

United States Department of Interior

National Park Service  
Gulf Islands National Seashore  
Gulf Breeze, FL 32563  
(850) 934-2604

FINDING OF NO SIGNIFICANT IMPACT

Proposed West Ship Island North Shore Restoration  
Mississippi Sound, Harrison County, Mississippi

The Proposed Action does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The Proposed Action will not have a significant adverse effect on the human environment. There are no unmitigated adverse effects to physical resources, water resources, natural resources, cultural resources, or other unique resources within the region. No highly uncertain or controversial impacts, unique or unknown risks, or known cumulative effects were identified.

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal actions are consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that they will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102 (2)(c) of NEPA.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:

  
\_\_\_\_\_  
Daniel R. Brown  
Superintendent  
Gulf Islands National Seashore

Date: 10/8/10

Approved:

  
\_\_\_\_\_  
David Vela  
Regional Director  
Southeast Region

Date: 10/20/10

## FINDING OF NO SIGNIFICANT IMPACT

### Proposed West Ship Island North Shore Restoration

#### **Introduction**

Public Law 111-32, *Supplemental Appropriations Act, 2009*, authorized barrier island restoration and ecosystem restoration to restore historic levels of storm damage reduction to the Mississippi Gulf Coast. The Mississippi Coastal Improvements Program (MsCIP) for Hancock, Harrison, and Jackson Counties, Mississippi Comprehensive Report and Integrated Programmatic Environmental Impact Statement, June 2009, contains a detailed description of the comprehensive barrier island restoration including the extensive restoration of West and East Ship Islands. The U.S. Army Corps of Engineers (USACE), Mobile District, in partnership with the National Park Service (NPS) and the State of Mississippi has developed a separable element of the comprehensive restoration to nourish the eroded northern shoreline of West Ship Island including the area fronting the historic Fort Massachusetts. By separating this element from the comprehensive plan the proposal will beneficially utilize suitable sandy material currently being dredged during the widening of the Gulfport Ship Channel entrance segment in addition to material being borrowed from the abandoned segment of the ship channel. Although the MsCIP program covers common objectives, the NPS and the USACE have prepared separate Finding of No Significant Impact (FONSI) decisions for each agency's actions within the context of this action.

#### **Description of the Proposed Action**

The Proposed Action includes the placement of sand along the northern shore of West Ship Island. The 77 acre placement area extends along approximately 62% of the northern shore or about 10,350 feet. About half of the placement will consist of a narrow band of sand along existing shoreline with the remaining placement filling in a concave area. Fill placement widths will range from approximately 150 feet to 550 feet. The narrow band of fill will also cover the beach area immediately north, east and west of Fort Massachusetts. Approximately 600,000 cubic yards of suitable sand will be utilized during the restoration with approximately 130,000 cubic yards coming from the ongoing widening of the Gulfport Ship Channel and approximately 480,000 cubic yards of material borrowed from the location of the old Gulfport entrance channel location. Heavy duty turbidity barriers will be installed to manage the placement of sand to avoid impacts to sensitive submerged aquatic resources. In addition, approximately 1,100 cubic yards of concrete rubble will be removed from the sandy shoreline and placed offshore to create an artificial reef.

The purpose of the Proposed Action is to supplement the eroded northern shoreline of West Ship Island with sand, which would continue the sustainability of this important barrier island system and ultimately protect Mississippi Sound and its very productive fisheries. A significant incidental benefit of the project would provide shoreline stabilization of the foundation of Fort Massachusetts located on the northern shore of West Ship Island. The current condition is undermining the historic structure and if not corrected immediately, will cause irreparable

damage to the foundation of the fort. In addition, the Proposed Action will remove concrete riprap that was placed adjacent to the foundation of the fort in the past in an effort to alleviate the erosion.

### **Description of the Alternatives**

The MsCIP Comprehensive Report and Integrated Programmatic EIS recommended placement of approximately 22 million cubic yards of sandy material within the NPS's Gulf Island National Seashore, Mississippi unit and an additional 1 – 2 million cubic yards for the restoration of Cat Island. The proposed action is an integral element of the overall barrier island restoration. Many alternatives were evaluated during the plan formulation process described in the above cited report prior to selecting the above identified alternative. The Record of Decision for the MsCIP Comprehensive Plan was signed by the Assistant Secretary of the Army for Civil Works on January 14, 2010. In order to meet the timeline associated with the beneficial use of dredged material from the ongoing widening at Gulfport Harbor, an Environmental Assessment (EA) has been tiered from the Programmatic EIS to address the environmental impacts associated with this particular element. All the information contained in the Report and Integrated Programmatic EIS are incorporated by reference. The EA considered two alternatives, No Action (the restoration of the north shore of West Ship Island would be accomplished as part of the total Ship Island restoration as originally evaluated) and the West Ship Island North Shore Restoration Alternative, as described above and in greater detail in EA.

### **Environmentally Preferred Action**

The Environmentally Preferred Action is determined by applying the criteria from Section 2.7 (D) of NPS Director's Order 12. These are the same criteria outlined in NEPA, which is guided by the Council of Environmental Quality (CEQ) regulations. CEQ regulations provide direction that "the environmentally preferable alternative is the alternative that will best promote the national environmental policy" as expressed in Section 101(b) of NEPA:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
- Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources (42 United States Code (USC) 4321-4347).

The Proposed Action will meet park purposes and national environmental policy goals by protecting important cultural resources and enhancing visitor safety. This alternative will also provide protection to historic resources.

### **The Proposed Action and Significance Criteria**

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

*Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an EIS:*

Impacts associated with the Proposed Action include long-term impacts from the project and short-term impacts from construction activities. The restoration of the island shoreline would provide a long-term, beneficial impact to historic resources through the restoration of the shoreline. Long-term, beneficial impacts to recreation, aesthetics, public health and safety, park operations, and visitor use/experience are also anticipated as a result of the Proposed Action. Adverse impacts to floodplains, the coastal zone, and wetlands will result from the Proposed Action, but mitigation proposed and the long-term benefits of protecting these resources through the island restoration are expected to outweigh the adverse affects. The Proposed Action will result in a net increase of 1.7 acres of wetlands. The Proposed Action may temporarily adversely affect special status species known to use West Ship Island during construction and would have temporary, minor adverse impacts to ecologically critical areas, submerged aquatic vegetation (SAV), and designated natural areas. The construction period may cause short-term, minor adverse impacts to noise quality, water quality, air quality, aquatic resources, water-based recreational opportunities in the immediate area, and aesthetics due to construction equipment required for sand placement. These impacts would be temporary and minor in nature and would only occur during the construction period of the project.

The No Action Alternative would cause long-term, major adverse impacts to historic resources, including the eventual and permanent loss of a historic structure and adverse changes to the cultural landscape and historic view shed. Under the No Action Alternative, the island would continue to erode from wave action and storm activity, the salinity in the Mississippi Sound could increase, leading to saltwater intrusion, increased wave action at the mainland shore, and destruction of wetlands. Increased salinity within the Mississippi Sound would adversely impact shellfish and other forms of estuarine life vital to the fisheries industry. The No Action Alternative would not affect special status species. Many benefits to the island, including public health and employee safety, visitor use/experience, and recreation would be diminished under the No Action Alternative.

***The degree to which the action affects public health and safety:***

The Proposed Action would have a long-term, negligible, beneficial impact to public health and safety. The Proposed Action would provide a safe and sustainable walking surface for the public and employees following project completion and for the foreseeable future.

***Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:***

Hurricane Katrina struck Gulf Islands National Seashore on August 28, 2005, severely damaging several features of the fort, including masonry, brick mortar, earthen roof and wooden components, such as heavy doors, shutters and other framing. Additionally, the storm surge caused significant erosion immediately adjacent to the fort, which as a result requires sand renourishment/replenishment to abate active shorelines processes from causing degradation to the currently exposed foundation of the fort. Preservation and protection of the fort is specifically cited within the Park's enabling legislation, which is considered a key component of the coastal fortification system emphasized as part of the Park's core mission. The Proposed Action would result in no adverse impacts to archaeological resources and would result in long-term, major, beneficial impacts to the fort. Therefore, the Proposed Action would have a long-term, moderate, beneficial impact to the cultural landscape.

As part of the restoration effort, 24.34 acres of wetlands will be filled. A total of 26.10 acres of restored wetlands will be created resulting in a net gain of 1.7 acres. This meets and exceeds the NPS "no-net-loss of wetlands" policy as stated in the NPS Procedural Manual #77-1. Intertidal areas that are exposed by the extreme low spring tide are considered wetlands. In addition, there will be a net benefit to wetland habitat as a result of the proposed action. The benefit will be a net increase in high quality intertidal wetland habitat. The Proposed Action would add 1.7 acres of high quality intertidal wetlands to low salt marsh habitat by filling in a portion of the island and then planting the material with saltmarsh cordgrass. Wetland loss would occur when the material revetment is placed along the shoreline, but the proposed wetland mitigation plan should offset the adverse impacts associated with the Proposed Action. Additionally, long-term, moderate, beneficial impacts associated with protecting the island and the existing intertidal wetlands from erosion and ultimate loss would occur and would far outweigh the minimal, short-term, adverse impacts to wetlands.

Long-term, minor, beneficial impacts to floodplains and long-term, minor, adverse impacts to floodplains would be anticipated due to the proposed project. The island lies within the 100-year floodplain and the total impact area for the Proposed Action is approximately 1.5 acres. Long-term, minor, beneficial impacts to floodplains would occur as a result of the project because erosion in the existing floodplain would be decreased and further loss of floodplain would be prevented. Because the Proposed Action is water-dependent, the project cannot completely avoid being situated in a floodplain due to the fort's designed function which historically relied on a close proximity to water. Impacts to the floodplain have been minimized to the greatest extent practicable.

***Whether the action threatens a violation of federal, state, or local environmental protection law:***

The Proposed Action will not violate federal, state, or local environmental protection laws.

**Impairment Statement**

The NPS has determined that implementation of the Proposed Action will not constitute an impairment to Gulf Island National Seashore's resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, the public comments received, collected data, and the professional judgment of the decision maker guided by the direction in the NPS *Management Policies, 2006*. Although the project will have some short term, minor, adverse impacts, in all cases these impacts will be the result of stabilizing West Ship Island to protect the fort. Overall, the proposed action will result in benefits to park resources and values, specifically cultural resources and the historic Fort Massachusetts.

**Potential Environmental Impacts**

The environmental impacts associated with the Proposed Action are fully described in the EA. The EA concludes that the proposed implementation of shoreline restoration would not have a significant adverse impact on the existing environment and would in fact have significant positive benefits to West Ship Island, Fort Massachusetts, and to the Mississippi Sound area.

**Coordination**

The MsCIP Comprehensive Plan and Integrated Programmatic EIS evaluated the impacts associated with the comprehensive barrier island restoration plan. These documents were fully coordinated with Federal and state agencies and public and a Record of Decision was signed on 14 January 2010. The specific impacts associated with the restoration of the north shore of West Ship Island, including the specific borrow sites, discussed in the EA was coordinated with the public for a 21 day period beginning August 12, 2010. Findings of this EA and the Clean Water Act, Section 404 (b)(1) Evaluation, determined no significant impacts would occur as a result of the West Ship Island North Shore restoration project as proposed. Additional details of coordination are provided in the EA.

**Public Involvement**

Both internal and external (public) scoping was conducted to inform various agencies and the public about the proposed West Ship Island North Shore restoration project. The EA was made available for public review. A Notice of Availability was published on August 12, 2010. The comment period for the EA extended from August 12 to September 2, 2010. No comments were received.