any trimming of mangroves.
Tidal wetlands self-regulate their elevation within the intertidal zone by trapping and accumulating sediment and organic matter, thereby creating equilibrium with sea level. However, in consideration of accelerated sea level rise (SLR) over the coming decades, new wetland restoration projects are designed with this in mind. National Oceanic and Atmospheric Administration and others have developed guidelines for assessing and incorporating SLR impacts into tidal wetland restoration planning and design. The SBEP follows this process for every new project it undertakes.

The quality of existing wetlands depends on the degree of disturbance, natural and man-made, a particular wetland has endured. Natural stresses include freezes, lightning, erosion, and insect damage. Anthropogenic impacts come in the form of dredging and filling, hydrologic alterations, structures, and perhaps the most widespread impact, trimming and pruning. While current regulations focus on preventing (or mitigating) wetland loss, the SBEP developed a comprehensive wetland restoration plan to prioritize habitat restoration projects within the watershed. This plan was developed to meet the Freshwater and Saltwater Wetlands Action Plan goals in the CCMP; its objectives are to restore or create 18 acres of intertidal wetlands and 11 acres of non-forested freshwater wetlands annually. The restoration plan was first developed in 2005 as a guide and planning tool to identify, prioritize, and implement restoration projects on a five-year cycle. The plan was updated in 2010. Overall, projects are prioritized based on three important considerations: • critical habitat restoration and/or creation • water quality or quantity improvements • historic habitat restoration and/or preservation.

Perico Preserve restoration project.

Emerson Point Preserve.
Together, these considerations help to achieve the overall goal of “Restoring the Balance” of wetland types within the watershed. (Copies of the latest SBEP Five Year Habitat Restoration Plan are available upon request or may be downloaded from the SBEP website.)

Actual restoration activities differ among projects, but generally involve removing exotic vegetation, excavating intertidal lagoons and waterways to create juvenile fish nurseries, and altering land elevations to create proper hydrologic conditions to support native habitat. The newly prepared lands are then planted with native trees, grasses, and other appropriate vegetation, often with the help of volunteers.

Since 1993, nearly 70 habitat restoration projects have been completed under the direction of the SBEP, with the participation of many program partners, agencies, conservation groups, and volunteers. These projects include ecological parks, preserves, reefs, and shorelines.

A map showing the project locations can be found at the end of this report. A list of recently completed projects is provided on page 15 (Figure 21).

Volunteers may participate in many restoration projects through the Bay Guardian Program, a family-friendly volunteer program established by the SBEP to engage residents of all ages in the ongoing effort to restore and protect Sarasota Bay. Sarasota Bay Guardians is the largest and most active local volunteer program focused solely on the welfare of Sarasota Bay and its watersheds.

The Bay Guardians program also provides an opportunity for volunteers to connect with other residents who care about Sarasota Bay wildlife and habitat, typically through six or seven Bay Guardian events annually.

The SBEP also partners with local schools, scouting packs, church groups, and other organizations in the private and public sector to support volunteer outings. Most of these projects involve planting native plants, removing exotic plants, and removing debris and trash from local parks and preserves. Each volunteer outing is an opportunity to learn about local habitat and wildlife, reinforcing environmental stewardship as an ongoing community priority.
ACTION PLAN

GOAL:
Restore shoreline and wetland habitats and eliminate further losses.

POLICIES:
Increase the quantity, improve the quality, and protect the diversity of freshwater and saltwater wetlands in the Sarasota Bay watershed. Recreate valuable fishery habitats throughout Sarasota Bay.

OBJECTIVE 1.0:
Implement comprehensive five-year habitat protection and restoration plan.

ACTION 1.1:
Update the five-year plan and develop a database for tracking progress in habitat restoration.

ACTION 1.2:
Enhance, restore, and create wetlands throughout the Bay region.

ACTION 1.3:
Maintain wetland protection in local comprehensive plans, ordinances, and land-development regulations. Incorporate wetlands and open-space concept in road, bridge, stormwater, wastewater, and other infrastructure projects.

ACTION 1.4:
Recognize the importance of adjacent upland areas as buffers in restoring, creating, or protecting wetlands.

ACTION 1.5:
Encourage and facilitate wetland protection through public ownership or private conservation arrangements.

ACTION 1.6:
Remove exotic noxious plants.

ACTION 1.7:
Coordinate wetlands activities with the SBEP, citizen organizations, and existing citizen advisory committees of local governments.

ACTION 1.8:
Develop and implement policies that are consistent across jurisdictions regarding shoreline alterations such as docks, seawall, or other shoreline protection alternatives.

Restoration project at Bowlees Creek.

North Lido Park restoration project.
ACTION PLAN (continued)

ACTION 1.9: Provide cooperative consultations (as requested) to the private and public sectors on development proposals and regulatory issues that impact wetlands (see Governance Action Plan on page 66, Objective 4.0).

ACTION 1.10: Continue to provide technical information to programs to increase public education and citizen involvement in wetlands issues.

ACTION 1.11: Encourage that fines for environmental violations at the regional and local level (from either permitted or unpermitted activities) be directed to environmental enhancement projects within the watershed.

OBJECTIVE 2.0: Provide opportunities for citizen involvement in wetlands protection, enhancement, and acquisition.

ACTION 2.1: Support an ongoing education program on mangrove protection and care.

ACTION 2.2: Encourage citizen groups to restore and protect wetlands through removal of trash and exotic plants.

ACTION 2.3: Coordinate wetlands activities with the SBEP, citizen organizations, and existing citizen advisory committees of local governments.

ACTION 2.4: Continue to promote neighborhood wetlands protection and homeowner shoreline management through the Florida-Friendly Landscaping Program.

Sandhill cranes.

The SBEP’s Citizens Advisory Committee (CAC) enjoyed a field trip to Celery Fields with Sarasota Audubon.
In 1995, performance measurements were established to evaluate the effectiveness of wetland improvements.

**MEASURE #1:**
Restore or create a minimum average of 18 acres per year, not including activities associated with mitigation.

**RESULTS 1.1:**
Since 1995, the SBEP has restored 1,550 acres of intertidal wetlands in Sarasota Bay.

**MEASURE #2:**
Restore or create an average of 11 acres of non-forested wetlands per year, not including open water systems, stormwater treatment facilities, or activities associated with mitigation.

**RESULTS 2.1:**
The SBEP and its government partners have restored 250 acres of wetland habitat at Celery Fields in Sarasota County.

**RESULTS 2.2:**
Natural filtration of pollutants has been accomplished on 1,550 acres of intertidal habitat and 250 acres of freshwater habitat.

**RESULTS 2.3:**
Natural hydroperiods (the rate of water rise and fall) have been re-established in several tributaries to the Bay, including Phillippi Creek and Catfish Creek. A project is also scheduled for Cow Pen Slough.

**MEASURE #3:**
Will measure net gains in wetland acreage and monitor the maintenance or enhancement of quality in existing wetlands.

**RESULTS 3.1:**
No mapping has been completed to date.
Since 1995, the SBEP supported a Bay-wide effort to restore intertidal and freshwater wetlands. These projects restore habitat for juvenile fish, crabs, wading birds, and other marine life. They also provide a valuable education opportunity for the public through volunteer planting (Bay Guardians), informative tours, and news coverage by the media.

This emphasis on wetlands restoration and enhancement continues to be expanded through the work of a wetlands coordinator appointed by local governments. The coordinator supports a proactive campaign to restore and enhance both freshwater and saltwater wetlands, while encouraging private-sector involvement in the form of volunteer plantings, adopting wetlands, and private land trusts for wetlands conservation.

The coordinator also plays a key role in pursuing grants and other funding for wetland restoration. Both Manatee and Sarasota counties are still developing priorities for acquiring additional environmentally sensitive lands.

Property near the Bay should be considered to be a high priority. No major changes in the wetland action plan were made in 2010.

The SBEP Bay Guardians volunteer program was established in 2010, as a family-friendly volunteer program managed by the SBEP in partnership with Around the Bend Nature Tours, a local eco-tourism business with expertise in environmental education. The Bay Guardians provides an outlet for adults and students to be part of the ongoing effort to restore and protect Sarasota Bay.

Around the Bend Nature Tour educates about Florida’s history and conservation.

Jiggs Landing restoration project.
BAY STEWARDSHIP

HOW YOU CAN HELP:

As a Property Owner:
• Protect wetlands on or adjacent to your property by limiting landscape maintenance near wetlands, including fertilizing, mowing, or using pesticides.
• Provide a buffer zone of Florida native plants between maintained areas and wetlands.
• Remove non-native, invasive plants such as Brazilian peppers, Australian pines, and Melaleuca trees from wetland habitat.
• Avoid pruning mangrove trees if they are located along your shoreline. Mangrove pruning is regulated by the State of Florida.
• Explore opportunities to create a natural shoreline along your property.
• Explore opportunities to protect wetlands through conservation easements or living trusts.

As a Civic Group Member or Educator:
• Visit a wetland to learn more about these vital ecosystems.
• Contact the SBEP about opportunities to protect or restore a wetland area through planting, trash removal, or the removal of exotic plants.
• Contact the SBEP about grant opportunities for your neighborhood or school through the annual SBEP Bay Partners Grant Program.

Bay Guardians at Emerson Point Preserve.