

## **Bucktown Marsh Creation and Living Shoreline**

This project seeks to advance the goal of restoring indigenous marshland and ecological features within this zone while also increasing the resilience of the Jefferson Parish levee system. The intent of this project is to rebuild a previously existing natural first line of defense against storm surge and rising sea levels, and to support the restoration of the water quality and ecological functions of Lake Pontchartrain. The indigenous marshland and ecological features once present along a one-mile stretch of lakefront from Bonnabel Park and Boat Launch to Bucktown Harbor connected Parish residents to the surrounding natural resources. This project will help facilitate a stronger relationship between Jefferson Parish residents and surrounding native habitats. NFWF's National Resilience Fund Program will help support the feasibility study and full design tasks necessary to advance the project toward implementation.



## COASTAL STORM RISK MANAGEMENT MEASURES





Open and exposed shorelines are prone to erosion due to waves.



Living shorelines are essentially tidal wetlands constructed along a shoreline to reduce coastal erosion. Living shorelines maintain dynamic shoreline processes, and provide habitat for organisms such as fish, crabs and turtles.

LABRANCHE WETLAND RESTORATION PROJECT - WEST



𝝼 ↔ High Tide in Storm

An essential component of a living shoreline is constructing a rock structure (breakwater/sill) offshore and parallel to the shoreline to serve as protection from wave energy that would impact the wetland area and cause erosion and damage or removal of the tidal plants.

LIGHTNING POINT - CURRENT CONDITION





A levee provides an additional layer of coastal flood protection, helping to mitigate water from flowing over the levee into undesirable areas like the built environment.

## LIGHTNING POINT - PROPOSED RESTORATION



LABRANCHE WETLAND RESTORATION PROJECT - EAST



These successful living shoreline designs will provide recommendations to support preliminary and final design concepts.



One square mile of salt marsh stores the carbon equivalent of 76,000 gal. of gas annually.



Marshes trap sediments from tidal waters, allowing them to **grow in elevation** as sea level rises.



Living shorelines improve water quality provide fisheries habitat increase biodiversity, and promote recreation.



Marshes and reefs act as natural barriers to waves. 15 feet of marsh can absorb 50% of incoming wave energy.



Living shorelines are **more resilient** against storms than bulkheads.



**33%** of shorelines in the U.S. will be **hardened 2100**, decreasing fisheries habitat and biodiversity.



Hard shoreline structures like **bulkheads** prevent natural marsh migration and may create seaward **erosion**.