Pelican Island National Wildlife Refuge Restoration and Stabilization Project

Florida Oyster Reef Restoration Workshop
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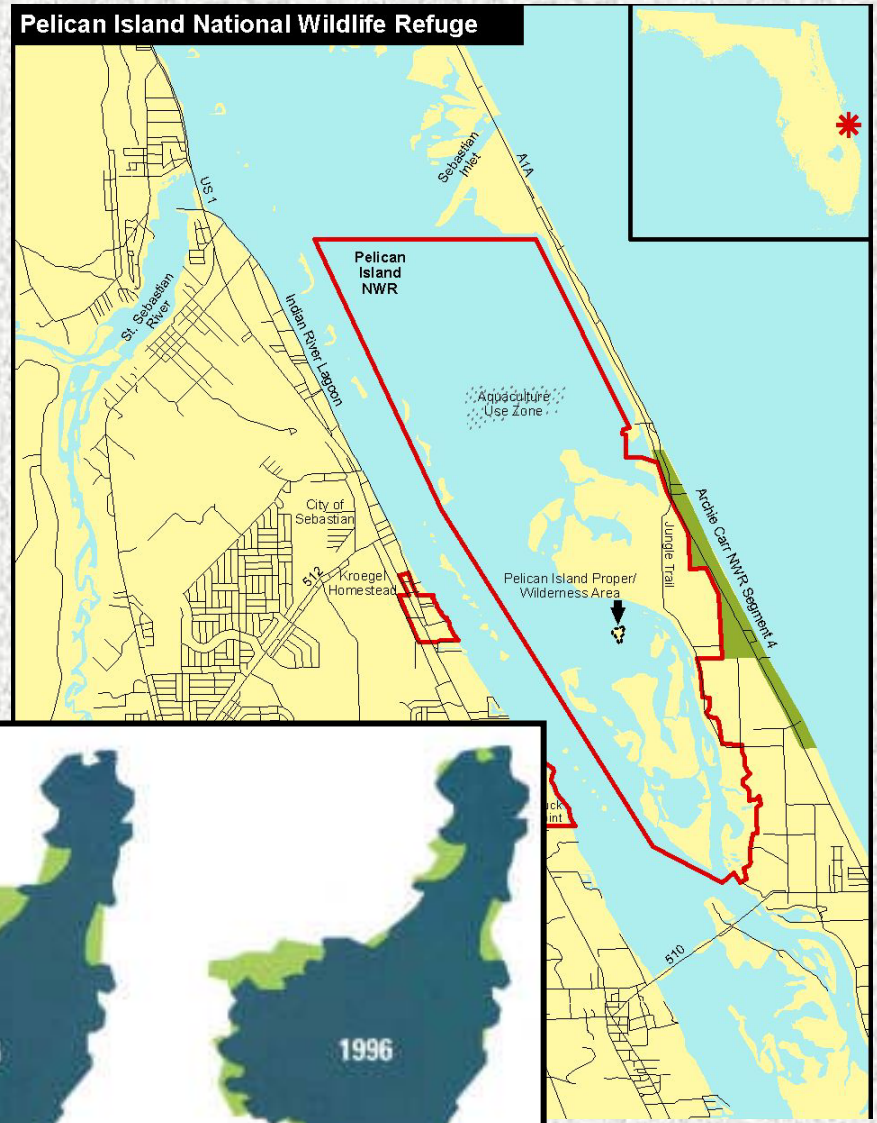
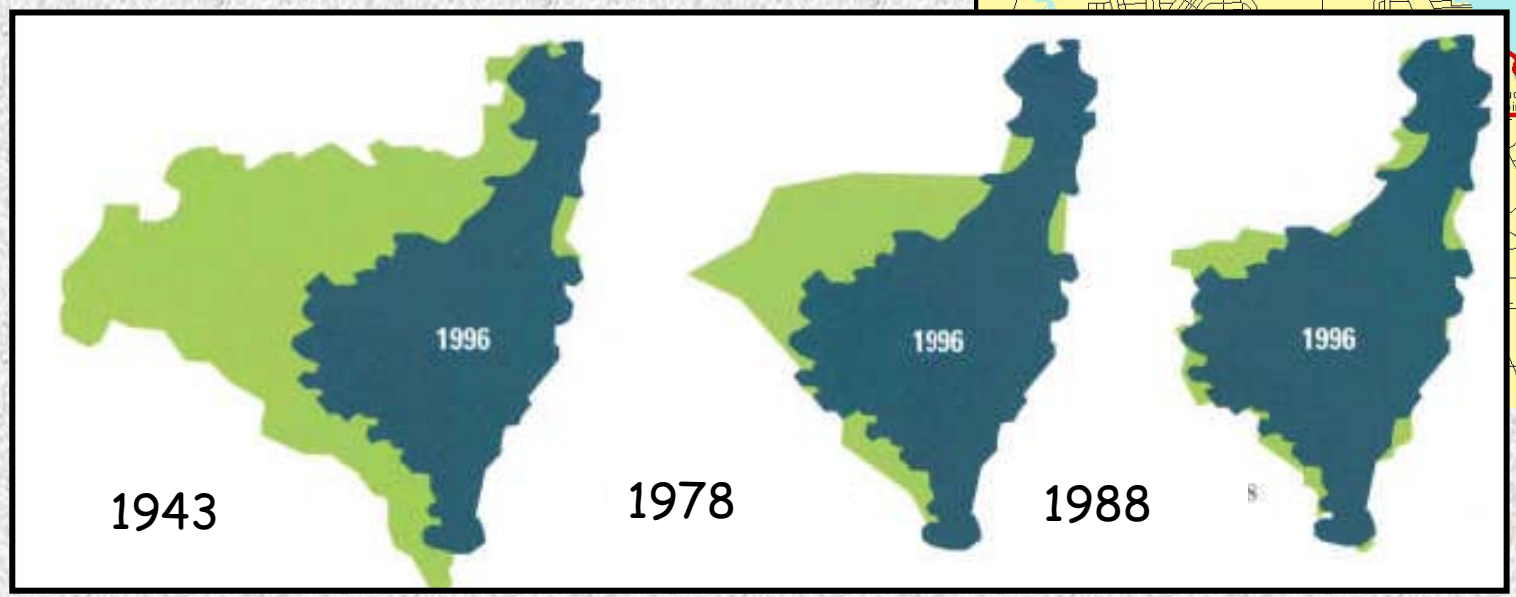
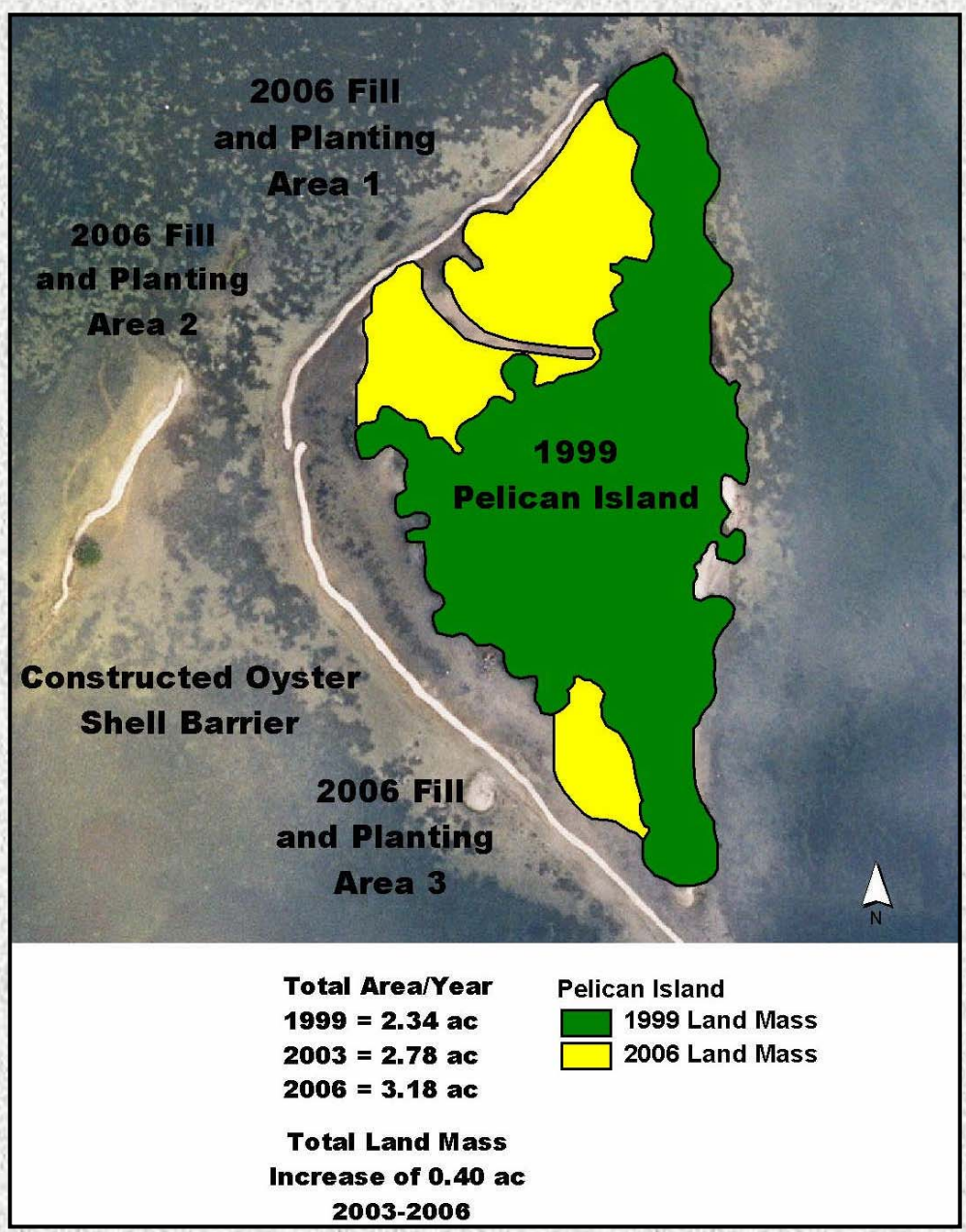
Pelican Island NWR Restoration

- Established as first NWR 1903
- 60% decrease in size due to erosion
- Constructed fossil shell breakwaters in 2000, '01, '06
- Planted Spartina & mangroves







Permit Requirements: seagrass avoidance

Timing: bird nesting season

Cost: hand-carrying baskets of shell vs. helicopter delivery

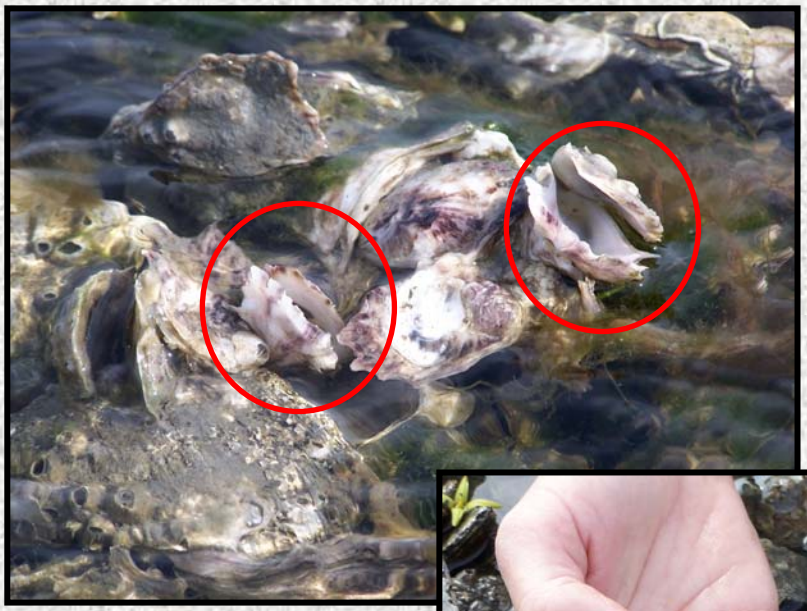
Expect the Unexpected

Was the stabilization part of the project a success?

- Pelican Island is considered stable and has increased by 0.40 acres due to the construction of breakwaters and plantings

Was the oyster reef biologically successful?

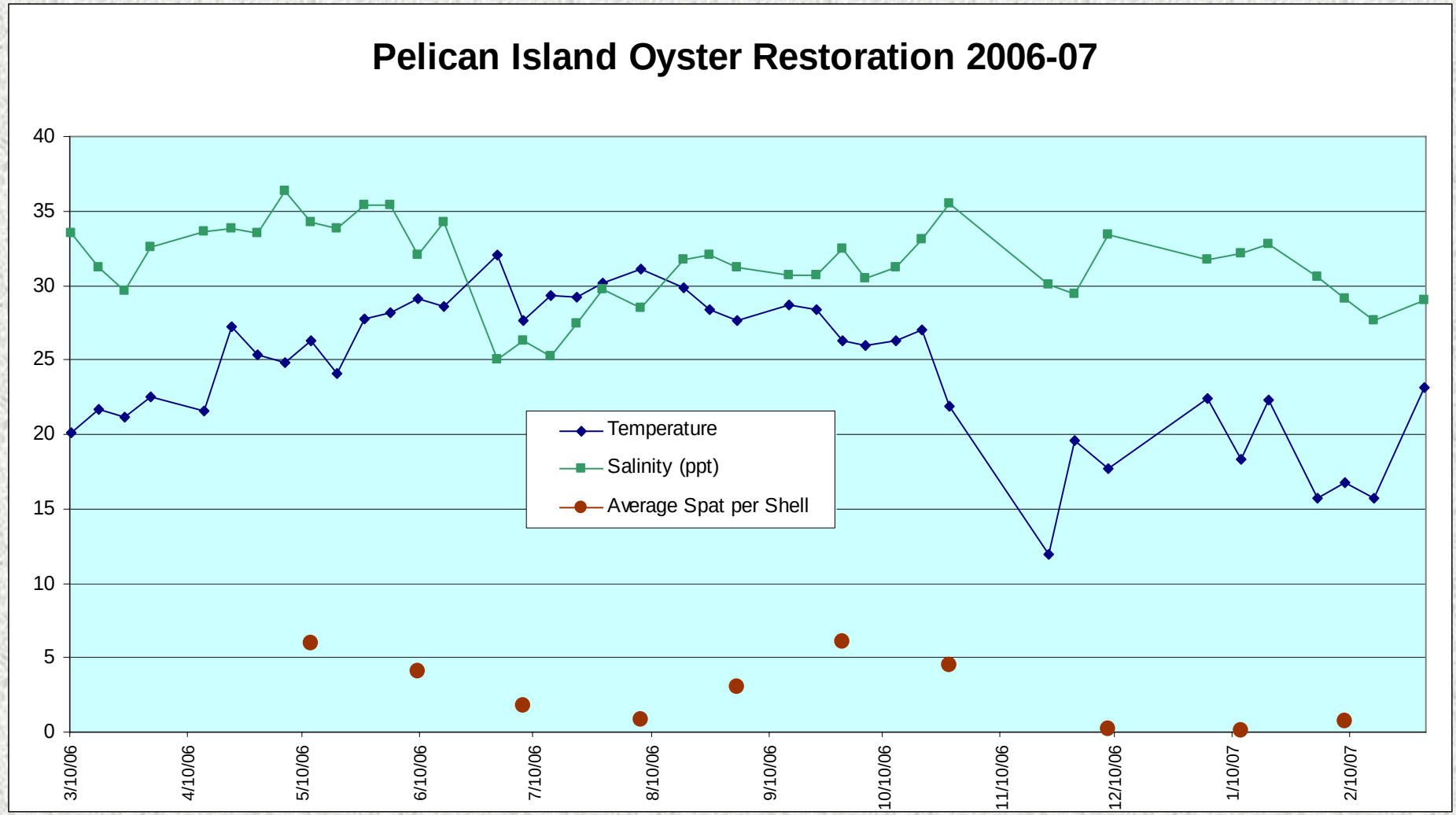
- Coastal Resources Group, Inc. reported that they anticipated the oyster reef to become covered with live oysters over the next several years



Limited funding provides partnership opportunities

- Established a weekly water quality monitoring station roadside

- Established 3 monthly spat recruitment and water quality stations adjacent to Pelican Island



Median salinity – 32ppt

Recruitment peak mean – 6 spat/shell

Fossil Shell Recruitment on Constructed Reef

What does this have to do with the Comprehensive Everglades Restoration Plan?

- Oysters are one of the main estuarine indicators of success for CERP

- Implementation of CERP will improve the quantity, quality, timing, and distribution of water, therefore increasing oyster reefs

- Can we apply lessons learned to efficiently create reefs as funding becomes available?