



Habitat Creation and Restoration on Mon Louis Island, Mobile County, AL

M o b i l e B a y



The Mon Louis Island shoreline has suffered significant erosion and habitat degradation from:

- Prevailing southeasterly winds
- Ship/boat traffic in Mobile Ship Channel and mouth of Fowl River
- Tropical weather events (e.g., Ivan, Katrina, Gustav)

The shoreline is generally impacted and dotted with pilings from docks and piers destroyed by storms. Otherwise it is heterogeneous, with retaining walls and beaches...





...concrete debris and wooded uplands...



...rip rap...

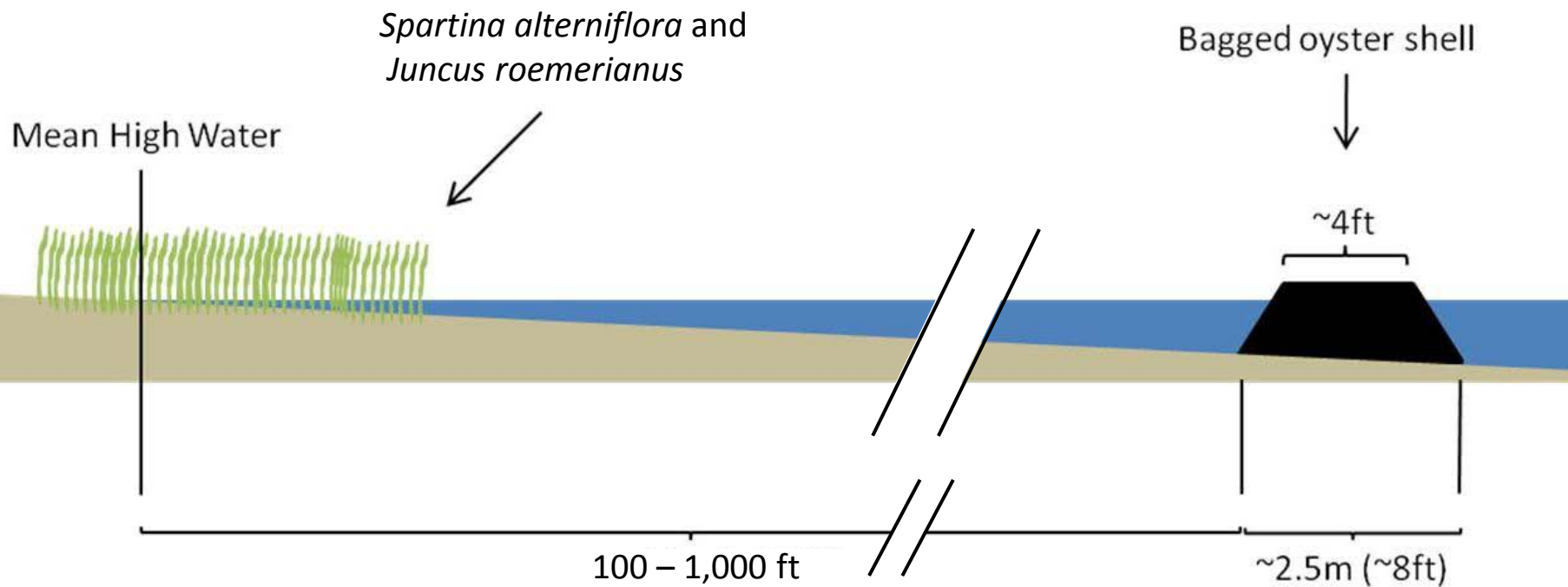


...bulkheads...



...and vegetation planted
to stabilize property.

Habitat Creation and Shoreline Stabilization: Oyster Reefs and Intertidal Salt Marshes



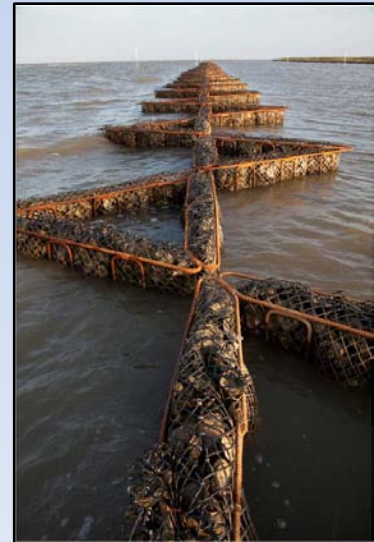




Oyster Reefs –




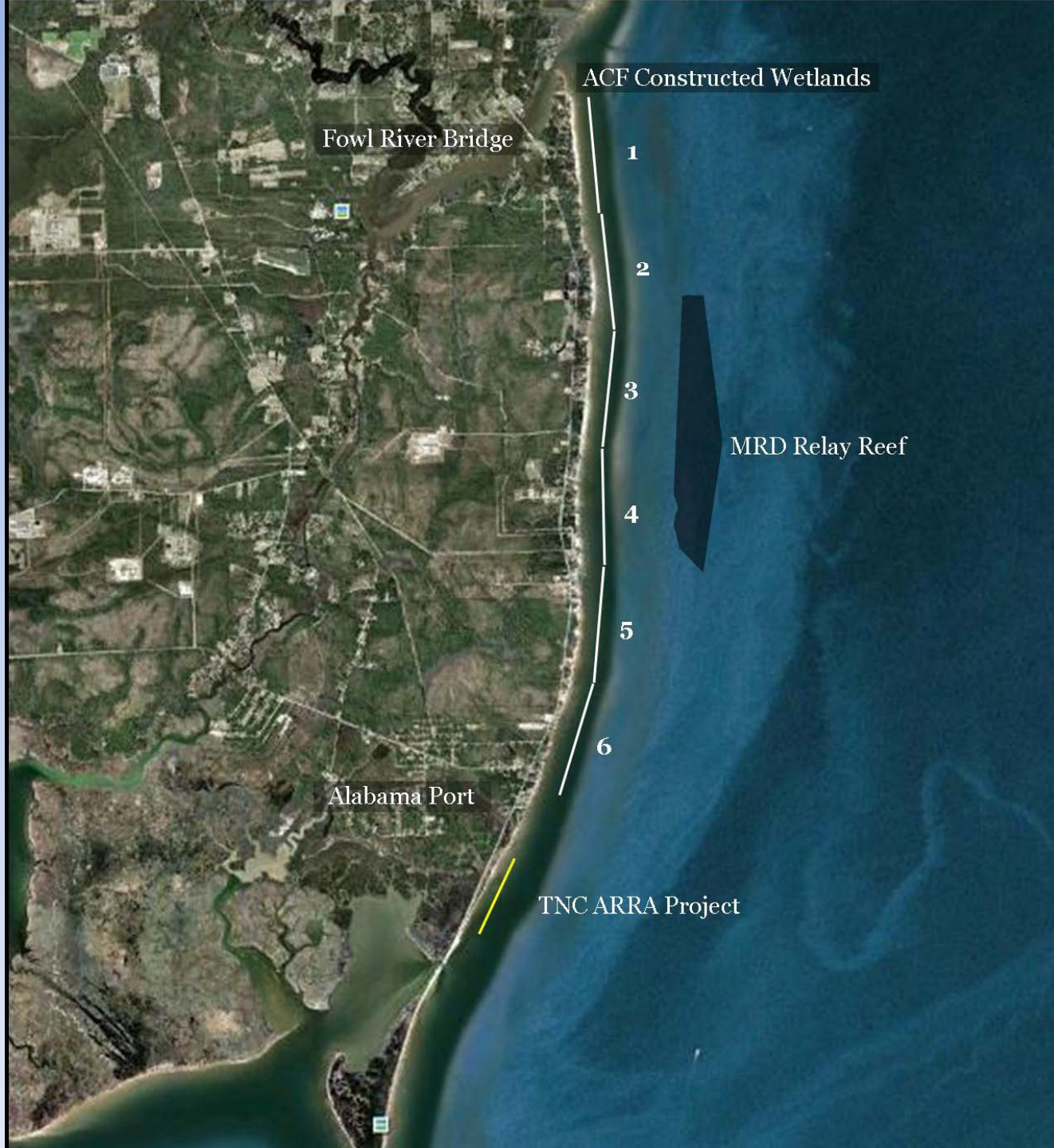
- Attenuate wave energy (stabilize shorelines and promote near shore seagrass habitat establishment)
- Create settlement substrate for new oysters
- Create complex habitat for fish and invertebrates
- Enhance water quality (a single oyster will filter up to 65 gallons of water per day.)





Salt Marshes –

- Stabilize shoreline sediments
 - Buffer the effects of storms
 - Provide habitat, food, and refuge for commercially and recreationally important fish and shellfish
 - Filter pollutants and nutrients from stormwater runoff entering the Bay
- 



ACF Constructed Wetlands

Fowl River Bridge

1

2

3

4

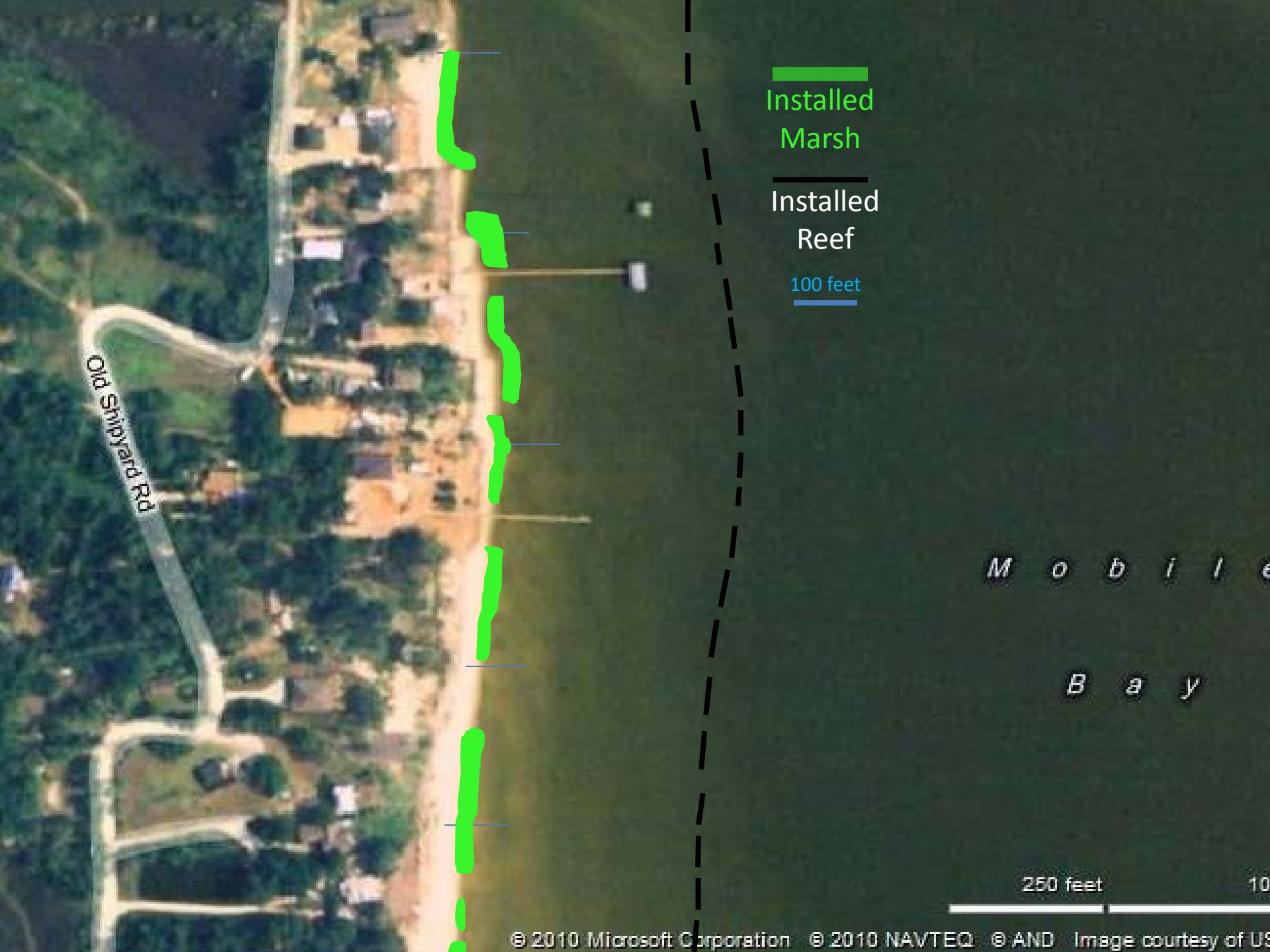
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6

MRD Relay Reef

Alabama Port

TNC ARRA Project



Installed
Marsh

Installed
Reef

100 feet

Old Shipyard Rd

M o b i l e

B a y

250 feet

100

Planning Exercise

- Get a cup of coffee and a cookie and find your property on the map
- Indicate structural features or actions taken that aren't apparent (use white markers and fine point black markers to make notes)
- Plan reef placement according to depth profiles (use black markers)
- Indicate your preference for marsh installation (none, part, on beach, on water bottoms, or full coverage – use yellow markers)