

**RECORD OF DECISION**  
**Southwest Coastal Louisiana**  
**Hurricane Storm Surge Risk Reduction and Ecosystem Restoration Study**

The Southwest Coastal Louisiana Integrated Final Feasibility Report and Environmental Impact Statement, dated May 2016, (the Final Report), herein incorporated by reference, addresses hurricane storm surge damage risk reduction and ecosystem restoration for Calcasieu, Cameron and Vermilion parishes in southwest coastal Louisiana. The people, economy, environment, and cultural heritage of coastal areas in Southwest Louisiana are at risk from damages caused by hurricane storm surge flooding. Southwest coastal Louisiana's topography and low elevation, proximity to the Gulf of Mexico, subsiding lands, and rising sea levels, are all contributing factors which cause coastal flooding, shoreline erosion, saltwater intrusion, and loss of wetland and Chenier habitats. These are conditions that are expected to worsen. Congress, through separate authorizations, authorized the investigation of alternatives to reduce risk from hurricane storm surge and significantly restore environmental conditions. Based on review of the Final Report, the views of other federal, state and local agencies, input from the public and the review by my staff, I find the plan recommended by the Chief of Engineers to be technically feasible, economically and environmentally justified, cost effective, in accordance with environmental statutes, and in the public interest.

The 2013 Draft Integrated Feasibility Report and Programmatic EIS (Initial Draft Report) evaluated various structural and nonstructural alternatives to address hurricane storm surge risk reduction and ecosystem restoration needs of the 3-parish area. The Initial Draft Report identified a Tentatively Selected Plan (TSP) which included both the hurricane storm surge risk reduction plan (NED TSP) and an ecosystem restoration plan (NER TSP). In March, 2015, a Revised Integrated Draft Feasibility Report and Environmental Impact Statement (Revised Draft Report) was released with updated NED and NER TSPs. To reduce risk from hurricane storm surge events, the Revised Draft Report evaluated in detail for comparison and plan selection the following NED alternatives:

- The No Action Alternative - a requirement of the NEPA regulations. No risk reduction features would be provided under this alternative.
- The Nonstructural 0-25 Year Floodplain Plan - a plan applying nonstructural measures to all economically justified structures located in the 2025 0-25-year floodplain.
- The Nonstructural 100-year Floodplain Plan - a nonstructural plan evaluating all structures located within the 2075 100-year floodplain.

The Revised Draft Report identified the Nonstructural 0-25 Year Floodplain Plan as the NED TSP. As compared to structural measures, both of the NED alternatives are considered environmentally preferable alternatives.

To restore environmental conditions in the study area, the Revised Draft Report evaluated in detail for comparison and plan selection the following NER alternatives:

- The No Action Alternative - a requirement of the NEPA regulations. No restoration measures would be provided under this alternative.

- The Comprehensive Small Integrated Restoration Plan (Plan CM-4) - a plan focused on stabilizing the perimeter geomorphology across the Calcasieu and Mermentau basins using a variety of restoration measures.
- The Mermentau Small Integrated Restoration Plan (Plan M-4) - a plan focused on stabilizing the perimeter geomorphology across the Mermentau basin using a variety of restoration measures.

The Revised Draft Report identified the Comprehensive Small Integrated Restoration Plan (Plan CM-4) as the NER TSP. The Plan CM-4 alternative is considered the environmentally preferable alternative.

Both the Initial Draft Report and the Revised Draft Report were circulated for a 45-day public review. The review period for the Initial Draft Report was extended an additional 14-days. The public review period for the Revised Draft Report commenced on March 20, 2015. Three public hearings were conducted as an opportunity for the public, resource agencies, and elected officials to provide comment regarding the proposed TSPs. The public hearings were held April 14, 2015 in Abbeville, LA (Vermilion Parish), April 15, 2015 in Lake Charles, LA (Calcasieu Parish), and April 16, 2015 in Cameron, LA (Cameron Parish). All comments were reviewed and considered in the preparation of and are included in the Final Report.

As fully detailed in the Final Report, additional updates and changes to the NED and NER TSPs occurred after public review of the Revised Draft Report. These changes included, among others, removal of the involuntary component of the NED plan and the development of additional and sufficient detail to make both the NED and NER features fully constructible. The Recommended Plan (RP), as fully described in the Final Report, includes both the hurricane storm surge risk reduction plan (NED RP) and an ecosystem restoration plan (NER RP). No impacts from the RP have been identified that would require compensatory mitigation. The major features of the RP include:

- The NED RP is Modified Plan 8 - “Nonstructural 0-25-Year Floodplain Plan” and will implement hurricane storm surge risk reduction measures across the 4,700 square mile study area to reduce coastal storm surge related damage to 3,462 residential structures, 342 commercial structures and public buildings, and 157 warehouses. This will be achieved by elevating residential structures, dry flood proofing non-residential structures, and constructing localized storm surge risk reduction measures around warehouses.
  - Eligible residential structures will be elevated to the 100-year base flood elevation predicted to occur in the year 2075;
  - Eligible non-residential structures will have flood proofing measures applied using a variety of techniques that the structure’s doors, walls, windows, and other openings water resistant with reduced risk of penetration by floodwaters; and
  - Localized storm surge risk reduction measures will be less than 6 feet in height.

Participation in the project is voluntary. The NED RP would result in beneficial impacts to socioeconomic resources including population and housing, tax revenue, and community cohesion.

- The NER RP is the Plan CM-4 plan which consists of 49 ecosystem restoration measures that would result in beneficial impacts to wetland, wildlife, fisheries, the threatened rufia subspecies of the red knot, and designated critical wintering habitat for the threatened piping plover. The NER RP is an integrated restoration plan that would have synergy with other area ecosystem restoration projects and would facilitate hydrologic and geomorphic stability and resilience. The NER RP includes the following measures:
  - 9 marsh restoration measures that would restore and nourish a net total of 7,900 acres with 2,700 average annual habitat units (AAHUs) at the end of the 50-year period of analysis;
    - Although part of the overall NER RP, two of the nine marsh restoration measures (124d - Marsh Restoration at Mud Lake and 3c1 - Beneficial Use of Dredged Material from the Calcasieu Ship Channel) are partially located on U.S. Fish and Wildlife Service (USFWS) refuge lands. The U.S. Army Corps of Engineers (USACE) is recommending that USFWS seek Congressional authorization and appropriation to construct these projects. The total ecosystem benefits associated with the two USFWS features are 1,492 acres and 611 AAHUs.
  - 5 shoreline protection measures that would protect a net total of 6,134 acres with 1,738 AAHUs at the end of the 50-year period of analysis; and
  - 35 Chenier reforestation measures that would reforest live oak and hackberry tree species for a net total of 1,413 acres with 538 AAHUs at the end of the 50-year period of analysis.
  - The Calcasieu Ship Channel Salinity Control Structure and the Cameron-Creole Watershed Spillway are recommended for additional long-range studies.

Through consultation with the Advisory Council on Historic Preservation, the Louisiana State Historic Preservation Officer, and Federally-recognized Tribes and other consulting parties, the USACE has elected to fulfill its obligations under Section 106 of the National Historic Preservation Act of 1966 through execution and implementation of two programmatic agreements as provided for in 36 CFR Part 800.14(b). The USACE will continue government-to-government consultation with federally-recognized Tribes on the potential of the RP to significantly affect historic properties.

Based on an analysis using the 2010 Census data at the block and block group level it has been concluded that implementation of the RP would not have a disproportionate adverse impact on minority and/or low-income residents.

All practicable means to avoid or minimize adverse environmental effects have been incorporated into the RP. Technical and economic criteria used in the formulation of alternative plans were those specified in the Water Resource Council's Principles and Guidelines. All applicable laws, executive orders, regulations and local government plans were considered in the evaluation of alternatives. The public will be best served by implementing the Recommended Plan as described in the Final Report. The Final EIS was filed with the Environmental Protection Agency on [INSERT Date] (ERP No. F- COE-XXXXXX-LA). The purpose of this Record of Decision is to complete the procedural requirements of the National Environmental Policy Act process.

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Date

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