



# Upper Barataria Basin LA Coastal Storm Risk Management Study

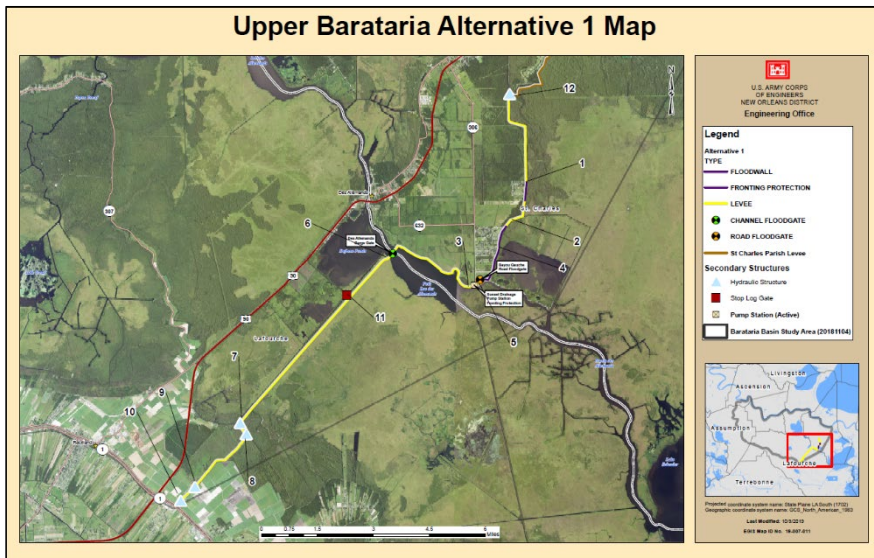
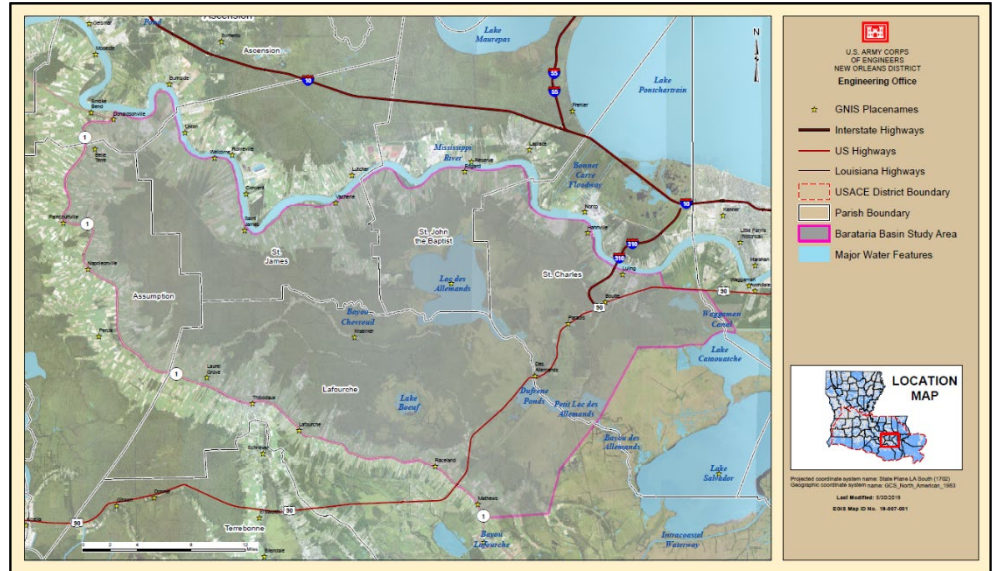
January 2020

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**Study Scope:** The Upper Barataria Basin Feasibility Study investigated alternatives for Coastal Storm Risk Management (CSRМ) and identified and evaluated a full range of reasonable alternatives including No Action. In accordance with USACE’s Planning Guidance Notebook (Engineer Regulation 1105-2-100), the product of this study is a decision document in the form of an integrated Feasibility Report and Environmental Impact Statement.

**Study Area & Problems:** The primary issue this study will investigate is flood risk from tidal surges, coastal storm surges and rainfall. The headwater flooding from rainfall is intensified by tidal events resulting in flood damages to industrial, commercial, and agricultural facilities and residential structures. The study area includes communities in seven southeast Louisiana parishes; St. Charles, St. John, St. James, Jefferson, Ascension, Lafourche and Assumption. The Upper Barataria Basin study area is approximately 800 square miles and characterized by low, flat terrain with numerous navigation channels, drainage canals and natural bayous that drain into Lake Des Allemandes. The study area contains a little over 25,000 structures in which 90 percent are residential.



**Tentatively Selected Plan:** The TSP identified from the final array is Alternative 1, Hwy 90 – Segment 1 Extension. This TSP is estimated to produce nearly \$30.3 million in average annual benefits at an average annual cost of nearly \$20.4 million (total project cost approximately \$514 million not including the cost of armoring for resiliency), for a Benefit to Cost Ratio (BCR) of 1.5 at the current Federal Discount Rate (FDR) of 2.75 percent. When including the cost of armoring, the BCR comes out to 1.4 and 1.2 for High Performance Turf Reinforcement Matting (HPTRM) and concrete armor respectively if the entire alignment and the existing St. Charles Parish Levee were armored for resiliency.



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The 7.5 foot elevation levee would extend out from the existing St Charles Parish Levee continuing south improving the Sunset Levee and including a vehicle crossing at Bayou Gauche. Then the levee system would cross Bayou Des Allemands just south of US Highway 90 with a 270ft barge gate structure. The levee system would then parallel US Highway 90 until high ground near Raceland (natural ridge). Hydraulic control structures will be placed in the section paralleling US Highway 90 to maintain existing water exchanges.

**Other Alternatives Considered:** The Corps developed hurricane and storm damage risk reduction measures and screened them based on their ability to meet the project objectives, avoid constraints, and maximize benefits provided over the 50-year period of analysis from 2023-2073 Alternatives were further evaluated if the preliminary cost/benefits exceeded 1.0. Only two measures met threshold criteria with a cost/benefit ratio greater than 1.0. The alternative with the greatest net benefits is the apparent NED Plan, and thus the TSP.



**Project Authority & Appropriation:** This study was authorized under H.R. Docket 2554 (06 May 1998) the interest of flood control, navigation, wetlands conservation and restoration, wildlife habitat, commercial and recreational fishing, salt water intrusion and fresh water and sediment diversion, and other purposes, in the area between Bayou Lafourche and the Mississippi River System, from Donaldsonville, Louisiana, to the Gulf of Mexico. Funding through Bipartisan Budget Act 2018 limits study to flood and storm damage risk reduction measures.

**Project Sponsor:** Coastal Protection and Restoration Authority Board (CPRAB) of Louisiana is the non-federal sponsor. The Corps has, and will continue to, coordinate with the CPRAB throughout the Study. The CPRAB supports the tentatively selected plan, but final approval and letters of support are subsequent to concurrent review of the draft report.

**Next Steps:** Concurrent review of this Study includes public, technical, legal, and policy reviews, as well as an Independent External Peer Review. The Corps will consider the evaluation of the significant comments on the tentatively selected plan and other alternatives to determine the endorsement of a recommended plan and proposed way forward to complete feasibility-level design and the final report.

## Send your comments on the Draft Report by January 13<sup>st</sup>, 2020!

**Email:** UpperBaratariaFS@usace.army.mil

**Mail:** U.S. Army Corps of Engineers: CEMVN-PMR-C:  
7400 Leake Ave. New Orleans, Louisiana 70118-365.