

# St. Andrew Bay Watch

*Living Shorelines Initiative - Habitat Restoration in St. Andrew Bay, FL*

## St. Andrew Bay Watch

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# RMA's Living Shoreline Initiative



To establish 'Living Shorelines' as the primary means for protecting eroding shorelines in the coastal areas along St. Andrew Bay and adjoining watersheds, where appropriate, thereby steering coastal protection towards softer, more natural alternatives, and away from hardening.

# What is a Living Shoreline?



- Native vegetation
- Breakwaters made of natural materials (if needed)
- Mitigate or reverse shoreline erosion
- Provide habitat and enhance natural shoreline

# Why Living Shorelines?



## LIVING SHORELINES SUPPORT RESILIENT COMMUNITIES

Living shorelines use plants or other natural elements—sometimes in combination with harder shoreline structures—to stabilize estuarine coasts, bays, and tributaries.



**One square mile** of salt marsh stores the carbon equivalent of **76,000 gal of gas** annually.



Marshes trap sediments from tidal waters, allowing them to **grow in elevation** as sea level rises.



Living shorelines improve **water quality**, provide fisheries **habitat**, increase **biodiversity**, and promote **recreation**.



Marshes and oyster reefs act as natural **barriers** to waves. **15 ft** of marsh can **absorb 50%** of incoming wave energy.



Living shorelines are **more resilient** against storms than bulkheads.



**33%** of shorelines in the U.S. will be **hardened** by **2100**, decreasing fisheries habitat and biodiversity.



Hard shoreline structures like **bulkheads** prevent natural marsh migration and may create seaward **erosion**.



The National Centers for Coastal Ocean Science | [coastalscience.noaa.gov](http://coastalscience.noaa.gov)

Some graphics courtesy of the Integration and Application Network, University of Maryland Center for Environmental Science ([ian.umces.edu/symbols/](http://ian.umces.edu/symbols/))

# St. Andrew Bay Watch Living Shoreline Projects 2003-2017



- 12 small scale projects
  - 75 – 1300 linear ft.
  - Erosion control
  - Habitat, Water Quality
  - Exempt activities
- Ch. 62-330.051(12)(e)

# Watson Bayou: Middlemas-Gramling Site

Before (December 31, 2008)

After (June 9, 2011)



Smooth cordgrass has expanded 25 feet waterward and 30 feet laterally towards adjacent property that was not originally included in the project.

# Watson Bayou: Vickers Site (lost 13 feet of shoreline in 8 years before restoration)



# West Bay: RiverCamps

Mar 17, 2016

Before restoration.  
Property lost ~25 ft.  
of shoreline



Oyster breakwaters  
installed April 2016



Smooth cordgrass  
planted May 2016



Four months after  
planting



Sept 9, 2016

# Hibiscus by the Bay – hybrid shoreline project



## Hibiscus by the Bay – low maintenance landscape buffer





Native Plant Nursery  
Oyster Reef Building  
Planting

# Bay Grasses in Classes

Deane Bozeman  
School



Monitoring: Plant growth,  
Oyster recruitment, Nekton  
surveys



# Our Partners & Volunteers



NW FL Aquatic Preserves,  
Florida Coastal Office



Sea Grant & Master  
Gardeners of Bay County



# Save Your Shoreline

