

PPL24 PROJECT NOMINEE FACT SHEET
January 30, 2014

Project Name: St. Catherine Island Shoreline Protection and Marsh Creation

Project Location:

Region 1, Pontchartrain Basin, Orleans Parish, East Orleans land bridge mapping unit, East of I-10 Twin Spans along the shore of Lake Pontchartrain to just east of Chef Pass.

Problem:

The landfall of Hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats in the Lake Pontchartrain basin. The hurricane weakened the Lake Pontchartrain shoreline and large areas of interior marsh habitat were either lost or damaged near Chef Menteur Pass. This area has an estimated erosion rate of 12 ft./yr. or greater. A portion of the lakeshore is protected by rock dikes (Bayou Chevee (PO-22), State only project and FWS funded project). Shorelines that are not protected by rock dikes will erode back into the shallow open water areas located near the shorelines further increasing erosion rates.

Goals :

The goals of the project are to stop shoreline erosion due to wind generated waves along 15,648 linear feet of the Lake Pontchartrain shoreline and create 74 acres of marsh and nourish 22 acres of marsh behind that shoreline protection.

Proposed Solutions:

Extend the Bayou Chevee (PO-22) rock dike along approximately 19,541 LF of weakened Lake Pontchartrain shoreline. This project also would create 74 acres of marsh and nourish 22 acres of marsh in shallow open water and broken marsh areas located directly behind the proposed rock dike. That marsh would be created by filling those sites with material hydraulically dredged from the bottom of Lake Pontchartrain. Earthen dikes would be constructed to contain that material and would be sufficiently gapped within 3 years to allow for exchange of nutrients and estuarine organisms. This project would work synergistically with other restoration projects in the area including CWPPRA, state, and Bayou Sauvage National Wildlife Refuge projects.

Preliminary Project Benefits:

1) *What is the total acreage benefited both directly and indirectly?* Approximately 204 acres would be benefited directly.

2) *How many acres of wetlands will be protected/created over the project life?* The total net acres protected/created over the project life is approximately 153 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74% and >75%).* The project would stop shoreline erosion and reduce the loss rates associated with marsh creation/nourishment to 50-74%.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc.* This project would help maintain the current Lake Pontchartrain shoreline and portions of Chef Menteur Pass.

5) *What is the net impact of the project on critical and non-critical infrastructure?* Helps protect a portion of the New Orleans Landbridge.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would work in sync with PO-22 and several associated state only and FWS funded shoreline protection projects.

Identification of Potential Issues:

Borrow site is located within Gulf sturgeon critical habitat.

Preliminary Construction Costs:

The estimated construction cost plus 25% contingency \$20 M.

Preparer(s) of Fact Sheet:

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