Mississippi Coastal Improvements Project, Hancock, Harrison and Jackson Counties, Mississippi, Interim Report 20 July 2006



Abstract: This project includes fifteen one-time Federal assistance project elements to aid recovery of coastal Mississippi water resources infrastructure that was severely damaged by the hurricanes of 2005. Seven project elements are located in Hancock County, three in Harrison County, and five in Jackson County. These project elements include both structural and nonstructural measures. Structural measures include protecting existing seawalls from continuing erosion, building protective breakwater structures, replacing storm drainage culverts, restoring protective beach and dune systems, reconstructing damaged seawalls, re-establishing tidal exchange between the Gulf and tidal wetlands, and removing storm debris from coastal streams and canals. Nonstructural measures include removing residential structures from highly vulnerable floodplains and supporting continued evacuation planning. The hurricanes of 2005 severely taxed the resources of local governments and institutions, making it unlikely that those resources could be employed to implement these proposed recovery actions near-term without significant Federal assistance. Thus, this package of one-time Federal assistance project elements will help the people of coastal Mississippi in their recovery and aid the path to normalcy.

Each of the recommended project elements will function as a component of a larger comprehensive plan to provided hurricane storm damage reduction along coastal Mississippi. The detailed Comprehensive Plan is currently being developed. However, conceptually, the Comprehensive Plan will likely encompass proposals for both structural and non-structural hurricane and storm damage reduction features, as well as, features to restore and protect vital environmental resources. The proposed fifteen one-time Federal assistance project elements recommended in this project focus on mitigating flood damages by restoring drainage capacity in local waterways, as well as employing, on a smaller scale, the beachfront protection, wetland restoration, and floodplain evacuation concepts of the developing Comprehensive Plan. For these one-time Federal assistance project elements, non-Federal project sponsors will assume complete responsibility for the operation, maintenance, repair, replacement, and rehabilitation o the work recommended in this report. The fifteen project elements include (by coastal county, from west to east):

- Bayou Caddy Ecosystem Restoration, Hancock County, MS.
 - Hancock County Beaches Hurricane Storm Damage Reduction, Hancock County, MS.
 - Hancock County Streams Flood Damage Reduction, Hancock County, MS.
 - Jackson Marsh Ecosystem Restoration, Hancock County, MS.
 - Clermont Harbor Hurricane and Storm Damage Reduction, Hancock County, MS.
 - Downtown Bay St. Louis Hurricane and Storm Damage Reduction, Hancock County, MS.
 - Cowand Point Hurricane and Storm Damage Reduction, Hancock County, MS.
 - Long Beach Canals Flood Damage Reduction, Harrison County, MS.
 - Harrison County Beaches Hurricane Storm Damage Reduction, Harrison County, MS.
 - Courthouse Road Flood Damage Reduction and Ecosystem Restoration, Harrison Cnty, MS.

- Shearwater Bridge Hurricane Storm Damage Reduction, Jackson County, MS.
- Gautier Coastal Streams Flood Damage Reduction, Jackson County, MS.
- Pascagoula Beach Boulevard Hurricane and Storm Damage Reduction, Jackson County, MS.
- Upper Bayou Casotte Flood Damage Reduction, Jackson County, MS.
- Franklin Creek Floodway Flood Damage Reduction, Jackson County, MS.

The project elements recommended for near-term improvements for coastal Mississippi were developed within the constraints imposed by the six-month time frame cited in the Department of Defense Appropriations Act of 2006 (P.L. 109-148), dated 30 December 2005. In accordance with this act the recommended project elements were not selected based on traditional benefit-cost analysis or by maximizing net national economic development benefits. Instead, each project element was evaluated on the basis of its quantitative and qualitative contribution to the system of four accounts defined in the *Economic and Environmental Principles for Water and Related Land Resources Implementation Studies*. These four accounts include national economic development (NED), environmental quality (EQ), regional economic development (RED), and other social effects (OSE). On the basis of the assessments of probable near-term contributions to the four accounts, the each of the fifteen project elements were found to be a cost-effective improvement in accord with the directives of P.L. 109-148.

The total first cost of the fifteen project elements is estimated at \$107,700,000. All costs of the proposed project elements are allocated to ecosystem restoration, hurricane and storm damage reduction, structural flood damage reduction, or non-structural flood damage reduction. The currently estimated Federal share of the total project cost is \$70,000,000 and the non-Federal share is currently estimated as \$37,700,000. Significant monetary and non-monetary benefits as described herein would accrue from implementation of the fifteen project elements.

Report Documentation: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- CWRB Briefing Agenda
- Project Summary
- CWRB Briefing Slides
- CWRB Lessons Learned
- CWRB Meeting Record
- Comment Letters
- Documentation of Review Findings
- Signed Chief of Engineers Report
- Transmittal to OMB
- OMB Clearance
- Congressional Notification
- Finding of No Significant Impact
- Authorization

Additional Information:

South Atlantic Division

Mobile District

Mississippi Coastal Improvement Program

<u>Mississippi Coastal Improvement Program</u> Interim Report