

US Army Corps of Engineers Dredging Conference 2010

By Donna Anderson, USFWS



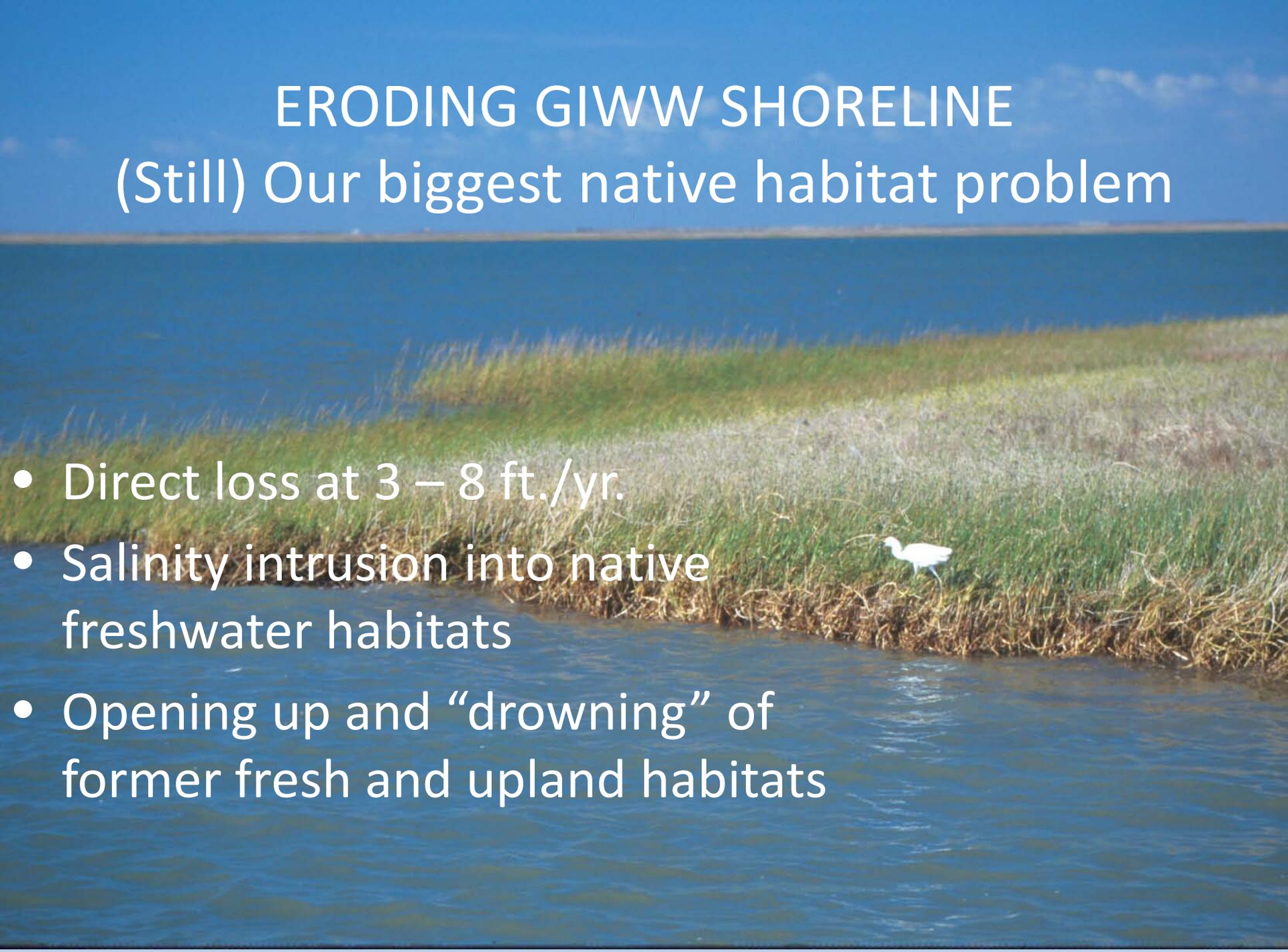
The Service recommends early coordination for all Federal and O&M projects (Corpus or Houston offices)



ERODING GIWW SHORELINE

(Still) Our biggest native habitat problem

- Direct loss at 3 – 8 ft./yr.
- Salinity intrusion into native freshwater habitats
- Opening up and “drowning” of former fresh and upland habitats





Green's Lake GIWW Marsh Nourishment



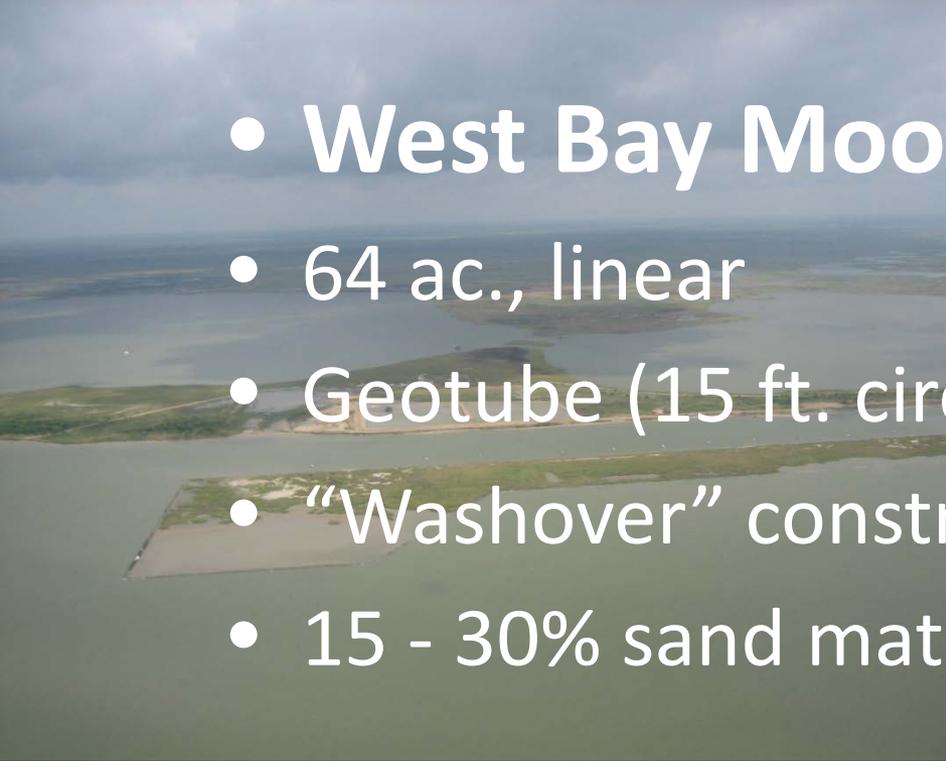
- 8,000 l.f. of eroding GIWW shoreline
- Est. 240,000 c.y.
- Unconfined at max. 12 discharge points
- Designed to raise elevations and delay marsh "drowning"







- **West Bay Mooring**
- 64 ac., linear
- Geotube (15 ft. circum.) confinement
- “Washover” construction
- 15 - 30% sand material



Feb 15, 2010



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Image Texas General Land Office

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29°10'19.43" N 95°06'20.73" W

Eye alt 2869 ft





05.25.20



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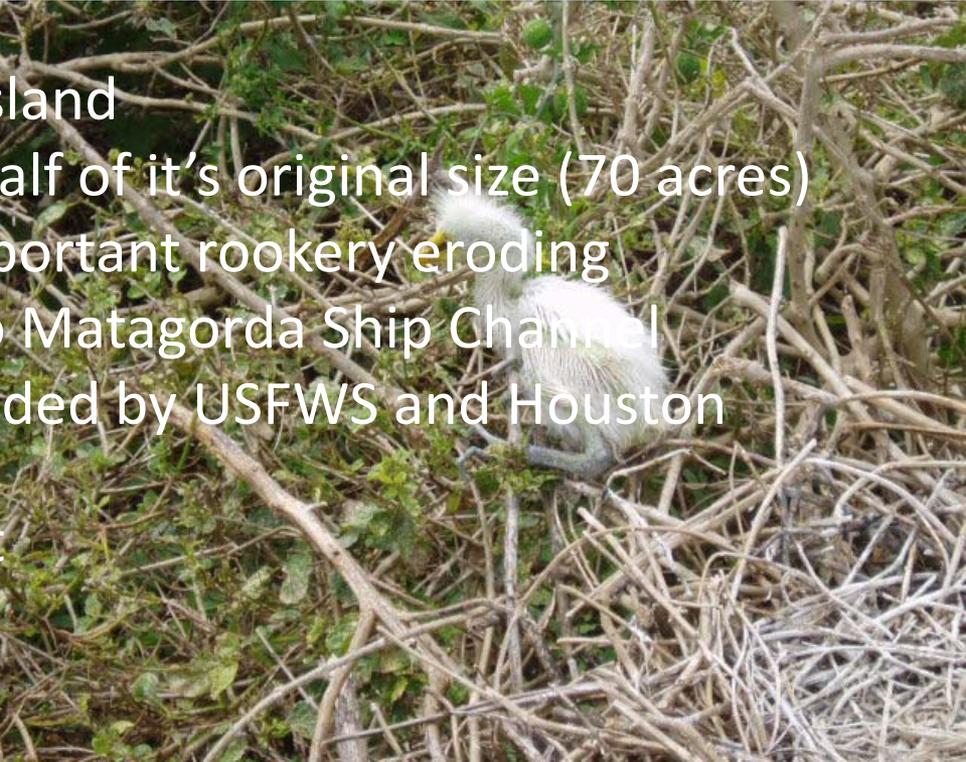
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FUTURE PROJECT PRIORITIES (addressing key resources)



- Sundown Island
- Less than half of its original size (70 acres)
- Existing important rookery eroding
- Adjacent to Matagorda Ship Channel
- Recommended by USFWS and Houston Audubon
- Smith Point



BU PROJECTS UNDERWAY

- **Chocolate Bayou DMMP BU**
- Construction started 2006, maintenance material
- 64-ac. earthen levee, overflow spillway, single outflow point
- 94-ac. geotube, no overflow, single outflow point
- *Spartina* plantings on levee and 3,500 l.f. of protected shoreline, seeded interior
- PROCESS problems in contracting dewatering structures before winter (low) tides

Chocolate Bayou 2010



10.20.2010



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Early Coordination for O&M and Federal Projects



HGNC Mid Bay
Placement Area

















07/08/2010







USACE Opportunities

- The creation of bird islands along the coast, specifically San Antonio, Matagorda and Galveston Bays. Generally, colonial waterbird species have been on the decline and can be attributed to a decline in available habitat.
- A return to the use of the Laguna Madre DMMP instead of approaching all dredging as emergency. This would allow for increased beneficial use of dredge material and eliminate open bay disposal.
- Taking the message of “Opening the wallet” to provide more environmentally sound alternatives to upland placement and open bay disposal to the Washington level (using dredge material beneficially).
- Understand the importance of critical habitat for species recovery and delisting. Current practices lend for some species to remain on or more being listed as threatened and/or endangered.
- Use maintenance dredge material to re-nourish federal, state and private marshes along the GIWW. These once fresh marshes are now intermediate to saline with species communities have changed entirely.
- Repair Smith Point project. Geotubes failed and leaked sediment

Take Home Points

- Strategically placed dredge material can provide marshes, beaches, and rookery islands a lift in the face of sea level rise. Stabilizing coastal and bay shorelines makes sense environmentally and economically.
- Observance of the Migratory Bird Treaty Act, Endangered Species Act, Bald and Golden Eagle Act and the Fish and Wildlife Coordination Act will ensure project impacts to fish and wildlife are thoroughly assessed and minimized.
- All projects need to be monitored and maintained for erosion and invasive species control.
- Early coordination with the Service on USACE Federal and O&M projects can prevent timely delays in project construction.
- Projects will be thoroughly assessed for impacts to whooping cranes and its habitat .
- Open bay disposal is not recommended by the Service. Beneficial use of dredge material to bolster the Texas coast line will be our first recommendation.

A large colony of seabirds, likely terns, is gathered on a dirt mound in a grassy field. The birds are white with black caps and orange beaks. They are densely packed in the center and right of the frame, with some individuals standing on the dirt mound. The background consists of a grassy field under a bright sky.

QUESTIONS ??

Thank You
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