A TAMPA BAY ESTUARY PROGRAM
PROGRESS REPORT
2015
Once again, we have good news about Tampa Bay to report to you. Overall water quality from 2011-2014 remains as good as it was in the 1950s, and we are within 3,350 acres of reaching our goal of 38,000 acres of seagrass baywide. Tampa Bay is widely viewed as a national model of regional cooperation to achieve environmental results. The progress we have made together is also reaping economic dividends, with a recent study by the Tampa Bay Regional Planning Council showing that 1 in every 5 jobs in the watershed depends on a healthy bay.

The regional consensus-building that has been our hallmark has grown in new and innovative directions over the last three years. We worked with local governments, our sister Florida Gulf estuary programs and the Southwest Florida Water Management District to prioritize restoration projects from the Big Bend to the Everglades that could be accomplished with fines from the 2010 Deepwater Horizon oil spill in the Gulf.

We also spearheaded the creation of a new grant program, the Tampa Bay Environmental Restoration Fund, supported by key industry partners such as The Mosaic Company Foundation, along with the Southwest Florida Water Management District, our three county partners, the Florida Department of Transportation and several others. This grant fund is administered jointly by TBEP and the respected national non-profit, Restore America’s Estuaries.

In addition, we have re-energized our strong alliance with our key county and city partners, updating the legal agreement that has served as the underpinning of our program since it began, and adopting a strategic plan that will keep us on sound operation and financial footing through the year 2020.

Another important milestone awaits as we embark upon only the second revision in 20 years of “Charting The Course,” the comprehensive blueprint that guides the science-based research, management and education we do. Your input and involvement are encouraged as we move forward to produce a draft of the updated Plan in 2015, and final adoption in 2016. This Plan is more than a static document; it is an adaptable, flexible road map for action, with measurable goals for enhancing and sustaining the bay’s living resources.

As we look ahead, we also respectfully remember three iconic Champions of the Bay we have lost in the last three years: Congressmen C.W. Bill Young and Sam Gibbons, and Roger Stewart, the first chief of Hillsborough’s Environmental Protection Commission. Despite being from opposing political parties and opposite sides of the bay, Congressmen Young and Gibbons exemplified bipartisanship in working together to create the Tampa Bay Estuary Program in 1990. Roger Stewart first drew attention to rampant pollution of the bay in the 1970s, and maintained his passionate advocacy for improving our environment for the next three decades. These incomparable community leaders will be greatly missed by all who care about clean air and clean water.
An economic assessment completed in 2014 shows that one in every five jobs in the Tampa Bay watershed depends on a healthy Tampa Bay.

A clean bay also contributes an impressive 13%, or $22 billion, of the total economic activity in the six counties in the bay’s watershed—Pasco, Polk, Pinellas, Hillsborough, Manatee and Sarasota.

The study, jointly conducted by the Tampa Bay Regional Planning Council and the Tampa Bay Estuary Program, is the first to look at the bay’s economic value since 1999. It assessed employment, real estate, food services and lodging in the 6-county area, providing strong confirmation of the value of clean water in luring—and sustaining—tourists, residents, retirees and businesses.

**Dive Deeper**

Read the Economic Impact Study

---

**A healthy Tampa Bay contributes 13% of the total economic activity in the 6-county region.**

Homes directly on the bay generate roughly four times as much property tax revenue as those not on the waterfront.

Even homes within a quarter-mile of the bay generate double the tax revenues of those farther away.

Nearly half of all jobs (47%, 660,000 of 1.4 million) in the watershed are influenced in some way by the bay.

---

**AVERAGE VALUE OF HOME**

<table>
<thead>
<tr>
<th></th>
<th>Hillsborough</th>
<th>Manatee</th>
<th>Pinellas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayfront</td>
<td>$600,000</td>
<td>$400,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Quarter mile from Bay</td>
<td>$400,000</td>
<td>$200,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>County</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

**JOBS IN THE WATERSHED**

- Healthy Bay: 291,450 (21%)
- Non Bay-Influenced: 757,031 (53%)
- Bay-Influenced: 660,094 (47%)
ABOUT US

Tampa Bay was designated an “estuary of national significance” by Congress in 1990, followed by creation of the Tampa Bay Estuary Program (TBEP) in 1991. We are an intergovernmental partnership of Hillsborough, Manatee and Pinellas counties; the cities of Tampa, St. Petersburg and Clearwater; the U.S. Environmental Protection Agency; the Southwest Florida Water Management District; and the Florida Department of Environmental Protection. We work with these and many other community partners to implement a comprehensive, science-based plan for improving and protecting the bay.

TBEP is governed by a Policy Board of elected officials from our local government members, and representatives of EPA, DEP and the Water Management District. A Management Board comprised of upper-level environmental administrators makes recommendations to the Policy Board.

Our mission is supported by several committees, including a Technical Advisory Committee of scientists and managers; a Nitrogen Management Consortium of industries, regulators and city/county officials; and a Community Advisory Committee of engaged citizens.

Dive Deeper
Learn more about TBEP’s mission and structure

TBEP Staff, left to right: Misty Cladas, Ron Hosler, Holly Greening, Lindsay Cross, Ed Sherwood and Nanette O’Hara

HOW WE ARE FUNDED

Over the past three years, TBEP’s annual operating fund was an average of $994,000. About $569,000 a year came from the U.S. Environmental Protection Agency, through Congressional allocation. Our local government partners provided $286,665 a year. The Southwest Florida Water Management District contributed $138,335 annually. Tampa Bay Water also contributed $10,000 a year to our Program.

In addition to our base funding, TBEP has two other principal revenue sources: The Tampa Bay Estuary specialty license plate, and grants from foundations and government programs.

TBEP BASE FUNDING

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWFWMD</td>
<td>14%</td>
</tr>
<tr>
<td>Cities &amp; Counties</td>
<td>29%</td>
</tr>
<tr>
<td>EPA</td>
<td>57%</td>
</tr>
</tbody>
</table>

Revenues from the Tampa Bay Estuary license tag, which features a “Silver King” tarpon, are returned to the community through our Bay Mini-Grants program, with a maximum of $5,000 per project.

TBEP has been very successful in obtaining external grants to advance our key research and education priorities. From 2012-2014, we obtained an additional $4.169 million in outside grants.

2014 TBEP POLICY BOARD

Councilman Steve Kornell, Chair
City of St. Petersburg
Commissioner Robin DiSabatino, Vice Chair
Manatee County
Commissioner Kevin Beckner (2012-2014)
Hillsborough County
Wendy Griffin
Southwest Florida Water Management District
Commissioner Charlie Justice
Pinellas County
Tom McGill
U.S. Environmental Protection Agency
Councilwoman Mary Mulhern
City of Tampa
Councilman Jay Polglaze
City of Clearwater
Mary Yeargan
Florida Department of Environmental Protection
**Old Tampa Bay Assessment and Action Plan**
$1.4 million total cost

$1.2 million Southwest Florida Water Management District (SWFWMD)

$200,000 TBEP

Comprehensive multi-year project to identify causes and potential solutions to persistent water quality and circulation problems in the northernmost segment of the bay. Project includes development of a sophisticated computer model to simulate results of various improvement options to identify most cost-effective actions.

**Linking of Compensatory Mitigation and Habitat Restoration Goals**
$334,000 total cost

$250,500 U.S. Environmental Protection Agency

remainder in-kind from TBEP partners

Project will coordinate mitigation required for development in freshwater wetlands with recently adopted goals for freshwater habitats in and around the bay, to maximize and direct mitigation for greatest ecological benefit.

**Feather Sound Restoration**
$1.18 million total cost

$516,000 SWFWMD

$346,090 Pinellas County Environmental Fund

$40,000 U.S. Fish and Wildlife Service

$100,000 Pinellas County

Multi-phase restoration of 30 acres of tidal wetlands in the Feather Sound region of Pinellas County to improve water quality and increase seagrass growth.

**Tidal Tributaries Habitat Initiative/Channel 5 Restoration**
Total cost $962,255

$500,000 Pinellas County

$270,000 SWFWMD

$94,000 NOAA/Sea Grant

$20,000 USFWS

$78,255 TBEP

Initial work identified and assessed streams throughout bay system where tidal flow is restricted by weirs, elevated culverts or other structures, and prioritized sites by restoration potential. Current work is restoring the highly altered Channel 5 tributary, including removal of the weir to enhance tidal exchange. Future work will restore adjacent tidal creek habitat.

**Residential Stormwater Quality Evaluation**
Total Cost $250,000

$100,000 Pinellas County

$50,000 Pollution Recovery Trust Fund (Hillsborough)

$100,000 TBEP

Project to assess and compare changes in water quality in stormwater ponds and homeowner landscaping practices resulting from adoption of local fertilizer use ordinances.

**Be Floridian Fertilizer Education Campaign**
Total Cost: $260,630

$75,000 from Tampa Bay Environmental Fund

$75,000 from Tampa Bay Estuary License Plate (unexpended funds from multiple grant cycles)

$10,630 from Florida Dept. of Transportation

$100,000 from TBEP

Implementation of Social Marketing campaign to reduce fertilizer use by homeowners, especially during summer rainy season.
Tampa Bay Environmental Restoration Fund

This new public-private grant partnership has provided $1.5 million since 2013 for important restoration, applied research and education projects in the Tampa Bay watershed.

TBERF is jointly managed by TBEP and Restore America’s Estuaries (RAE), a respected national non-profit. Grant sponsors include the Southwest Florida Water Management District, The Mosaic Company Foundation, TECO Energy, the Florida Department of Transportation; Hillsborough, Manatee and Pinellas counties; and Port Tampa Bay. The National Fish and Wildlife Foundation also was an important sponsor in 2013.

In 2013, the program – then called the Tampa Bay Environmental Fund – awarded $900,000 in grants for projects that restored more than 1,000 acres of coastal habitats, created 2,900 feet of oyster reefs and treated 500 acres of urban runoff. Nearly $625,000 in grants was awarded in 2014, when the program was renewed as the Tampa Bay Environmental Restoration Fund. Additional grants will be awarded in Spring 2015.

Southwest Florida Regional Ecosystem Restoration Plan

In 2012-2013, TBEP was a key partner in the creation of a sweeping regional plan identifying some 230 environmental improvement projects – from Florida’s Big Bend to the Big Cypress Preserve -- that could be implemented with fines associated with the devastating Deepwater Horizon Oil Spill in the Gulf of Mexico.

The projects contained in the Southwest Florida Regional Ecosystem Restoration Plan range from large-scale coastal habitat restoration to land acquisition to water quality enhancement, as well as applied research, monitoring and education programs. The combined cost of the projects is nearly $3 billion.

The Plan was a unique collaboration of Florida’s Tampa Bay, Sarasota Bay and Charlotte Harbor National Estuary Programs, along with the Southwest Florida Water Management District. It was submitted to the Gulf Coast Ecosystem Restoration Council in March 2013. The federal RESTORE Act directs 30% of the Clean Water Act fines associated with the Deepwater Horizon spill to the Gulf Council, exclusively for environmental activities.

The three NEPs agreed to put forward one list of priority projects for consideration by the State and Council, hoping by their unified front to transcend turf-guarding and improve the funding odds. In November 2014, three of the projects -- habitat restorations at Robinson Preserve and the Palm River, and installation of a living shoreline at the Alafia Bank bird rookery -- were among those recommended for Council funding by the Governor’s office.

Dive Deeper:
View a map with summaries and locations of grant projects

Dive Deeper:
Read the Plan
Tampa Bay Nitrogen Management Consortium

The Consortium has become a national model for public-private cooperation to reduce nitrogen pollution from wastewater, stormwater, air emissions and industrial discharges. Consortium members include more than 40 cities, counties, and key industries that border the bay, such as fertilizer manufacturers, electric utilities and agricultural interests. This diverse partnership has reduced nitrogen loads to the bay by 500 tons since 1996, and more than 100 tons from 2007-2011.

In recent years, the Consortium developed allocations limiting the amount of nitrogen that individual communities or industries are permitted to discharge. Partners agreed to individual nitrogen limits even when doing so required them to give up previously permitted, but unused capacity.

This voluntary strategy, and the technical basis that supports it, has provided “reasonable assurance” to state and federal regulators that water quality goals for Tampa Bay are being met. The allocations were incorporated into the Florida Department of Environmental Protection’s water quality standards in 2011, and are being included in discharge permits as they are renewed.

The Nitrogen Management Consortium is one of the few public-private partnerships in the nation to routinely report its progress in meeting community restoration goals for a waterway. The next update and review of the nitrogen allocations is scheduled for 2017.

Dive Deeper:
Read the 2012 Nutrient Management Compliance Assessment
Read a paper about nitrogen management in Tampa Bay
WATER QUALITY GETS A GREEN LIGHT AGAIN

All major segments of Tampa Bay met water quality goals in 2014, for the third year in a row and the fourth time in the last five years.

Seagrasses, an important barometer of the bay’s health, continue to respond to the improving water quality. In fact, the bay now supports more life-sustaining seagrass than at any time measured since the 1950s. At this report’s publication, we were just 3,358 acres away from our goal of 38,000 acres of seagrass baywide, with new estimates expected in early 2015.

TBEP annually compares water quality to established targets in the bay and reports the results through a simple report card that uses a red, green and yellow color rating system. The system considers the amount of microscopic algae in the water (as indicated by chlorophyll a, the plant pigment), as well as the amount of visible sunlight penetrating the water column.

“Green” means a bay segment is meeting water quality targets, while “red” means it is not. “Yellow” indicates that the area bears watching.

All bay segments have received a “green light” in three of the last four years. In winter 2013, scientists reported unprecedented water clarity, with bottom visibility in waters more than 30 feet deep.

The most recent surveys of seagrasses, conducted from 2010-2012, showed an increase of 3,250 acres. Since 1991, seagrasses have expanded, on average, 738 acres per year.

An algae bloom was observed in summer 2014 in Old Tampa Bay, the area north of the Gandy Bridge. Poor water circulation and lagging seagrass recovery in this segment, especially in the western part of Old Tampa Bay, prompted a multi-year research project to probe specific problems and identify cost-effective solutions.

Dive Deeper: View a summary of the 2014 Water Quality Assessment

SEAGRASS COVERAGE (x 1,000 ACRES)

SEAGRASS COVERAGE RECOVERY GOAL (38,000 ACRES)
As water quality in the bay itself has dramatically improved, our attention has turned to the rivers and streams that are the equivalent of its arteries and veins. These tributaries and their life-nurturing freshwater pulses are increasingly on the front line of coastal development pressure throughout Southwest Florida.

Research sponsored by the Tampa Bay, Sarasota Bay and Charlotte Harbor estuary programs, the U.S. Environmental Protection Agency, Mote Marine Lab and counties from Hillsborough to Collier is helping us better understand, restore and protect these important barometers of ecosystem health. As part of that work, water quality and fish sampling were conducted in 16 creeks in 2013 and 2014. The selected creeks are representative of those found throughout the region.

Ranging from relatively pristine streams like South Creek in Oscar Scherer State Park to more urbanized waterways like Sweetwater Creek in Hillsborough County, the data paints the most comprehensive portrait yet of the tidal patterns, shoreline vegetation, fish populations and nutrient levels in Gulf Coast tributaries. This information will be used to develop criteria for healthy, balanced creeks that can continue to serve as natural incubators for snook and other sportfish.

**CASE IN POINT: CREEKS GET A CLOSER LOOK**

Scientists use seine nets, above, to collect fish, including juvenile snook.
TBEP adopted targets for restoration of freshwater wetlands in 2013, expanding the same “Restoring The Balance” approach that we have applied to saltwater restoration to freshwater systems of all types.

“Restoring the Balance” recognizes that some habitats have been lost in greater proportions than others. For example, low-salinity marshes (such as those far upstream in rivers and creeks) were historically much more abundant than they are now, so they have been a restoration priority.

Freshwater wetlands also have been disproportionately affected. From 1950-2008, more than 100,000 acres were lost due to development or changes in hydrology. These freshwater habitats are vital for many of Tampa Bay’s fish and wildlife, including white ibis and many species of amphibians.

TBEP and partners mapped past and present distribution of these wetlands, and developed specific restoration and protection targets. The info is intended to help permitting agencies direct restoration or mitigation to habitats that have been disproportionately impacted in a specific basin.

Overall, non-forested wetlands -- those characterized by grasses and low-profile vegetation such as arrowhead -- have been lost in greater proportion than forested freshwater wetlands (such as red maple swamps).

The new targets recognize the imbalances, and set restoration goals that will bring the habitats back to their historic ratios. The targets also ensure no further losses to any type of freshwater wetland within the watershed.

Baywide, the restoration goal for non-forested freshwater wetlands is 17,088 acres. For forested freshwater systems, the goal is 1,615 acres. Protection of existing freshwater wetlands is also an important component.

Achieving these goals may be accomplished through public land acquisition and restoration, as well as privately funded mitigation.

Future “Restoring The Balance” targets will be set for coastal uplands, oyster bars and hard-bottom habitats, as we strive to return the diversity of habitats to historic ratios.

_Dive Deeper:_ Read our report on Prioritizing Habitat Restoration Goals

---

**BAY HABITATS: FRESHWATER WETLANDS RESTORATION TARGETS SET**

**FRESHWATER WETLAND LOSSES (IN ACRES) BY STRUCTURE AND BY BASIN**

**OVERALL FRESHWATER WETLAND RESTORATION TARGETS**

_Dive Deeper:_ Read our report on Prioritizing Habitat Restoration Goals
FISH AND WILDLIFE: ENHANCING TIDAL STREAMS TO SUPPORT SNOOK

In 2012, TBEP completed an initial inventory that identified 344 manmade water control structures that may block tidal flows and fish movement in streams that flow into the bay.

Improving the ecological connection between Tampa Bay and its more than 150 tidal tributaries was a key recommendation of previous TBEP-led research. That work found that tidal streams — ranging from large navigable waterways like Rocky Creek in upper Tampa Bay to tiny creeks you can jump across — are critical nurseries for fish, especially snook. In fact, the tributaries in the study harbored up to 36 times as many juvenile snook as adjacent bay waters. They also are important foraging areas for wading birds.

However, many of the bay’s tidal creeks have been severely impacted by structures such as weirs, culverts, railroad bridges and even road crossings that constrict tidal flow and fish movement. Often, these structures are decades old and no longer needed. Removing some of these “salinity barriers” could benefit snook and other fish by reviving tidal exchanges and promoting more natural and sustained water flows instead of large “pulses” of stormwater runoff.

The recent assessment sponsored by TBEP found that 159 of the 344 “salinity barriers” were on streams in the Old Tampa Bay segment north of the Gandy Bridge, contributing to persistent water quality problems there.

Restoring more than a fraction of these is probably not feasible, given such factors as public versus private ownership of the barriers and adjacent land; potential impacts to surrounding property owners; and water quality benefits relative to cost.

Currently, a pilot project is underway to remove a weir along Channel 5, a highly channelized tributary just east of the St. Petersburg-Clearwater Airport, and monitor water quality changes and fisheries usage. This project may serve as a model for removal of structures from additional tidal creeks in coming years.

Dive Deeper:
Read a report on salinity barriers in Tampa Bay

CASE IN POINT: OPENING OF CHANNELS A AND G

Two water control structures in the Rocky Creek and Brushy Creek watersheds in upper Tampa Bay are being left open for a year to see if allowing unrestricted tidal flow improves water quality and fish habitat in these highly altered areas.

The structures, on Channels A and G in northwest Hillsborough County, were opened in summer 2014 through a pilot project sponsored by TBEP and the Southwest Florida Water Management District. The channels were originally constructed to prevent flooding of nearby lands, and the two structures were installed in the 1970s to prevent salt water from intruding into groundwater.

As part of the pilot study, below-water manatee exclusion barriers on both structures also were removed so saltwater fish and manatees can travel upstream.

Rocky Creek is an important, but highly urbanized, tributary in the upper bay. Scientists hope that restoring more natural water flows in the two manmade channels along the creek will improve water quality and provide more low-salinity habitat for snook and other fish. Possible effects of opening the channels include increased salinity upstream of the structures, frequent tidal exposure of bottom sediments, and a transition from freshwater to saltwater shoreline plants (such as marsh grass or mangroves) that are a nursery for juvenile fish, crabs and other creatures.

Since the project began, residents have reported manatees upstream of the structures, and monitoring is underway to evaluate other changes in animals and plants, along with water quality parameters such as oxygen and salinity levels.

Scientists hope the unfettered flows also will restore natural fluctuations in water levels that occur with rising and falling tides, instead of the irregular and often large pulses of nutrient-laden waters released from the structures during high rainfall events.

Dive Deeper:
Read a summary of the project

TIDAL BARRIERS BY BAY SEGMENT

Old Tampa Bay 159
Hillsborough Bay 56
Middle Tampa Bay 56
Lower Tampa Bay (Terra Ceia and Manatee River) 39
Boca Ciega Bay 35
A deep dredge hole in McKay Bay near downtown Tampa was the first to be filled as part of an effort to use material routinely dredged from the bay bottom to enhance habitat and water quality.

Completed in 2012, the project was initially recommended by an advisory group overseeing a TBEP study of dredge holes conducted in 2003-2004. That work analyzed the water quality and habitat value of 11 holes excavated in the bay decades ago to facilitate various shipping or construction projects.

The advisory group concluded that many of the manmade holes provided valuable winter refuges for fish and should be left alone but a few had poor water quality and little usage by fish or the bottom-dwelling worms and crustaceans they eat. The 56-acre McKay Bay hole, with its deep, oxygen-poor waters, was given highest priority for filling.

The project was brought to life in recent years by the Southwest Florida Water Management District as part of a larger wetlands restoration effort in this highly industrial area of Tampa Bay. The pieces fell into place when the Tampa Port Authority donated clean fill from a nearby port expansion project, allowing partial restoration of the McKay Bay hole to the level of the surrounding bay bottom.

Monitoring will determine if the project has improved water quality and light availability in this part of McKay Bay.

Annually, more than a million cubic yards of material is dredged from Tampa Bay each year, enough to fill Raymond James Stadium 10 times. Finding environmentally beneficial uses of this “spoil” is an important bay management goal. The McKay Bay project may facilitate future use of suitable dredge “spoil” to fill some of the large holes that are the remnants of past dredging of the bay bottom.

To help guide future efforts, TBEP has reconstituted its Dredging Advisory Committee. The committee meets routinely to review pending dredging projects, identify and prioritize bay restoration activities that could utilize dredge spoil, assess the environmental impacts of those projects and help to address regulatory issues. The committee is seeking funds to assess additional dredge holes to determine whether filling those would enhance fisheries habitats and foster seagrass recovery.

Dive Deeper: Read about the McKay Bay Project

Rosate spoonbills and other wading birds at the newly restored McBay Bay wetland area.

Photo ©Ben Brice
With the familiar plastic pink yard flamingo as its ambassador, TBEP’s “Be Floridian” education campaign employs Social Marketing techniques to change urban fertilizer practices and redefine perceptions of what constitutes an attractive landscape. This 5-year effort in support of local ordinances that restrict summer fertilizer use enters its final year of dedicated funding in 2015.

Be Floridian asks residents to skip the lawn fertilizer from June-September, when heavy rains can wash excess yard runoff into Tampa Bay and the Gulf of Mexico. The campaign’s “Protect Our Fun” theme recognizes the importance of water-based recreation like fishing and boating to area residents, and promotes compliance with the summer bans as a cultural norm for Floridians.

The program has paired traditional community outreach with contemporary marketing techniques – digital ads, a large and active Facebook community, shareable infographics and online and mobile-enabled pledges – to deliver a message that less fertilizer means less pollution, less yard work and more time to enjoy the waters that make living here fun. As residents have become accustomed to the new fertilizer rules, the campaign has increasingly promoted less-lawn landscapes that do not require fertilizer or frequent irrigation.

Be Floridian’s popular group of plastic pink yard flamingos was transformed into a traveling art exhibit in 2014. This wild and whimsical flock of 25 flamingos painted by area artists promotes “gardening like a Floridian.” The ambassa-birds will be on display at area museums, art and cultural centers, libraries and even an airport through summer 2015.

Program evaluations have shown that Be Floridian has helped to change fertilizer practices and promote increased use of native and Florida-friendly plants in residential landscapes.
Workshops and Special Events

Since 2012, TBEP has conducted workshops on topics ranging from urban agriculture to “landscaping like a Floridian.” Additionally, we sponsored or co-sponsored special events such as the “Leave No Trace” outdoor ethics course, “A Land Remembered” multi-media presentation, the “Chasing the Waves” King Tide traveling photo exhibit, and the “Water Words That Work” training in environmental communication. TBEP also sponsored a summer workshop for teachers and participates year-round in environmental events and festivals.

TBEP presents the “Golden Mangrove Award” annually to one outstanding Bay Mini-Grant project selected by CAC members. The level of volunteer involvement and the overall environmental benefit of the project are among the criteria used in selecting the winner. In 2012, the winner was a habitat restoration project at Mann Wagnon Park on the Hillsborough River. The 2013 Golden Mangrove Award went to a Pinellas condo association for a stormwater pond rehab. Co-winners were named in 2014 for the restoration of Ulele Spring and East Lake in Tampa.

Public Involvement: Diverse Tools Inform, Inspire Citizens To Take Action

Bay Mini-Grants

Each year, TBEP awards grants of up to $5,000 to community groups, homeowner associations, schools and non-profits for bay restoration, education or pollution prevention projects. Funding for the Bay Mini-Grants comes from sales of the Tampa Bay Estuary specialty license plate. Grant applications are due each October, and recipients are ranked by our Community Advisory Committee (CAC). Since 2012, TBEP has awarded $185,463 to 41 community groups for projects that directly involve citizens in restoring and improving Tampa Bay. In 2012, special $10,000 awards for in-ground habitat restoration projects were available thanks to a matching grant from the Tampa Bay Environmental Fund.

Socially Speaking

TBEP utilizes a variety of social media tools to connect with the bay community. More than 15,000 people follow the TBEP and Be Floridian Facebook pages; some 5,000 people receive bi-monthly e-newsletters and more than 3,500 receive periodic e-blasts about bay-related news and events. Photos are posted on TBEP’s Flicker and Pinterest pages, and our You Tube channel features short informational videos and slideshows produced by outreach staff.

View slideshows about the Golden Mangrove award winners
Community Advisory Committee

The TBEP Community Advisory Committee (CAC) members represent a diverse cross-section of interests and organizations, but share a common concern for the health of Tampa Bay. The CAC meets about four times a year and supports TBEP by providing input on programs and policies, assisting with community events and volunteer workdays and selecting our Bay Mini-Grant recipients and Golden Mangrove winners. In 2014, CAC members launched a special initiative to involve local college students in bay restoration.

Give a Day for the Bay

The “Give a Day for the Bay” program relies on community volunteers to assist with bay improvement projects at area parks and preserves. Tasks include removal of invasive plants and installation of native species to help restore important coastal and upland habitats.

From 2012-2014, some 436 volunteers participated in 12 workdays across three counties removing a total of 11,830 pounds of invasive plants and trash.

Visit our Flickr photo stream (https://www.flickr.com/photos/118567175@N05/sets) or watch short videos of our workdays (www.youtube.com/TheTBEP)
Adapting to Rising Seas as a “Climate-Ready Estuary”

Tampa Bay has been designated a “Climate-Ready Estuary” by the U.S. Environmental Protection Agency because of our work to enhance the ability of coastal wetlands to adapt to the effects of rising seas.

Part of this adaptation is ensuring that habitat restoration projects leave room for newly created habitats to migrate landward over time, as waters rise and move inland. Examples of how communities around the Gulf of Mexico are attempting to accommodate climate change in habitat restoration can be found in our Gulf Coast Community Handbook published in 2012.

More recently, we are advancing research to better understand and quantify the value of the bay’s salt marshes, mangroves and seagrass beds in storing carbon and reducing greenhouse gas emissions. This “Coastal Blue Carbon” study, being financed by a grant from the Tampa Bay Environmental Restoration Fund with additional support from NOAA and EPA, was highlighted in the President’s updated Climate Action Plan released in Fall 2014.

We also created, in partnership with the Tampa Bay Regional Planning Council, a computer model that projects sea level rise in the watershed under varying scenarios, adaptation strategies and time periods. Intended for city and county planners, the model allows users to see possible sea level rise of .5 meters to 2.0 meters over a time period of 2025-2100, and how that rise would impact shorelines with or without protection of manmade structures.

The “Chasing The Waves” photo exhibit helps citizens visualize how rising seas might impact structures and shorelines. This compelling collection of photos taken locally and worldwide during extremely high “King Tides” was displayed at public venues across our 3-county area in 2013-2014.

In 2014, TBEP adopted the following policy statement about sea level rise and our role in supporting the region’s response to the enormous challenges posed by our changing climate:

Tide gauges in Tampa Bay have recorded water levels rising at the rate of one inch per decade since the 1940s, a rate that scientists predict is likely to increase.

By the end of the century, rising water levels in Tampa Bay are projected to inundate considerable portions of low-lying shorelines in the watershed, resulting in either the degradation, change in composition, or loss of some key coastal habitats. These coastal habitats support commercially and recreationally valuable fish and wildlife resources.

Through research, technology transfer and public education, the Tampa Bay Estuary Program will promote the scientific understanding of potential impacts of sea level rise on coastal habitats and support development of appropriate management actions to protect and improve the ecological and socio-economic resources of the estuary.

Dive Deeper:

Read the Gulf Coast Community Handbook
Learn about Coastal Blue Carbon
View the “Chasing The Waves” photo set
Use our Sea Level Rise Mapping Tool
CONFERENCES

- American Water Works Association, Florida Section
- Gulf of Mexico Ocean Observing System Technical Committee
- National Association of Environmental Professionals
- 23rd Annual Social Marketing Conference: Ideas Beyond Borders
- Florida Stormwater Association Annual Conference
- Association of National Estuary Programs Annual Conference
- Restore America’s Estuaries National Summit
- Coastal and Estuarine Research Federation

SCIENTIFIC PUBLICATIONS

- Poor, N., L. Cross and R. Dennis. 2013. Lessons learned from the Bay Region Atmospheric Chemistry Experiment (BRACE) and implications for nitrogen management of Tampa Bay. Atmospheric Environment 70:75-83.

CASE IN POINT: SEAGRASS TRANSECT TRAINING

TBEP staff annually conducts a hands-on training session for Tampa Bay seagrass scientists who work for local governments, regulatory agencies and non-profit organizations. They practice techniques for measuring seagrass abundance, density and health, using a standardized method to ensure consistency and accuracy. The training prepares participants to collect seagrass data in the waters in which they routinely work. Equipped with transect grids, rulers, masks and snorkels, and waterproof datasheets, the workshop participants will put their skills to work collecting information about seagrasses from about 60 different locations in Tampa Bay annually. Along with detailed aerial surveys conducted every few years by the Southwest Florida Water Management District, this detailed field work provides a robust assessment of the bay’s seagrass meadows.

Dive Deeper:

View photos from our Seagrass Transect Training
Learn more about our research and monitoring projects on our technical website
A LOOK AHEAD...

As we approach our 25th anniversary in 2016, we look forward to new partnership opportunities, more ground-breaking research and the continued strong support of the bay community. Our busy to-do list for the next three years includes:

- The first complete revision of *Charting The Course*, the Comprehensive Conservation and Management Plan (CCMP) for Tampa Bay, in a decade. This process will result in a revised CCMP that will guide bay restoration, research and education efforts for the coming decade and ensure that we continue to make meaningful, measurable progress in improving Tampa Bay.

- The 6th Bay Area Scientific Information Symposium, scheduled for Fall 2015. Held every five years, BASIS 6 will bring together scientists, resource managers, citizens and students to review the status of research and restoration in Tampa Bay in a lively 3-day conference.
A LOOK AHEAD… (CONT’D)

- Participation in innovative research to examine and estimate the carbon-capturing attributes of mangroves, salt marshes and seagrasses. These coastal wetlands are collectively known as “Coastal Blue Carbon Habitats” in recognition of their role in mitigating the carbon dioxide emissions causing global climate change.

- Implementation of an initiative developed by our Community Advisory Committee to raise awareness among local college students of issues affecting Tampa Bay, and inspire the next generation of environmental leaders to participate in cleanup and monitoring efforts.

- Continuing our partnership with Restore America’s Estuaries, a national non-profit, to cultivate the Tampa Bay Environmental Restoration Fund as a sustained public-private financing mechanism for supporting important research, restoration and education projects in the bay watershed.
YOUR TARPON TAG SUPPORTS TAMPA BAY

Thanks to your purchase of the Tampa Bay Estuary license plate, we have been able to award more than $1.5 million to community groups since 2001 to support bay restoration and education.

Haven’t bought yours yet?

Auto tag fees were rolled back in 2014 by $17-$25 per vehicle, so this is a great time to reel in your Tarpon Tag. Please support the only license tag whose revenues stay solely within our community and our bay!