

Title of Project

New Orleans East Landbridge Living Shoreline and Marsh Creation

Project Description

New Orleans East Landbridge Living Shoreline and Marsh Creation project will restore and protect the thin strip of marsh that separates Lake Pontchartrain from Lake Borgne and the Gulf of Mexico. The New Orleans East Landbridge is the only remaining natural feature in the Louisiana Coastal Master Plan that protects the City of New Orleans from storm surge in the Gulf, and this project has the potential to provide multiple benefits to the 1.5 million people who rely on the landbridge for protection and also to the people who rely on a healthy estuary for their livelihoods.

Abstract

The City of New Orleans faces significant expected wetland loss over the next 50 years, with the potential to lose 32% of the land currently in the New Orleans East area, according to the Louisiana Coastal Protection and Restoration Authority (CPRA). The New Orleans East Landbridge, which provides a boundary between Lake Pontchartrain and Lake Borgne and the Gulf Coast, is now the only project within CPRA's Coastal Master Plan that directly benefits communities in the City of New Orleans and the parishes around Lake Pontchartrain. The natural buffer of the New Orleans East Landbridge provides direct flood protection for residents who live on the landbridge in the Lake Catherine and Venecian Isles neighborhoods, and for residents on the North Shore of Lake Pontchartrain who do not have any levees protecting their communities. For residents in downtown New Orleans, the landbridge takes pressure off the hurricane levee system on Lake Pontchartrain, and reduces the risk of the levees overtopping during a storm event while lowering the burden of long-term operations and maintenance costs for residents. Additionally, essential infrastructure is located on the landbridge, such as Chef Menteur Highway that serves as a critical hurricane evacuation route, making restoration of this area a priority.

While the need for restoration of the New Orleans East Landbridge was identified in the CPRA 2017 Coastal Master Plan, no specific project design has been initiated to date. Preliminary design of the Landbridge project will be critical for CPRA to move forward with implementation of this important restoration site. Without the completion of this design, stakeholders risk further project deferral – making it more expensive due to increasing sediment needs – and potentially making it difficult for CPRA to justify the cost of implementing the project.

This proposal would use NFWF funding to conduct preliminary planning and design for the New Orleans East Landbridge Living Shoreline and Marsh Creation project, which would

create new wetland habitats and restore degraded marsh on approximately 1,000–1,500 acres, while creating roughly 5-10 linear miles of living shoreline protection. The project is located in areas that have been identified as critical landscape features in the EIS for the Mississippi River Gulf Outlet, Ecosystem Restoration Plan. These geographic areas are significant structural elements to maintain ecosystem function and reduce storm surge damage risk.

Grant funding awarded through NFWF would be used to conduct data inventory and needs assessment, land rights investigation, geotechnical investigations, and advance the completion of the design to approximately the 15% design milestone. Completing this phase of work will help refine the scope and create efficiency for final design, permitting, and construction of this essential restoration project protecting New Orleans. The City of New Orleans will work in partnership with the Louisiana Coastal Protection and Restoration Authority to execute deliverables for this feasibility and planning grant.

Project Location Description

The New Orleans East Landbridge Living Shoreline and Marsh Creation project is located in New Orleans, Louisiana. The marsh is on either side of Chef Menteur Highway and extends from New Orleans East to the southern edge of St. Tammany Parish. The landbridge divides two major bodies of water: Lake Pontchartrain to the west, and Lake Borgne and the Gulf of Mexico to the east.

Total Amount Requested Matching Contributions Proposed

The total costs of the feasibility project are \$1.2 million. The amount requested through NFWF is \$600,000. The City of New Orleans will provide a match of \$300,000, and CPRA will also provide a match of \$300,000. In total, the NFWF program can expect a match of 100% from local government for the proposed New Orleans East Landbridge Living Shoreline and Marsh Creation project, if selected.

Proposed Grant Period

July 2020 – July 2021