



Overview

Tampa Bay was designated an "estuary of national significance" by Congress in 1990, paving the way for development of a long-term blueprint for bay restoration through the Tampa Bay Estuary Program. The TBEP, guided by its Comprehensive Conservation and Management Plan and working together with various formal and informal partners, has launched a long-term restoration effort aimed at revitalizing the entire Tampa Bay ecosystem. Thus far, strides have been made in reducing the amount of nitrogen reaching bay waters from sources of pollution upstream; restoring coastal wetlands and benthic habitats, including 1,000 hectares of seagrass beds; working with local government and industry representatives to reduce the impact from dredging activities; and developing a public outreach and education component that aims to create an informed and interested citizenry. This project is ongoing and encompasses plans for continuing restoration, including the restoration of 100 acres of low-salinity tidal marsh every five years.

Project Details

Lead Entity:

Tampa Bay Estuary Program

Lead entity types:

National Government

Adaptive management

Describe adaptive management processes and mid-course corrections taken to address unforeseen challenges and improve outcomes in each of the following categories:

Other:

The restoration of Tampa Bay has shown that large-scale estuarine ecosystem restoration takes time and money, and requires a "bottom-up" (i.e., citizen-stakeholder talking to government) commitment first, followed by a "top-down" (i.e., government talking to the citizen-stakeholders) commitment later. Both are essential, but "top-down" by itself did not work in the Tampa Bay case study in its initial phases, and likely will not work elsewhere. Citizen-stakeholders, commonly formed into environmental NGO's, started the process in the Tampa Bay estuary. It was not a "successful government initiative" alone.

State of Progress:

Implementation

Project Start:

1972-05-31

Project End:

1972-05-31

Total budgeted expenses:

USD >100 million

Global Regions:

Northern America

Americas

World

Countries:

United States of America

Ecosystem Functional Groups / Biomes:

Brackish tidal biome

Ecosystems:

Coastal river deltas

Extent of project:

- Other

Extent of restoration:

- Other

Degradations:

- Other industrial and urban development

Description:

The Tampa Bay estuary and watershed is an urban/suburban estuary ecosystem, with more than 2.3 million people living in the three counties that directly border it. Home development along the shore, domestic and industrial waste discharges, and increasing demands for fresh water are all contributing factors in the bay's degradation. Dredging and filling activities associated with the three ports on the bay represent another significant anthropogenic pressure on local ecosystems.

Planning and Review**Goals and Objectives****Was a baseline assessment conducted:**

UNSURE

Was a reference model used:

UNSURE

were_goals_identified:

YES

Goals and objectives:

- Other

Goals Description::

(1) Restoration of 5,000 ha of tropical seagrass meadows; (2) Restore 8 ha per year of tidal marsh, and oligohaline marsh habitat, and preserve the remaining mangrove forests; (3) Develop and implement a no-net-gain in nitrogen discharge to the bay program and (4) Development and implementation of management and restoration plans for all of the sub-watersheds draining to Tampa Bay.

Stakeholder Engagement**Were Stakeholders engaged?:**

unsure

Description of Stakeholder Involvement:

Local government agencies and community groups have worked alongside environmental NGOs and national government entities to plan, design, implement and oversee restoration activities in the Tampa Bay ecosystem. Members of the local community also have an interest in this project, however, as the bay has become an important contributor to local economic, recreation and education activities.

Ecosystem Activities and Approaches

General Activities: As a comprehensive ecosystem restoration and management initiative, the Tampa Bay Estuary Program encompasses many different project activities. Mapping the bay was an important antecedent for much of the restoration work, as models of the natural and anthropogenic processes influencing the ecosystem are indispensable to attempts at reversing degradation. Maps and models of bay habitat, water quality and urbanization were created and then integrated in hopes of gaining a more complete understanding of the interactions that

affect the ecosystem as a whole. Water quality assessments have been another important aspect of the ongoing work in Tampa Bay. Research has focused on locating and quantifying groundwater, analyzing sediments, identifying contaminants, and evaluating surface water quality and circulation. These hydrologic investigations have informed and guided subsequent habitat-specific projects. Besides maps of the bay and water quality assessments, models of the bay's history and prehistory were also created as guides for restoration work. These models of the bay's evolution have greatly assisted practitioners in predictive modeling and restoration planning, as they help differentiate natural impacts from anthropogenic ones. With conceptual data from which to draw, practitioners have undertaken a variety of actual restoration efforts within the bay. Sandbars, seagrass beds, and coastal wetlands have all been targeted for restoration.

Categories of ecosystem restoration activities and approaches utilized:

- Ecological restoration

Specific type of rehabilitation and/or restoration approach implemented:

- Assisted natural recovery with planting, seeding, or faunal introductions (e.g. enrichment planting or seeding; farmer assisted natural regeneration; rewilding)

Project Outcomes



Eliminate existing threats to the ecosystem: 1000 hectares of persistent seagrass meadows have been restored through water quality improvements. In addition, one hundred hectares of tidal marsh, mangrove forests and oligohaline marsh have been restored by the Surface Water Improvement and Management Program (SWIM) of the Southwest Florida Water Management District (SWFWMD). Factors limiting recovery of the ecosystem: Restoring seagrass by hand, and through mechanical planting techniques, largely failed. Natural recolonization due to water quality improvements is the primary reason for approximately 1000 hectares of new seagrass meadows in the bay. Additional progress toward the restoration of seagrass meadows will require the reconstruction of the historic longshore bar system in the bay. This needed restoration goal was not apparent until recent years, when progress towards the goal of 5000 hectares of seagrass restoration was stymied. Economic vitality and local livelihoods: Tampa Bay is a vital component of the region's economic well-being. Its beauty attracts millions of tourists each year, its bounty lures anglers, sailors and nature enthusiasts from around the world, and its deep-water ports support a bustling maritime industry. Thus, restoration of the bay promises to protect a vital natural resource and safeguard the economic benefits upon which the region depends.

Monitoring and Data Sharing



Does the project have a defined monitoring plan?:

NO

Open Access URL:

()

Long Term Management



STAPER

