



# Lake Worth Lagoon Living Shorelines

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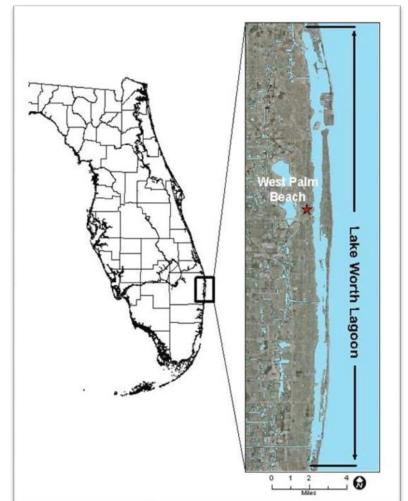
Photo Credit John Marshall



# Lake Worth Lagoon



- Located between Village of North Palm Beach and the Town of Ocean Ridge
- 20 mi long, ½ mi wide,
  6-10' deep
- Resources include:
  - 1,689 acres of seagrass
  - 283 acres of mangroves
  - 5 acres of oysters





# Living Shorelines



- create habitat for birds, oysters & fish
- protect seawalls against wave energy & storm surge,
- protect natural shorelines from erosion.
- provide a more natural, aesthetic view to the waterfront







### Breakwaters





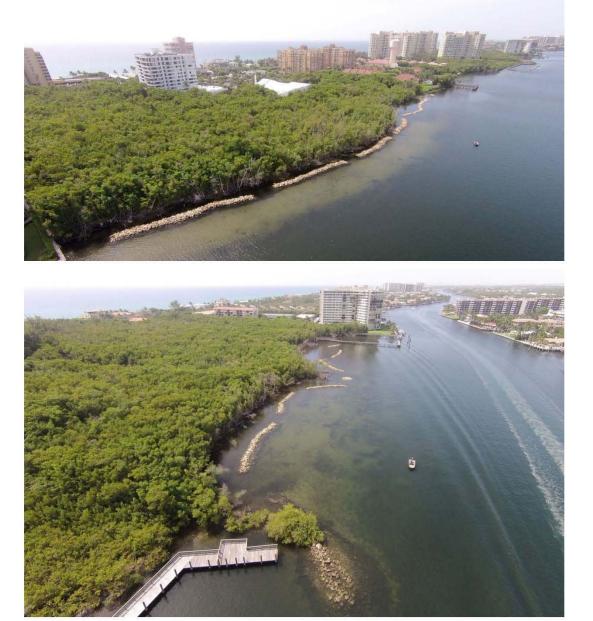
### Oyster Reefs



### Highland Beach Shoreline Enhancement







### Breakwaters Oyster Reefs

#### **Boynton Beach Breakwaters - 2009**

#### South Cove - 2012

#### Jupiter Ridge Breakwater 2012

Ibis <mark>Isles-</mark> 20







## Intertidal Wetland Planters





## Bryant Park Living Shoreline











### Intertidal Islands







#### Bryant Park-2015



## **Grassy Flats Restoration Project**







US Army Corps of Engineers.















### Grassy Flats Restoration Project











## South Cove Natural Area

- 6-acre dredge hole filling project
  - 2 acres of mangrove/salt marsh
  - 3.5 acres of seagrass
  - 1 acre of oyster/artificial reef
- Completed 2012

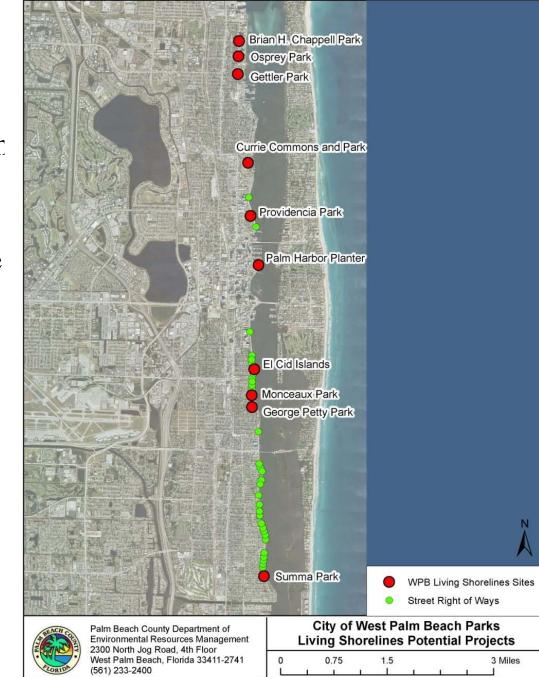








West Palm Beach Living Shoreline Concepts





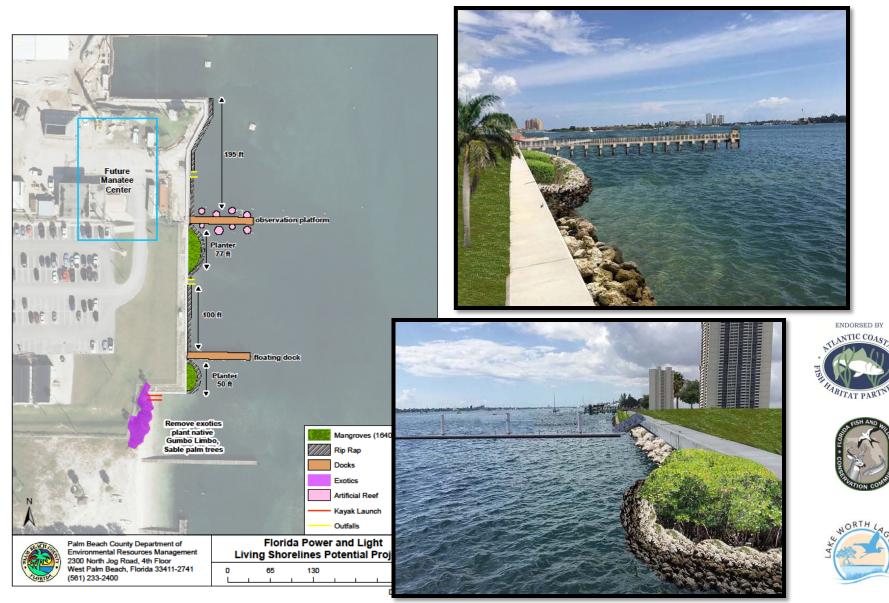
10 parks
31 end of street right-of-ways
2 miles of City shoreline
6 acres of intertidal habitat

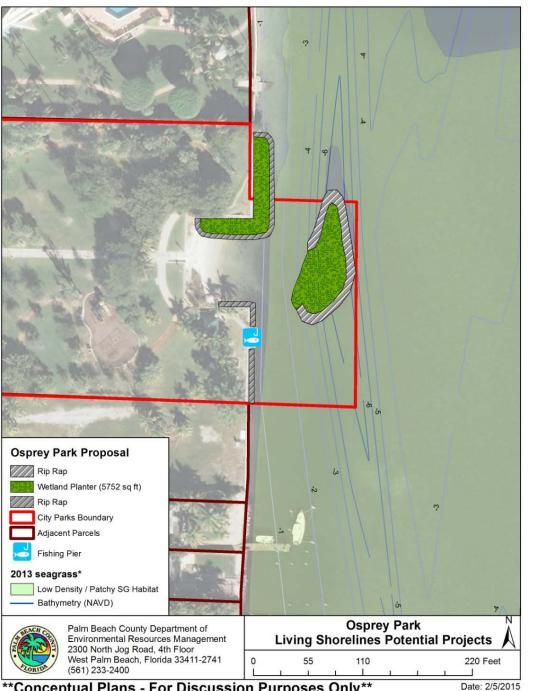




# FPL – Manatee Center







### Osprey Park

- Shoreline Length: 400'
- Sandy beach, rip-rap;
- New seawall

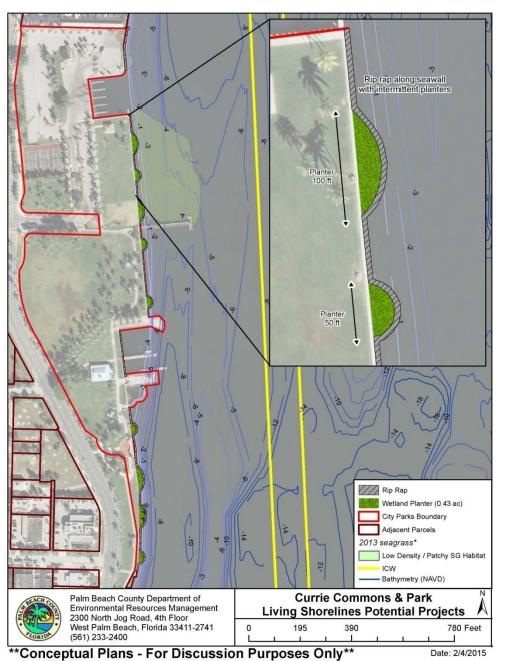
#### Potential Components:

 120' x 55' Intertidal Breakwater Island to protect the shoreline

- 160' of shoreline planter
- 130' of rock rip-rap



\*\*Conceptual Plans - For Discussion Purposes Only\*\*



Currie Park

- Length: 2,000'
- Seawall; urban rip-rap off seawall,

#### Project Components:

- 1,200' of rip-rap
- 9 planters = 880' of shoreline
- Planters vary between 50' and 100' in length and 25' wide.
- Design gaps for views



