

Record of Decision

Mississippi Coastal Improvements Program (MsCIP) Comprehensive Barrier Island Restoration Project

Hancock, Harrison, and Jackson Counties, Mississippi

U.S. Army Corps of Engineers

Mobile District

The MsCIP Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (PEIS) dated June 2009 described a Comprehensive Plan to support the long-term recovery of Hancock, Harrison, and Jackson Counties, Mississippi from the devastation caused by the hurricanes of 2005 and identified ways to increase the resiliency of the Mississippi coast for the future. The MsCIP Study was conducted under the authority of the Department of Defense Emergency Supplemental Appropriations Act of 2006 (Public Law 109-148) and was completed in June 2009. The MsCIP Comprehensive Plan was authorized by Congress in Section 7002(4) of the Water Resources Reform and Development Act of 2014.

The Supplemental Appropriations Act of 2009 (Public Law 111-32) authorized and appropriated funds for barrier island restoration and ecosystem restoration to restore historic levels of storm damage reduction to the Mississippi Gulf Coast. The PEIS recommended preparation of a tiered National Environmental Policy Act Supplemental Environmental Impact Statement (SEIS) to analyze site specific data. The MsCIP Barrier Island Restoration SEIS evaluates detailed alternatives designed to accomplish barrier island restoration as recommended by the MsCIP Comprehensive Plan and authorized by Congress.

The Comprehensive Barrier Island Restoration Plan consists of placement of up to 22 million cubic yards (mcy) of sand within the Ship Island portion of the National Park Service's (NPS) Gulf Islands National Seashore (GUIS), Mississippi unit to close Camille Cut between East and West Ship Islands and to ameliorate erosion of the southern shoreline of East Ship Island. In addition, the plan includes the restoration of the eastern shore of Cat Island using approximately 2 mcy of additional sand. A third related action is the modification of the placement plan for sands dredged during maintenance of the Pascagoula Harbor Entrance Channel to maximize the beneficial placement in the active littoral zone of Horn Island. Mobile District has implemented a Monitoring and Adaptive Management (MAM) Plan as per Section 2039 of the Water Resources Development Act of 2007 to evaluate restoration success.

The SEIS evaluates the environmental effects of specific design templates for restoration of Ship and Cat Islands and the possible use of 19 specific borrow sites within 5 geographic areas located in state waters of Mississippi (MS) and Alabama (AL) and waters of the Outer Continental Shelf. The selected alternative, Ship Island

restoration (Borrow Site Option 4) will place approximately 19 mcy of sandy material over approximately 1,500 acres of which 700 are open water below the mean high water line. This would be accomplished in five phases over an approximate 2.5-year period. The selected borrow site plan (Option 4) utilizes 18 borrow locations including: Ship Island (1.2 mcy), Horn Island Pass (3.2 mcy), Petit Bois Pass-AL (PBP-AL) (8.5 mcy), Petit Bois Pass-MS (PBP-MS) (2.0 mcy), and Petit Bois Pass-Outer Continental Shelf (PBP-OCS) (4.1 mcy). The selected borrow site plan does not involve the excavation of sand from DA 10/Sand Island. Restoration of Cat Island will take approximately 1 year and utilize approximately 2 mcy of sand over approximately 305 acres of which 140 are open water below the mean high water line. Sand would be dredged from an approximately 429-acre sand deposit in an area within Ship Island Pass east of Cat Island.

For Ship Island restoration, three additional borrow site alternatives were evaluated that included the removal of sand from the DA10/Sand Island borrow site and varying quantities from other sites. No additional borrow site alternatives were evaluated for Cat Island. The SEIS also evaluated a No-Action alternative.

The No-Action Alternative represents the future without-project conditions that would occur in the project area without comprehensive restoration of the Mississippi barrier islands. The No-Action Alternative would involve continuing erosion of the barrier islands, increasing salinity of the Mississippi Sound, and continuing degradation and loss of estuarine habitats and productive fisheries. Sand available for transport from East Ship Island would be depleted in a matter of decades, as storm and normal transport processes reduce the island to a shoal. Dog Keys Pass would become wider as East Ship Island evolves to a shoal, and natural sediment bypassing to West Ship Island would be greatly diminished. In addition, Cat Island would continue to lose land area from persistent erosion due to increased exposure to southeast waves from the Gulf.

The relative environmental effects associated with the borrow site alternatives for Ship Island restoration are similar overall, and vary according to the total number of sites and quantities of borrow material. Consistent among the three non-selected alternatives is the removal of material from DA-10/Sand Island that would result in the loss of upland and wetland island habitat supporting a variety of wildlife. In addition, the use of this borrow site would be inconsistent with NPS policy.

Ship Island Alternative 1- Borrow Site Option 1

Borrow Site Option 1 would require approximately 18.5 mcy of sand to restore Ship Island. Borrow sites include: Ship Island (1.2 mcy), DA-10/Sand Island Area 1 (5.2 mcy), and PBP-AL (12.2 mcy).

Ship Island Alternative 2- Borrow Site Option 2

Borrow Site Option 2 would require approximately 19.0 mcy of sand to restore Ship Island. Borrow sites include: Ship Island (1.2 mcy), DA-10/Sand Island Area 1 (5.1 mcy), PBP-AL (3.4 mcy), PBP-MS (2.0 mcy), PBP-OCS (4.1 mcy), and Horn Island Pass (3.2 mcy).

Ship Island Alternative 3- Borrow Site Option 3

Borrow Site Option 3 would require approximately 19.0 mcy of sand to restore Ship Island. Borrow Sites include: Ship Island (1.2 mcy), DA-10/Sand Island Area 2 (3.7 mcy), PBP-AL (4.8 mcy), PBP-MS (2.0 mcy), PBP-OCS (4.1 mcy), and Horn Island Pass (3.2 mcy).

Implementation of the Comprehensive Barrier Island Restoration Plan to restore the Mississippi barrier island system would result in both negative and beneficial impacts to placement and borrow areas and to the users of these areas. Negative impacts include the permanent loss of open water habitat at Camille Cut, East Ship Island, and Cat Island, resulting in the loss of approximately 679 acres of Gulf sturgeon critical habitat, a loss considered small due to the large amount of habitat available in the Mississippi Sound area. Construction-related short to long-term disruptions to birds and other wildlife may occur on Ship and Cat Islands. Construction may also temporarily disrupt public use of borrow and placement areas.

However, the significant long-term system-wide benefits to the ecosystem outweigh the negative impacts. Restoration of Ship and Cat Islands would provide for additional 1500 acres of nesting habitat for threatened and endangered sea turtles and overwintering critical habitat for the piping plover and red knot as well as habitat for neotropical migrants and waterfowl. Closure of Camille Cut would help to maintain the salinity regime in the Sound and the habitat conditions for Gulf sturgeon, oysters and numerous estuarine dependent fish and crustacean species that are essential for commercial and recreational fishing. In addition, barrier island restoration would help protect significant historical and cultural sites on the islands. The anticipated reduction in storm wave height would also help protect unique coastal mainland habitats and infrastructure.

Mobile District involved the public throughout the development of the MsCIP PEIS and the SEIS. A Notice of Intent to prepare the Draft SEIS was published in the Federal Register (Vol. 75, No. 203) on October 21, 2010. The Draft SEIS was made available for a 45-day public review period on March 7, 2014. Fourteen comment letters were received from Federal, State, local agencies, and other interested parties. The Final SEIS was made available for a 30-day public review period on January 22, 2016. A total of 12 comment letters were received from Federal and State agencies, and interested persons. The comments and Mobile District's responses are included in Appendix R of the Final SEIS.

I find that the Comprehensive Barrier Island Restoration Plan as described in the SEIS is consistent with all applicable statutory and regulatory requirements. I have taken into account the comments and correspondence received in response to the public coordination of the document. Based on my review, I have determined that the selected barrier island restoration alternative includes all practicable means to avoid and/or minimize environmental harm. This Record of Decision completes the National Environmental Policy Act process.

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Date

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C. David Turner
Brigadier General, U.S. Army
Commanding