



# Pecan Island Terracing (ME-14)

## Project Status

**Approved Date:** 1998                      **Cost:** \$2.9 M  
**Project Area:** 3,550 acres              **Status:** Construction  
**Net Benefit After 20 Years:** 442 acres  
**Project Type:** Sediment and Nutrient Trapping

## Location

This project is located in southeastern Vermilion Parish, Louisiana, approximately 5 miles north of the Gulf of Mexico just south of Pecan Island and Louisiana Highway 82.

## Problems

In the mid-1950s continuous dikes were constructed and water was pumped off the marsh, transforming it into dry pastureland. As a result of oxidation, the soil elevation has subsided 1 to 2 feet. Deterioration and loss of the perimeter levees in recent years has converted the entire area into a shallow, open water lake with a few small marsh islands resulting in a net loss of fisheries habitat.

## Restoration Strategy

The restoration project will reduce marsh erosion by creating emergent terraces designed to minimize wave fetch across open water and, at the same time, creating linear marsh features. Future marsh loss will be prevented and brackish marsh will be restored.

Construction of the earthen terraces in shallow water areas will also convert areas of open water back to vegetated marsh creating more habitat for fish and shellfish.

The project calls for constructing adjacent terrace cells in a staggered gap formation, each bordered by terraces made from dredged material. Terraces will be built and planted with smooth cordgrass (*Spartina alterniflora*), and California bulrush (*Scirpus californicus*). Plantings may also occur on the north side of the terracing area.



An example of the proposed terrace construction for Pecan Island Terracing.

## Progress to Date

The engineering design contract has been awarded. Land rights have been obtained.

The monitoring plan was finalized in November 2001 and data collection has been ongoing since that time. Pre-construction aerial photography was collected in December 2001 and the first post-construction photography is scheduled for fall of 2004. Submerged aquatic vegetation and emergent vegetation data are also being collected to evaluate project effectiveness.

This project is on Priority Project List 7.

For more project information, please contact:



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National Marine Fisheries Service  
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**Local Sponsor:**  
Louisiana Department of Natural Resources  
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# Pecan Island Terracing (ME-14)

 Terrace \*  
 Project Boundary  
 \* denotes proposed feature



Map Produced By:  
 U.S. Department of the Interior  
 U.S. Geological Survey  
 National Wetlands Research Center  
 Coastal Restoration Field Station

Background Imagery:  
 1998 Digital Orthophoto Quarter Quadrangle

Map Date: November 27, 2002  
 Map ID: USGS-NWRC 2003-11-004  
 Data accurate as of: November 27, 2002