TAMPA BAY WATCH

Cockroach Bay Aquatic Preserve: Successful Partnerships for the Environment

Restoring the Bay Every Day

Martha Gruber

Co Authors:

Brandt Henningsen, Ph.D., SWFWMD-SWIM J. Richard Sullivan, Hillsborough County

 Largest openwater estuary in Florida

Encompasses nearly 400 square miles

Watershed covers a land area of about
 2,200 square miles

 More than 100 tributaries drain into Tampa Bay

TAMPA BAY



What Impacts Our Bay

- Coastal Development
- Wastewater treatment plants and industrial discharges
- Widespread dredging and filling
- Shipping channels
- Stormwater Runoff





What's Making the Difference?

- Dredging the Tampa ship channel completed in 1981
- City of Tampa improved wastewater management practices in the mid-'80s
- Wetlands protection (controls on dredging and filling, stormwater treatment) in 1982
 - Community educatio
- Youth stewardship
- Habitat restoration





Restoration in Action

- Salt Marsh Plantings
- Oyster Domes & Bars
- Fishing Line Recycling
- Coastal & Bird Nesting Island Cleanups
- Stormwater Runoff
 Awareness
- Derelict Crab Trap Removal
- Seagrass Transplanting & Monitoring
- Bay Scallop Monitoring
- Cockroach Bay Oil Boom Program
- Native Plants & Invasive Plant Removal





Restoration: Salt Marsh

- Problem(s):
 - Coastal erosion
 - Loss of fish habitat
 - Loss of feeding habitat (birds)
- How we Help:
 - BAY GRASSES IN CLASSES:
 - Schools build and maintain their own plant nurseries
 - COMMUNITY SALT MARSH PLANTINGS:
 - To stabilize shorelines from erosion and introduce restored habitat







Cockroach Bay Aquatic Preserve: <u>Successful Partnerships for the Environment</u>





Early History of Cockroach Bay

- What's in a name?
- Most pristine section of Tampa Bay.
- Public concern in late 1950's established the aquatic preserve system of today.
- In 1969 a 40 foot shipping channel was built for Port Manatee.







Early History of Cockroach Bay

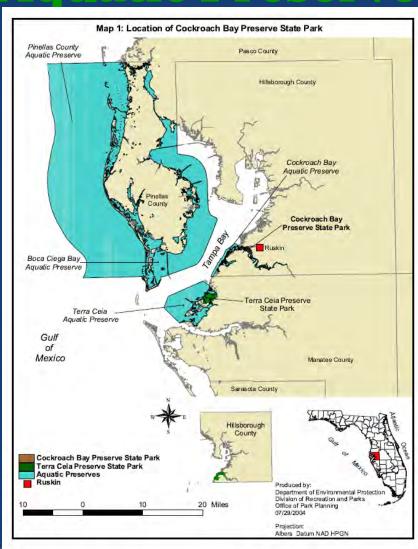
- Purchased by Hillsborough County-ELAPP in 1991.
- Series of farm fields and shell mining pits.
- Part of multi-agency partnership coordinated by Southwest Florida Water Management District's Surface Water Improvement and Management program.
- Construction of restoration efforts began in 1996.





Cockroach Bay Aquatic Preserve

- 875 acres originally purchased by Hillsborough County-ELAPP in 1991.
- Over the years 500 acres of wetlands, uplands, and coastal habitats have been restored.
 - 220 Uplands
 - 280 wetlands
- Total acreage of the Preserve is 1,027 that is managed by the State and County.





Flashback









To Now





Partners of Success

AmeriCorps City of St. Petersburg City of Tampa Coastal America* Cockroach Bay Aquatic Preserve Program Cockroach Bay User's Group Hillsborough County Environmental Protection Commission* Fish and Wildlife Research Institute Florida Department of Environmental Protection* Florida Fish and Wildlife Conservation Commission Hillsborough County Stormwater and Environmental Lands Acquisition and Protection Program* National Oceanic and Atmospheric Administration (NOAA)-**National Marine Fisheries Service**

Peninsula Design and Engineering Inc.

Scheda Ecological Associates, Inc. Southwest Florida Water Management District (SWFWMD)*-SWIM, Operations, and Survey Depts. Sate of Florida* Tampa Bay Estuary Program Tampa Bay Regional Planning Council Tampa Bay Watch Tampa-Hillsborough County Expressway Authority* Tampa Port Authority* University of South Florida United States Army Corps of Engineers United States Environmental Protection Agency* United States Geological Survey United States Fish and Wildlife Service

And over 2,500 Community Volunteers

*Provided project funding.



Tampa Bay Watch Involvement

Stormwater Tidal Creek

One Arm Pond with Creek

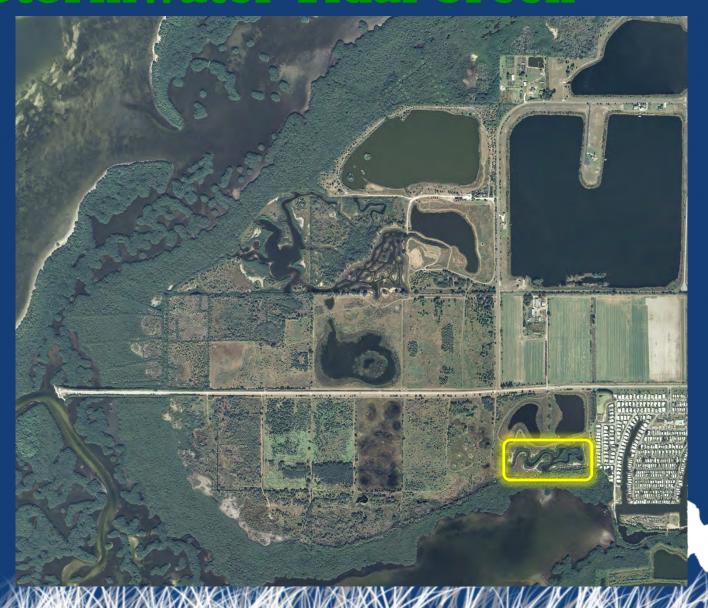
Braided Tidal Creek

Leisey Pit





- Construction was finished in 1996.
- Work was done by SWFWMD crews.
- Tampa Bay Watch started planting in 1999.





Before After













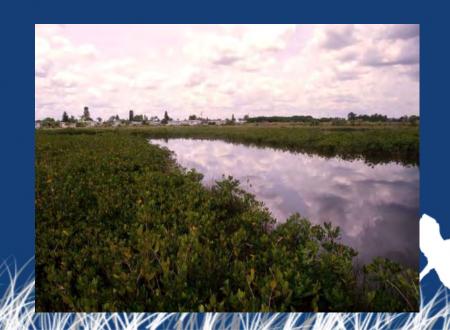


Volunteer Planting

TAMPA BAY











- Construction began in 1996.
- 1,010 volunteers planted 87,000 plugs.
- 24.5 acres





One Arm Pond with Creek

- Construction was completed in 1997 for one armed pond.
- Construction was completed in 1999 for tidal creek.
- Work was done by SWFWMD crews.
- Tampa Bay Watch planted in 1999.





One Arm Pond With Creek

Before of Creek



After of Creek





One Arm Pond With Creek

Before of One Arm Pond

After of One Arm Pond



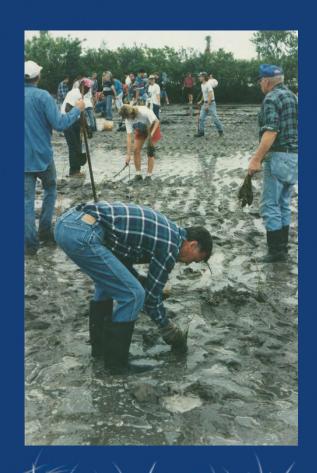




One Arm Pond with Creek

Volunteer Planting







One Arm Pond with Creek

- 260 volunteers
- 24,000 plugs
- 55.8 acres





- Construction was completed in 2005.
- Tampa Bay
 Watch began
 planting in
 2005.





Before



After





Volunteer Planting









Before construction



After construction









- 289 volunteers
- 34,400 plugs
- 17 acres





- Construction began in 2011.
- Tampa Bay
 Watch began
 planting in Dec.
 2011.





Before



After











Before





After





Cockroach Bay Aquatic Preserve: Successful Partnerships for the Environment





- Total Acres Restored: over 209 acres
- Total Volunteers: 1,842 community volunteers
- Does large scale restoration work?



Restoring the Bay Every Day























Restoring the Bay Every Day

Thank you for your support!





www.tampabaywatch.org