DEPARTMENT OF THE ARMY Mobile District, U.S. Army Corps of Engineers Post Office Box 2288 Mobile, Alabama 36628-0001

Applicant: Mississippi Department of Marine Resources Action ID: SAM-2011-00129-KMN

Date: September 7, 2011 Waterway: Mississippi Sound

ENVIRONMENTAL ASSESSMENT, 404(B)(1) ANALYSIS, STATEMENT OF FINDINGS, AND DECISION DOCUMENT

This document constitutes my Environmental Assessment, Finding of No Significant Impact, Statement of Findings, and review and compliance determination according to the 404(b)(1) guidelines for the proposed work.

This permit action is being taken under authority delegated to the Mobile District Engineer by the Secretary of the Army and the Chief of Engineers by Title 33, Code of Federal Regulations (CFR), Part 325.8, pursuant to:

- (X) Section 10 Rivers and Harbors Act.
- (X) Section 404 of the Clean Water Act.
- () Section 103 of the Marine Protection, Research and Sanctuaries Act.
- () Section 4(e) of the Outer Continental Shelf Lands Act of 1953.

Applicant: Mississippi Department of Marine Resources Action ID: SAM-2011-00129-DMY

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- 1. Applicant: Mississippi Department of Marine Resources
- 2. Application Number: SAM-2011-00129-KMN

3. Location and Environmental Setting Without the Project:

- **a. Location:** Mississippi Sound, Northeastern shore of Deer Island, Sections 1, 6, & 7, Township 8 South, Range 8 West, Latitude 30° 22' 15" N, Longitude 88° 49' 45" W, Biloxi, Harrison County, Mississippi.
- b. Environmental Setting Without the Project: The project site is located on the northeast shore of Deer Island. Deer Island is located south of Biloxi and southeast of the mouth of Back Biloxi Bay and is located in the Mississippi Sound. The City of Biloxi is located on the mainland directly north of the Island. Deer Island is comprised of its coastal maritime forest, beach/dune complex, freshwater lake, and emergent tidal marsh habitat. The uninhabited island is one of the last natural islands along the Gulf Coast. The Island provides the mainland with hurricane/storm protection by helping to dissipate wave energy prior to its reaching the shoreline of the coast. The Island also provides feeding, resting, and wintering habitat for numerous types of migratory bird species.
- c. Historical Events and Prior and On-going State and Federal Projects: Impacts from a series of hurricanes in 2005 to the island systems and mainland in and around the Mississippi Sound brought the importance of Beneficial Use (BU) projects in addition to other projects which would enhance protective measures from storm systems into the Federal, State, and Public eye. In July of 2010 the State of Mississippi passed legislation (Mississippi Code §49-27-61) which mandates that dredging projects obtaining material over 2,500 cy (cubic yards be subject for use as Beneficial Use Material as deemed acceptable by Mississippi Department of Marine Resources (MDMR). The proposed BU project would be located at Deer Island. State (MDMR) and Federal (U.S. Army Corps of Engineers; (COE) & Mississippi Coastal Improvements Program; MSCIP) projects have been proposed and or constructed on or around Deer Island.
 - 1) Master Plan for the Beneficial Use of Dredged Material for Coastal Mississippi (May 2011): The "Long-Term Comprehensive Master Plan for Beneficial Uses of Dredged Material Along Coastal Mississippi (2002)" was updated in 2011 to develop a comprehensive plan to identify areas within each coastal county where dredged material could be placed to help restore, nourish, and enhance the coastal marshes and wetlands of Mississippi. The Master Plan is broken into sections to provide an over view of the existing sediment transport system in Mississippi, the laws and regulations that provide the permitting structure to be followed to establish beneficial use sites, options for dredging technologies, and potential BU projects and stakeholders. The original 2002 Master Plan was prepared for the COE and was approved by MDMR. The MDMR has been working with federal, state, and private partners for nearly a decade to promote the use of dredged material and concrete rubble for coastal land and habitat restoration.

- 2) U.S. Army Corps of Engineers, Mississippi Coastal Improvements Program (MSCIP):
 - COE 204 Site Deer Island: The site was first established in 2002 by the a) COE for the Biloxi Harbor Navigation Project. In 2009 the project was handed over to MDMR for management purposes. MDMR received a Department of the Army (DA) 404 permit (SAM-2008-01990-JBM) for the repair and reestablishment of the marsh system which was adversely impacted by tropical storms Ivan (September 2004) and Katrina (August 2005). The project site is currently referred to by MDMR as Deer Island Marsh Restoration One (DIMR1). The publication, "Section 204 Ecosystem Restoration Project for Marsh Re-establishment Project in Mississippi" was incorporated in this document as baseline material and to further assist in the assessment of potential environmental impacts at the proposed project site, outlined in Section 10 of this document. The proposed project site, Deer Island Marsh Restoration Two (DIMR2), is located immediately adjacent to DIMR1; therefore existing conditions (i.e. Affected Environment) are similar. Additional information related to impacts associated with the DIMR1 is also outlined in the enclosed material.
 - b) COE Southern Shore Restoration Deer Island: In August 2007, an Environmental Assessment (EA) was completed for the restoration of Deer Island. Projects reviewed in the EA were for restoration of the breach of Deer Island, Grand Bayou marsh restoration, and the overall restoration of Deer Island back to its historic 1850's shoreline. The Southern Shoreline Restoration project was completed in Spring 2011 and currently the COE is reviewing potential use of the area between the constructed Southern Shoreline and the previously existing southern shoreline. Once these projects are approved and or completed they could potentially be handed over to MDMR. If this project site is handed over to MDMR the designation would be Deer Island Marsh Restoration Three (DIMR3).

4. Project Description, Changes to Project:

a. Project Description: The applicant, the Mississippi Department of Marine Resources (MDMR) is proposing to create a 50 acre site on the northeastern shore of Deer Island as a Beneficial Use Site. The site would be referred to as DIMR2, and would be located adjacent and immediately to the west side of DIMR1. The proposed project would create approximately 40 acres of salt marsh and approximately 5 acres of a Chenier (upland ridge) along the southern boundary of the site. The applicant proposes to construct a 3,200 foot long dike (approximate 5 acres) along the proposed northern boarder of the site which would run parallel to the north shore of Deer Island. Upon completion, the site would be able to contain approximately 400,000 cubic yards of dredged material.

The proposed dike would be mechanically constructed from borrow areas within the site. It

would be raised to an elevation of between +4 to +7 feet, Mean Lower Low Water (MLLW). The area encompassed by the new dike would be located in shallow water, mostly above – 2 feet MLLW, currently composed of sandy material. It would be constructed to run parallel to the north shore of Deer Island. The western end of the dike would be constructed to either curve to the southwest and continue for approximately 600 feet to reattach to Deer Island; or end in open water and not rejoin Deer Island. Wave protection at the western end would probably not be required and leaving it open could improve flushing and allow the interior marsh to interact ecologically with the surrounding environment.

The Chenier would be constructed on the current southern portion of Deer Island as suitable materials become available from area dredging projects. The ultimate dimensions of the Chenier would depend upon the availability of materials suitable for its construction.

The exterior of the dike would be constructed at a 1:5 slope to mimic the natural slope at the existing site. The interior area would be managed by mechanical equipment to ensure elevations are consistent with marsh establishment. The new marsh areas would be allowed to vegetate naturally as the dredged material consolidates to marsh elevations but may also be augmented by plantings as resources become available and specific needs related to habitat or erosional stablitiy are recognized. The Chenier area would receive plantings, particularly of live oaks to help anchor and stabilize the feature as well as provide additional habitat value.

Dredging permits are currently subject to Mississippi Code §49-27-61 which requires beneficial use of the dredged material. The proposed project would provide a location for placement of dredged material deemed suitable by the MDMR for Beneficial Use.

b. Changes to Project: The applicant has proposed to place the BU material into the proposed marsh portion of the site using mound creation when suitable material is available. Use of mound formation increases the diversity of habitat located in within the marsh system. Mound construction involves the placement of material in a series of mounds to designated elevations, leaving lower elevations in between the mounds with the objective to maintain tidal flow throughout the project footprint during and after placement. The material placed in the containment area for construction of the mounds is done by pumping the material into the site. Typically, the mounds are achieved by moving the end of the dredge pipe periodically. The degree, size and placement of mounding is managed adaptively based upon the consistency and character of the incoming material. The applicant has also proposed to maintain flow from the marsh restoration site (DIMR1) on the eastern boarder of the proposed site (DIMR2). Flow through both marsh restoration systems will be part of the overall maintenance plan.

5. Project Purpose and Need: The overall project purpose is to restore approximately 40 acres of tidal marsh habitat.

a. Basic project purpose: The basic project purpose is used as a basis for determining water dependency. For this action, the basic project purpose is to restore marsh habitat along a portion of the northeastern shore of Deer Island; therefore, the project is considered water dependent.

- **b.** Overall project purpose: The overall project purpose is used as a basis for assessing the practicable alternatives for the proposal. For this action, the overall project purpose is to restore a marsh system and surrounding uplands in and around 5 acres, the northern extent to be the footprint of the 3,200 foot long dike moving southward to the existing northern shore of Deer Island. Marsh restoration at this site will help re-establish fisheries habitat and allow continued protection of the original core of Deer Island. Continued protection of the Island would allow it to persist as a storm surge buffer for the mainland located to the north.
- **6.** <u>Scope of Analysis:</u> In accordance with the National Environmental Policy Act (NEPA) 40 CFR, Part 1508.25 and 33 CFR, Part 325, several evaluation factors are to be considered when determining the project scope of analysis.

a. NEPA:

- (1) Factors: The NEPA scope of analysis factors include "(a) whether or not the regulated activity comprises "merely a link" in a corridor type project; (b) whether these are aspects of the upland facility in the immediate vicinity of the regulated activity which affects the location and configuration of the regulated activity; (c) the extent to which the entire project will be within the COE jurisdiction; and (d) the extent of cumulative Federal control and responsibility." A DA permit is required for work associated with the stabilization around Fort Massachusetts and the required channel dredging associated with the work. Obtaining DA authorization for this work is needed for the overall project. But for issuance of the required DA permit, the project could not be constructed at this site. Because of the determination by the COE that waters of the U.S. exist onsite, and the proposed action would be subject to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, the project could not proceed without a DA permit.
- (2) Determined Scope: The regulated activity has been determined to be the 5 acres in and around the northern extent to be the footprint of the 3,200 foot long dike moving southward to the existing northern shore of Deer Island.

b. National Historic Preservation Act (NHPA) and Appendix C Also, in accordance with 33 CFR Part 325 Appendix C and supplemental guidance for the "Permit Area"

- (1) Tests: "Activities outside the waters are or are not included because all of the following test are or are not satisfied: (a) Such activity would or would not occur but for the authorization of the work or structures within the waters of the U.S.; (b) such activity is or is not integrally related to work or structures to be authorized within waters of the U.S. (or, conversely, the work or structures to be authorized must be essential to the completeness of the overall project or program); and (c) such activity is or is not associated (first order impact) with the work or structures to be authorized."
- (2) Determined Scope: Having considered the development footprint and the jurisdictional areas as determined by the COE in accordance with the permit area test, the regulated activity has been determined to be the 5 acres in and around the northern extent to be the footprint of the 3,200 foot long dike moving southward to the existing northern shore of Deer Island.

c. Endangered Species Act "Action Area":

- (1) Action Area: Action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.
- (2) Determined Scope: The 5 acres in and around the northern extent to be the footprint of the 3,200 foot long dike moving southward to the existing northern shore of Deer Island.

Scope of Analysis Summary: Because of the project proposed impacts to waters of the U.S in accordance with Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, the evaluation of the project in accordance with Section 106 of the NHPA permit area test, and the action area regulated by Section 7 of the ESA; therefore there is sufficient Federal control to extend the scope of analysis for the public interest review to include the 5 acres in and around the northern extent to be the footprint of the 3,200 foot long dike moving southward to the existing northern shore of Deer Island.

7. Federal, State, and Other Authorizations Obtained or Required Pending:

- **a. State 401 water quality certification (401):** The Mississippi Department of Environmental Quality (MDEQ) issued 401 water quality certification, dated August 5, 2011 (WQC2011004).
- **b.** Coastal Zone Management (CZM) Consistency Determination: The Mississippi Department of Marine Resources (MDMR) has determined the activity to be consistent to the maximum extent practicable with the Mississippi Coastal Program in letter dated April 21, 2011 (DMR-090302).
- c. Mississippi Department of Archives and History (MDAH): The proposed project was reviewed by the MDAH State Historical Preservation Office (SHPO) in accordance with responsibilities under Section 106 of the NHPA and 36 CFR, Part 800 (MDAH Project Log #02-022-11). In a letter dated May 3, 2011, MDAH stated that they had attended a site visit (April 5, 2011) with George Ramseur to address concerns regarding an archeological site located near the proposed project. They stated that the project will not impact the known archeological site and will most likely protect the archeological site from further erosion. The COE Archeologist was provided the project information and MDAH's written correspondence. The COE Archeologist stated that he concurs with MDAH's recommendation that the permitted activity should not impact cultural resources listed on or eligible for listing on the National Register of Historic Places.
- **8.** Application and Public Notice History: The COE received the initial application on February 4, 2011. The permit application was determined to be complete following a request for additional information on February 22, 2011. The proposed project was advertised by a 30 day public notice SAM-2011-00129-KMN, dated February 28, 2011.
- 9. Alternatives [33 CFR 320.4(b)(4), 40 CFR 230.10]: No discharge shall be permitted if there

is a practicable alternative which would have less adverse impact on the aquatic ecosystem. If an activity associated with a discharge which is proposed for a special aquatic site does not require access or proximity to, or sitting within the special aquatic site in question to fulfill its basic purpose (i.e., is not water-dependent), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise.

"Water dependency" is determined on the basis of the basic project purpose. As discussed in Section 5 above, this proposed marsh restoration is "water dependent". When the EA confirms that the impact of the applicant's proposal is not significant and there are no "unresolved conflicts concerning alternative uses of available resources * * *" (section 102(2)(E) of NEPA), and the proposed activity is a "water dependent" activity as defined in 40 CFR 230.10(a)(3), the EA need not include a discussion on alternatives (33CFR325 Appendix B, Section 7.0(a)).

Steps taken to avoid and minimize impacts are as follows:

- **a.** Avoidance and use of other sites: The stated purpose of the project is to provide marsh restoration to a 5 acre portion of Deer Island. Placement of fill material in any other location would not meet this stated purpose and need. This is a project specific location and no other location alternatives exist. Avoidance would be in the form of "no action" or denial of the DA permit. To do so would allow the continued erosion along a 3,200 linear foot area located along a northeastern portion of the shoreline. Continued erosion could result in the continued degradation of the beach ecosystem and possible lack of suitable fish and wildlife habitats which could adversely impact numerous federally protected species. Loss of the Island system also reduces its function as a wave break and storm surge buffer for the mainland.
- b. Impacts Associated with Project as Proposed: The work to be performed would restore the marsh system adjacent to and north of the shoreline to what was found at the site prior to 2004. The proposed project site is currently open-water habitat. Project construction would convert an open-water habitat to a marsh habitat which would be surrounded by upland areas. Material to construct the containment dike would be dredged from the area located between the proposed dike and the existing shoreline. Material to construct the Chenier and marsh systems would be obtained from approved dredge sites.
- c. Minimization of impacts: 40 CFR part 230.10 (d) states that "no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." The work would be performed using Best Management Practices and would be conditioned in such a manner as to provide for a decrease in impacts to waters of the U.S. or other aquatic resources. The recommended conditions are reasonably enforceable and would afford appropriate and practicable environmental protection. Also, it appears that the applicant has taken all practicable steps to minimize the impacts associated with the proposed work. Therefore, the COE has determined that the proposed project demonstrates meaningful avoidance and minimization of impacts to aquatic resources.

10. Environmental Impact of the Proposed Action and Public Interest Review (33 CFR

320.4(a - s)

- **a. Public Interest Review**: A public notice was issued for this project to seek public comment relative to the following factors concerning this proposal: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and in general, the needs and welfare of the people. A summary of the comments received and COE response is presented in Section 13 of this document. Full consideration has been given to all comments, including those of federal, state, and local agencies, and other experts on matters within their own expertise.
- **b.** Wetland/Stream Impacts: The proposed activity will not impact wetlands, streams, or submerged aquatic vegetation. Construction of the site and restoration of marsh habitat through mound construction should contribute to the establishment of submerged aquatic vegetation at the site. Construction using mound technology should also allow lower elevations in between the mounds maintaining tidal flow throughout the project footprint during and after placement.

c. Fish and wildlife concerns:

Construction activities could impact non-mobile bottom dwelling organisms. More mobile organisms such as fish, shrimp, and crabs should be able to avoid the fill area and the excavation area and should return to the site after marsh and shallow water habitat is created. The excavation may have short-term negative effects on the Essential Fish Habitat (EFH) for commonly occurring federally managed species, including but not limited to brown shrimp, white shrimp, pink shrimp, and red drum; however, once the excavation is complete this area should recover. The benthic organisms should repopulate the area after excavation and studies indicate that this repopulation occurs within 6 weeks. Based on recent information in the area of the Mississippi Sound, the National Marine Fisheries Service, Protected Resources Division (NMFS-PRD) evaluated the project impacts on Gulf sturgeon, and sea turtles (leatherback, Kemp's ridley, hawksbill, green, and loggerhead). NMFS-PRD analyzed the routes of potential effects from the proposed project and determined that listed sea turtles and Gulf Sturgeon are not likely to be adversely affected. Effects on sea turtles and Gulf sturgeon include the risk of injury from construction activities, which should be discountable due to the specie's mobility and the implementation of NMFS' Sea Turtle and Small tooth Sawfish Construction Conditions.

It is anticipated that any shore and wading birds such as herons, gulls, and skimmers may be attracted to the excavation area, where they may feed on small benthic organisms that may be suspended during the excavation operations. These birds may also feed on benthic organisms in the excavated material. There will be some minor impacts to Critical Habitat for the Piping Plover, however, the Piping Plover, like the other shore and wading birds, will simply relocate to another area of the beach until the work is complete. The U. S. Fish and Wildlife Service (USFWS) evaluated the projects impacts on the Piping Plover and other shore and wading birds. USFWS stated that care should be taken to avoid impacts to nesting shore birds within proximity of any planned work. They recommended having the area where the containment dike will meet the existing shore line surveyed for shorebird nesting sites just prior to construction.

Fish and other aquatic species could possibly be affected by short term impacts during the construction phase of the proposed project. Construction activities could impact water quality; however, implementation and proper maintenance of effective BMPs during construction would help to reduce potential impacts from these activities. Adherence to the special conditions containing the state water quality certification, USFWS request to avoid impacting shore bird nesting habitat, and NMFS request to follow their Sea Turtle and Small tooth Sawfish Construction Conditions, should ensure the project as proposed does not have a significant impact on fish and wildlife.

- **d. Water quality:** The project has been fully coordinated with MDEQ concerning potential effects that the proposed work may have on water quality. No significant adverse impacts to water quality are anticipated to result from the proposed work. During construction activities, erosion control and other best management practices will be required to minimize impacts to water quality. MDEQ issued 401 water quality certification indicating that the proposed work, with implementation of the required conditions, will not violate the water quality standards of Mississippi. This certification is considered conclusive in the COE evaluation regarding water quality aspects (33 CFR 320.4(d)) and impacts to water quality should not be significant.
- **e.** Air Quality: The proposed marsh restoration project activities are expected to add equipment exhaust emissions to the project area during construction, but this would not result in any permanent changes to the air quality of the area. The project area is within a National Ambient Air Quality Standards attainment area and therefore a conformity analysis pursuant to Section 176(c) of the Clean Air Act is not required.
- f. Historic, cultural, scenic and recreational values: The proposed project was coordinated with the MDAH, Advisory Council on Historic Preservation (ACHP) and Tribal Officers during the public notice dated February 28 2011, and the 30-day comment period. A final determination under Section 106 of the NHPA and COE regulatory requirements is granted given the knowledge and history in conjunction with the approval from the MDAH for the activities associated with the project upon final approval of this document. Impacts to historical and cultural resources as a result of this project should not be significant.
- **g.** Effects on limits of the territorial sea: There should be no effect on the limits of the territorial sea.
- h. Consideration of property ownership/shoreline erosion and accretion: The DA permit does not convey any property rights, or any exclusive privileges, and does not authorize any injury to property or obviate the requirements to obtain other local, state, or Federal authorization required by law. The stated purpose of the proposed work is to restore a previously existing marsh habitat.

- i. Activities affecting coastal zones: The MDMR has determined the activity to be consistent to the maximum extent practicable with the Mississippi Coastal Program in letter dated April 12, 2011 (DMR-090302).
 - j. Activities in marine sanctuaries: The proposed project does not affect marine sanctuaries.
- **k.** Other Federal, State or local requirements: Issuance of a DA permit does not obviate the permittee from other necessary Federal, State or local requirements. The applicant is responsible for contacting the community's designated responsible officials to obtain necessary permits and to ensure all floodplain ordinances and safety precautions in effect for this area are met.
- **l. Safety of impoundment structures**: No impoundment is associated within this proposed project.
- m. Floodplain management: The project is located in a flood hazard zone. The proposed project does not contain buildings or structures. The proposed project is the restoration of marsh and upland systems along an Island located in the Mississippi Sound.
- **n.** Water supply and conservation: There should be no or minimal effect on water supply and conservation.
 - o. Energy conservation and development: Not applicable
- **p. Navigation:** The project will not impact any federal navigational channels. The public notice was provided to the U.S. Coast Guard (USCG) and COE Navigation Division. No concerns regarding navigation were brought forth from either of these agencies. The applicant would be required to notify the USCG 60 days prior to project construction in order that they can alert maritime traffic to the pending work at the Island.
- **q. Environmental benefits:** The direct environmental benefits associated with this project relate to the use of dredged material for marsh restoration. The proposed work would provide stability and protection for Deer Island. Indirect long-term environmental benefits associated with the proposed work include the restoration marsh habitat and the species it supports.
 - **r. Economics:** The proposed project is expected to create construction jobs for the local area.
- s. Noise / Traffic: The project location is an island located in the Mississippi Sound, south of the City of Biloxi. Noise levels in the vicinity would be temporarily increased by construction equipment in the area. These increases would be short term and the overall noise level would return to normal following construction. No long term adverse impacts are anticipated.
 - t. Mitigation: Compensatory mitigation is not required for the proposed work.

11. Cumulative and Secondary Impacts:

a. Cumulative Impacts: Cumulative impacts are defined as the "impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Consideration must be given to the changes in the aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material that may be associated with this action. This section discusses the reasonably foreseeable cumulative impacts to the aquatic environment that will likely occur due to other projects directly related to the proposed dredging and marsh restoration.

The project as proposed is not expected to have significant cumulative adverse impacts on the aquatic ecosystem. Future projects requesting use of this project site for disposal of dredged material would be required to obtain a DA permit for placement of the material into the project site. Prior to placement, the dredged material would be tested using protocol approved by the MDMR and MDEQ. Testing results would be used to determine the suitability of the material by MDMR and MDEQ.

If the applicant adheres to the proposed Best Management Practices (BMP) plan and required compliance with the MDEQ certification, impacts should result in insignificant declines in water quality and altered hydrology. The potential adverse environmental impacts associated with the proposed action are minor. In general, the proposed marsh restoration operations would have no significant adverse cumulative effects.

Based on the above discussion of the minor impacts, which would result from the implementation of the proposed project, and due to the lack of long term adverse impacts, it is our belief that no significant cumulative impacts as a result of the marsh restoration activities and the dredging activities would occur.

- b. Secondary Effects to the aquatic ecosystem: Secondary effects to the aquatic ecosystem are those effects that are associated with, but do not directly result from the actual placement of the fill material. The potential secondary effects to the aquatic ecosystem caused by the regulated activities are not expected to be significant. These relate primarily to potential changes in water quality and aquatic habitat fragmentation and disturbance. Erosion and sediment control features and on-site mitigation measures would be used to minimize these impacts. These impacts have been further addressed in Section 11 above. Additionally, the MDEQ also issued Clean Water Act Section 401 water quality certification, stating that the proposed work, with implementation of the required conditions, would not violate the water quality standards of Mississippi.
- c. Secondary Effects to the human environment: The proposed project would have minimal negative impact on the human environment. The work would create some employment opportunities for construction related employees. The marsh restoration activities along a portion of Deer Island should enhance the human environment by improving fisheries habitat and improving storm surge protection for the mainland. The secondary impacts of the proposed project have been determined to be minor and should not have a significant impact on the human environment.

- 12. <u>Public Notice Comments, Responses, and COE Analysis of Comments and Responses:</u> The project was advertised by a 30-day public notice dated February 28 2010. Responses and agency coordination resulting from this notice are summarized as follows:
 - a. EPA: No comments received.
- **b.** United States Fish and Wildlife Service (FWS): In an phone conversation with Paul Niecase of FWS on August 15, 2011, Mr. Niecase stated that FWS has no objection to the issuance the permit as outlined in the public notice. However, care should be taken to avoid impacts to nesting shore birds within proximity of any planned work. He recommended having the area where the containment dike will meet the existing shore line surveyed for shorebird nesting sites just prior to construction.

COE RECOMMENDATION AND CONCLUSION: The COE concurs with FWS request for survey of shorebird nesting sites and will incorporate the request as a condition of the permit.

c. National Marine Fisheries Service (NMFS) Habitat Conservation Division (NMFS-HCD): In a letter dated March 23, 2011, NMFS-HCD requested the applicant compile a plan to address construction methods, marsh establishment procedures, hydrology, performance standards, monitoring, management, maintenance, and a time table that would assure project success. In a letter dated April 20, 2011, the applicant provided a response to NMFS-HCD addressing the above listed concerns. In an e-mail dated April 28, 2011, NMFS-HCD stated that all of their concerns had not been addressed. A site visit was held with NMFS-HDC on June 7, 2011, and a follow up meeting on June 8, 2011, to discuss issues regarding the proposed project. In a letter dated June, 24, 2011, the applicant provided additional information to NMFS-HDC regarding proposed measures to maintain tidal flow through the site. Discussions also included how long-term renourshment plans would assist in providing additional sediment into the littoral system and assist in stabilizing the original core of the island, while providing ephemeral marsh and coastal habitat. In an e-mail dated August 4, 2011, NMFS-HCD stated that while they have concerns regarding the proposed project, which include issues regarding stabilization of the dredged material at the site, they recognize that this will be MDMR's first of many beneficial use projects of this nature, and with the lessons learned from the COE 204 site, has no further objections to permit issuance. In a phone conversation on August 11, 2011, NMFS-HCD requested to have the permit conditioned, requiring the applicant to provided regular monitoring reports to the Mississippi Beneficial Use Team, for discussion and lessons learned for management of the DIMR2 site and future Beneficial Use sites.

COE RECOMMENDATION AND CONCLUSION: The COE concurs with NMFS request for monitoring reports during the life of the permit and will incorporate the request as a condition of the permit.

d. NMFS-PRD: In an e-mail dated March 22, 2011, NMFS-PRD requested additional information regarding the proposed project. In a letter dated April 20, 2011, the applicant provided a response to NMFS-PRD addressing their questions and concerns. In a letter dated August 3, 2011, NMFS-PRD provided an Informal Consultation Letter (F/SER31:RGH) containing

mandatory terms and conditions to implement reasonable and prudent measures to be associated with the proposed project. NMFS-PRD analyzed the routes of potential effects from the proposed project and determined that listed sea turtles and Gulf Sturgeon are not likely to be adversely affected. Effect on sea turtles and Gulf sturgeon include the risk of injury form construction activities, which should be discountable due to the specie's mobility and the implementation of NMFS' Sea Turtle and Small tooth Sawfish Construction Conditions. The consultation also addressed potential for takes of an endangered species, in particular the Gulf sturgeon, and sea turtles (leatherback, Kemp's ridley, hawksbill, green, and loggerhead). Taking of a species by action of the proposed project would not be allowed and if a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action reinitiation of consultation with NMFS-PRD must take place.

COE RECOMMENDATION AND CONCLUSION: The COE concurs with NMFS-PRD request for notification and reinitiation of takes and for adherence with supplied conditions and reasonable and prudent measures and will incorporate the request as a condition of the permit.

e. United State Coast Guard (USCG): No comments received.

COE RECOMMENDATION AND CONCLUSION: The permit will be conditioned to require notification of the USCG 60 days prior to initiation of construction of the containment dike in order that proper notice to the maritime community.

f. MDAH: On April 5, 2011, MDAH and MDMR employees held a site visit to review the proposed project in relation to a known archeological site. In a letter dated May 3, 2011, (MDAH Project Log #02-022-11) MDAH provided a letter stating that they have determined that the proposed project would not impact the listed site and would most likely protect the listed site from further erosion. In an email dated May 4, 2011, COE Archeologist concurred with MDAH findings and stated the project should not impact cultural resources listed on or eligible for listing on the National Register of Historic Places.

COE RECOMMENDATION AND CONCLUSION: The COE has determined that the Section 106 process of the NHPA coordination and consultation has been met. There should be no impacts to any cultural resources as a result of the project.

g. MDEQ: The MDEQ issued a Water Quality Certification on August 5, 2011 (WQC No. WQC2011004).

COE RECOMMENDATION AND CONCLUSION: All terms and conditions of the WQC shall become part of COE permit conditions. No further coordination is needed.

h. Mississippi Secretary of State's Office: The MSOS stated that public trust status and ownership would not be affected by the project, and that in fact inclusion of this site, which is currently open waters, within Coastal Preserves would enhance its conservation status.

COE RECOMMENDATION AND CONCLUSION: No further coordination is required.

i. MDMR: The MDMR reviewed the project and issued a Federal Consistency statement and a permit under the provisions of the Mississippi Coastal Wetlands Protection Law (DMR-090302) by letter dated April 21, 2011.

COE RECOMMENDATION AND CONCLUSION: No further coordination is required.

j. Mississippi Department of Wildlife Fisheries and Parks (MDWFP): The MDWFP responded to the public notice by letter dated March 17, 2011. The MDWFP stated that as long as proper best management practices (BMP's) were implemented, there should be no impact to any known state listed species.

COE RECOMMENDATION AND CONCLUSION: No further coordination is required.

13. <u>Public Hearing</u>: Federal Guidelines at 33 CFR 327.4 state that a public hearing will be held whenever the hearing will assist in making a decision on such application. In response to the public notice on this project, no requests for a public hearing were received. In accordance with the general policies of 33 CFR 327.4, the need for a public hearing has been evaluated in order to complete the public interest review and reach a decision upon the application. This Guideline states a public hearing will be held whenever the hearing will assist in making a decision on such application. It has been concluded a public hearing would not provide any additional information which would assist in making a final decision in this request for a permit. Therefore, a public hearing will not be required for this project.

14. Consideration of Special Acts or Executive Orders (EO) Not Already Addressed:

a. Environment:

- 1. Section 176(c) of the Clean Air Act General Conformity Rule Review: The project site is located within a National Ambient Air Quality Standards attainment area and therefore does not require a conformity analysis pursuant to Section 176(c) of the Clean Air Act.
- 2. Executive Order (EO) 11900 Protection of Wetlands (1977): The purpose of this Executive Order is to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. The evaluation of the proposed project, taking into account economic, environmental and other pertinent factors, indicate that (1) there is no practicable alternative to the proposed project, and that (2) the proposed action includes all practicable measures to minimize harm to wetlands, therefore this action is in compliance with that order.
- 3. EO 13158 Marine Protected Areas (2000): The purpose of this EO is to help protect the significant natural and cultural resources within the marine environment for the benefit of

present and future generations by strengthening and expanding the Nation's system of marine protected areas. The project as proposed will have a direct impact on the marine environment. The project will provide additional marsh habitat to the marine environment improving fisheries habitat and reducing erosion at the site. The project will also assist in adding protection for an existing cultural resources site.

- 4. EO 12898 Environmental Justice: This EO directs each federal agency to "...make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States." A review of the project indicates that there should be no significant adverse impact on the environment or human health conditions of the region and that there would be no disproportionate adverse impacts on minority or low-income populations.
- 5. EO 13045 Protection of Children: This EO requires that "consistent with the agency's mission, each Federal agency: (1) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (2) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." This EO defines "environmental health risks and safety risks" to mean risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to. The project as currently proposed should not cause any environmental health risks or safety risks that would disproportionately affect children and is therefore in compliance with the Executive Order.
- 6. EO 11988 Floodplain Management: In accordance with the EO and 33 CFR 320.4(1) floodplains pose significant natural values and carry out numerous functions important to the public interest. These include water resource values, living resource values, cultural resources values and cultivated resource values. In accordance with Executive Order 11988, the COE should avoid authorizing floodplain development whenever practicable alternatives exist outside the floodplain. If there are no such practicable alternatives, the COE shall consider, as a means of mitigation, alternatives within the floodplain which will lessen any significant adverse impact to the floodplain. The project does not include development to be located in a floodplain. The project includes restoration of a marsh system in the floodplain. Additional information can be found in Sections 8, 10, 11, and 13 of this document. This project as proposed will not affect any floodplains and is considered consistent with the EO.
- 7. EO 13112 Invasive Species: This EO requires federal agencies to "prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause." There were no invasive species involved. The evaluation above included invasive species concerns in the analysis of impacts at the project site and associated compensatory mitigation project. If needed and through the use of special conditions, the permittee would be required to control the introduction and spread of toxic species. The project has been properly coordinated with both the federal and state

regulating agencies as noted above. This project as proposed should not cause an introduction of invasive species into the surrounding ecosystem and is considered consistent with the EO.

8. EO 13212 and 13302 - Energy Supply and Availability: This EO requires "for energy-related projects, agencies will expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections." The project is not identified as an energy related project and is not one that is considered to increase the production, transmission, or conservation of energy, or strengthen pipeline safety. All energy related projects evaluated by the COE are expedited and/or other actions are taken to the extent permitted by law and regulation to accelerate completion of energy related (including pipeline safety) projects while maintaining safety, public health, and environmental protections. The project as proposed is considered consistent with the EO.

b. Other

- 1. EO 13175 Consultation and Coordination with the Tribal Indian Governments: The purpose of this Executive Order is to coordinate new construction with Indian Tribal Governments. This proposed work has been fully coordinated with Tribal Officials during the initial public notice. No Tribal Officials commented on the project. Additional information can be found in Sections 8 and 13. In the event, if any items falling under Native American Graves and Repatriation Act (NAGPRA) are discovered during construction, the appropriate measures will be implemented as per the requirements of the federal and state regulations.
- 15. Evaluation of the 404(b)(1) Guidelines: The following relates only to the direct impacts associated with the placement of fill material into waters of the U.S.

a. Factual determinations:

- (1) Physical substrate: The proposed project will not change the physical substrate at the subject site. The material dredged from approved sites would be similar in composition to the material lost from Deer Island due to erosion.
- (2) Water circulation, fluctuation, and salinity: Flow patterns and circulation are not likely to be changed in the Mississippi Sound, and the proposed project is not considered to have significant effect on the drainage patterns or flow regimes outside the project area.
- (3) Suspended particulate/turbidity: Turbidity levels in waters near the fill site are expected to rise during the construction phase. These impacts will be temporary and minimized by the use of BMPs.
- (4) Contaminant availability: All material used as fill in waters of the U.S. will be clean and free of contaminants, so there should be no effect.

- (5) Aquatic ecosystem effects: Aquatic functions will be lost in the areas filled. However, rapid re-colonization is expected to occur to offset the adverse effect to overall aquatic ecosystem.
- (6) Proposed disposal site: All dredged material would be placed as fill material for the proposed work.
- (7) Cumulative effects: No action would occur that would require mitigation. Cumulative effects of the proposed activity should be of a positive nature to the effected environment.
- (8) Secondary effects: No negative secondary effects to the aquatic environment are anticipated as a result of the fill placement.

b. Restrictions on discharges:

- (1) Alternatives (See Section 10):
 - (a) The activity is located in a special aquatic site.
 - (b) The activity does need to be located in a special aquatic site to fulfill its basic purpose.
 - (c) All practicable alternatives have been reviewed in Section 10 above. It has been adequately demonstrated that the practicable alternative with the fewest impacts on the aquatic ecosystem (least damaging alternative) is proposed.
 - (d) The least damaging alternative has no other significant environmental effects.
- (2) Other program requirements:
 - (a) The proposed activity does not violate applicable state water quality standards or Section 307 prohibitions or effluent standards.
 - (b) The proposed activity does not jeopardize the continued existence of federally listed threatened or endangered species, nor affect their critical habitat.
 - (c) The proposed activity does not violate the requirements of a federally designated marine sanctuary.
- (3) The activity will not cause or contribute to significant degradation of waters of the United States, including adverse effects on human health, life stages of aquatic organisms, ecosystem diversity, productivity and stability, or recreational, aesthetic, and economic values.

(4) Minimization of adverse effects:

- (a) Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.
- (b) Compensatory Mitigation (Wetland restoration, enhancement, creation, preservation, etc.): There will be impacts to fringe wetlands from the proposed activity; however, upon project completion fringe wetlands will be established at the project site.
- **16.** <u>Findings of 404(b)(1) Analysis</u>: The proposed disposal site for discharge of dredged or fill materials complies with the Section 404(b)(1) guidelines, subject to the following conditions:
- a. The permittee shall comply with all requirements of the Mississippi Department of Environmental Quality 401 Water Quality Certification (WQC2011004) dated August 5, 2011.
- b. The permittee shall comply with all requirements of the Mississippi Department of Marine Resources Coastal Zone Consistency Determination (DMR-090302) dated April 21, 2011.
- c. Should artifacts or archaeological features be encountered during project activities, all heavy equipment operations within a 35-foot buffer surrounding the potentially significant artifact(s) or the observation shall cease and the U.S. Army Corps of Engineers and the State Historic Preservation Officer shall be consulted immediately. The dredging shall be performed in coordination with MDAH to avoid adversely affecting these newly discovered sites or existing sites.
- d. Construction activities shall not infringe upon navigation on the waterway. These activities shall be in compliance with 33 CFR 163, which states in part: "A clear channel shall at all times be left open to permit free and unobstructed navigation by all types of vessels and tows normally using the various waterways."
- e. The Mobile District and the U.S. Coast Guard shall be notified before work mobilization so that a "Notice to Mariners" can be issued. The work schedule shall be submitted by telephone to both the Corps of Engineers (Corps) and the U.S. Coast Guard (USCG).

U.S. Army Corps of Engineers Telephone: (251) 690-2570 U.S. Coast Guard, Sector Mobile Telephone: (251) 441-6503

Corps Address: U.S. Army Corps of Engineers, Mobile District, OP-TN, P.O. Box 2288, Mobile, Alabama 36628

USCG Address: U.S. Coast Guard, Sector Mobile, Attention: Marine Safety Office, Brookley Complex, Building 102, Mobile, Alabama 36615-1390

f. Best management practices shall be implemented to minimize erosion, siltation and damage to adjacent wetlands and waters of the United States. Appropriate erosion and siltation control

measures must be used and maintained in effective operating condition during construction. All temporary erosion control features shall remain in place until permanent stabilization measures have been completed and have become fully effective.

- g. All excavation and fill activities shall be performed in a manner that minimizes disturbance and turbidity increases in "waters of the United States" and wetlands; and shall be retained in a manner to preclude its erosion into any adjacent wetlands or waterway.
- h. Project construction shall be conducted in such a manner the passage of normal and expected high flows of surface water runoff outside the project boundaries is not restricted or otherwise altered.
- i. The permittee shall comply with the local flood damage ordinance and the regulations of the National Flood Insurance Program. The project cannot cause ponding or flooding on adjacent properties.
- j. In the event the permit is transferred, proof of delivery of a copy of the notification of permit transfer must be provided to the Corps.
- k. It is the permittee's responsibility to ensure that the contractors working on this project are aware of all general and special permit conditions.
- l. The project site shall be monitored during and after construction. An initial site report documenting site conditions (to include photos) should be completed and submitted to this office within 30 days of issuance of the permit and prior to restoration activities. A second site report (to include photos) should be completed and submitted to this office 30 days after initial work at the project site. Annual monitoring reports (to include photos) are to be completed in the fall of each year and submitted to this office no later than January 5th of that following year. Monitoring reports are to include accomplishments, successes, and lessons learned. The monitoring reports shall be provided on a yearly basis for a period of ten years. Copies of all reports should be provided to the Mississippi Beneficial Use Group for review.
- m. The permittee shall survey the location where the western most portion of the containment dike would tie into the existing shoreline for shorebird nesting sites, just prior to construction. If shorebird nesting sites are found the permittee shall consult with U.S. Fish and Wildlife Service prior to beginning the planned work at that location to ensure the work will not result in impacts to shorebirds or their habitat.
- n. This Department of Army (DA) permit does not authorize you to take an endangered species, in particular the Piping Plover, the Gulf sturgeon, and sea turtles (leatherback, Kemp's ridley, hawksbill, green, and loggerhead). If a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action reinitiation of consultation with NMFS-PRD and/or USFWS must take place.

Therefore, within 24 hours of any of the above mentioned actions taking place you shall notify this office of the event and/or finding. The enclosed (National Marine Fisheries Service) Informal Consultation Letter (August 3, 2011, F/SER31:RGH) contains mandatory terms and conditions to implement reasonable and prudent measures that are associated with your project. Your authorization under this DA permit is conditional upon your compliance with all of the mandatory terms and conditions associated with the enclosed PSTC Access and Additional Considerations for ESA Section 7 Consultations (Revised 7-15-2009) and Sea turtle and Smalltooth Sawfish Construction Conditions. Lack of compliance with these enclosed conditions would constitute non-compliance with your DA permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of these requirements.

- o. Prior to use, the dredged material is to be evaluated using protocols approved by the MDMR and the MDEQ. The results of the evaluation are to be used to determine the suitability of the material by the MDMR and the MDEQ. Upon approval by the MDMR and the MDEQ and prior to the start of construction, the permittee shall provide a copy of the authorization to this office.
- 17: Other Mitigative Actions (i.e. additional items or conditions not considered above): On a case by case basis, additional conditions outside of the General Conditions or the above Special Conditions may apply (i.e. non-typical general or special conditions). At this time, no other conditions or evaluation factors were needed.
- **18.** <u>Public Interest Determination:</u> I find, in accordance with National policy, statutes and administrative directives, when the total adverse effects of the proposal are weighed against the benefits to the general public, issuance of the requested permit would not be contrary to the public interest.

19. CONCLUSION/FINDING OF NO SIGNIFICANT IMPACT (FONSI):

Based on this assessment, consideration of comments presented by other agencies and the public, and after weighing all factors involved, I conclude that this permit action is not a major Federal action significantly affecting the quality of the human environment. Therefore, an Environmental Impact Statement is not required.

PREPARED BY:

KAAREN M. NEUMANN

Project Manager, Coastal Mississippi

Regulatory Division

DATE:

APPROVED BY:

STEVEN J. ROEMHILDT, P.E.

Colonel, U.S. Army Corps of Engineers

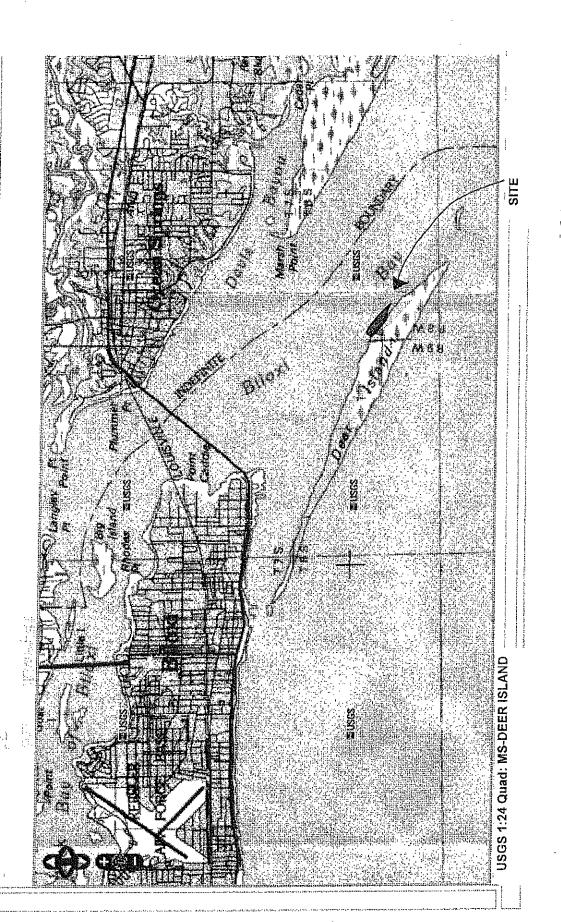
District Engineer

DAMON M. YOUNG, P.G.

Team Leader, Coastal Mississippi

Regulatory Division

DATE:



SAM-2011-00129-KMN MDMR Deer Island BUS Expansion

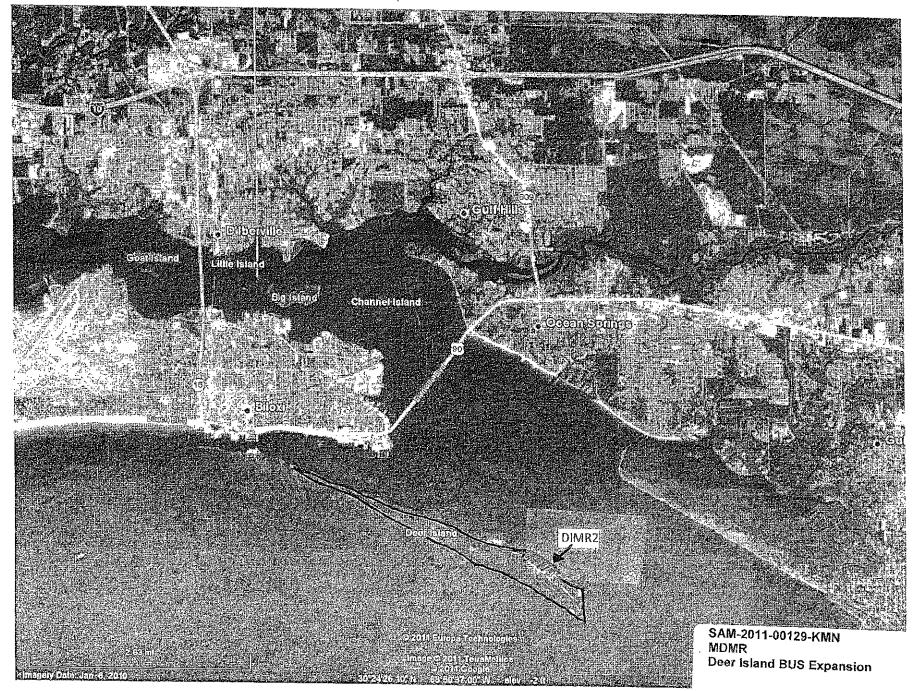


Figure 1a) Broad Scale Project Location from Google Earth

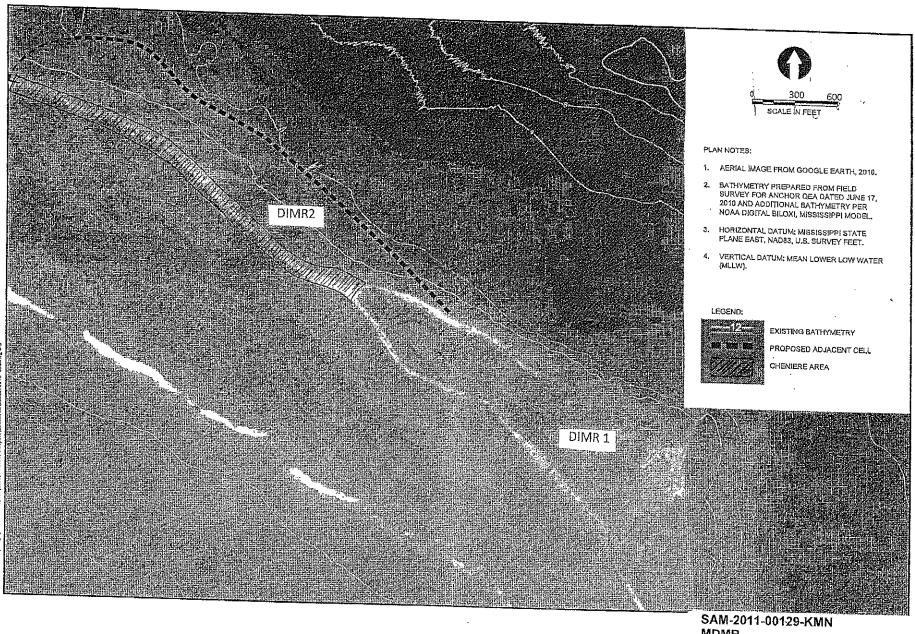
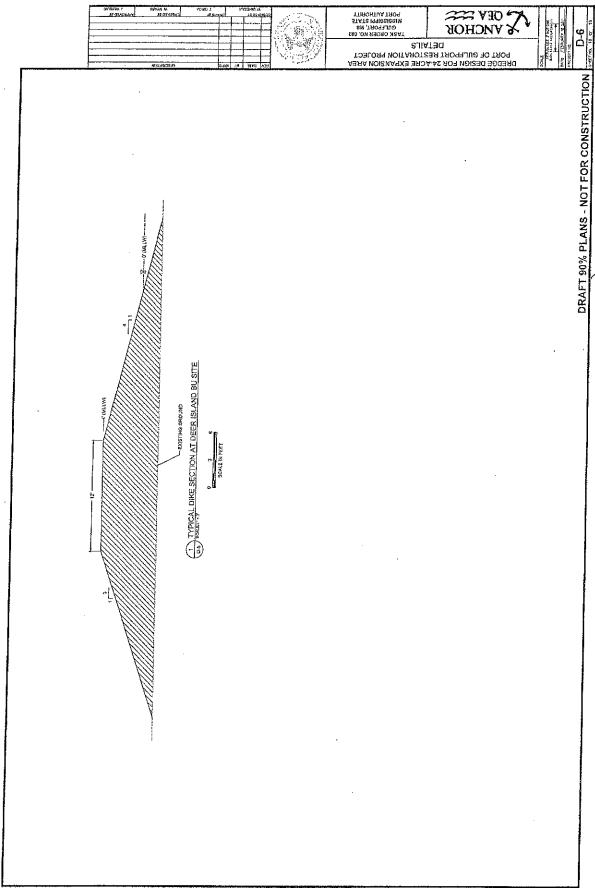


Figure 2) Aerial View from Google Earth, 2010

SAM-2011-00129-KMN MDMR Deer Island BUS Expansion



DRAFT 90% PLANS - NOT FOR CONSTRUCTION SAM-2011-00129-KMN MDMR
Deer Island BUS Expansion



STATE OF MISSISSIPPI

HALEY BARBOUR GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

TRUDY D. FISHER, EXECUTIVE DIRECTOR

August 5, 2011

Certified Mail No.7008 0500 0001 7046 7227

Mr. George Ramseur, Jr. Mississippi Department of Marine Resources 1141 Bayview Avenue Suite 501 Biloxi, Mississippi 39530

Dear Mr. Ramseur:

Mississippi Department of Re: Marine Resources, Beneficial Use Site Harrison County COE No. SAM201100129KMN WQC No. WQC2011004

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Office of Pollution Control (OPC) issues this Certification, after public notice and opportunity for public hearing to, Mississippi Department of Marine Resources, an applicant for a Federal License or permit to conduct the following activity:

Mississippi Department of Marine Resources, Beneficial Use Site: Proposed creation of a 50 acre site on the northeastern shore of Deer Island as a beneficial use site. The site will be referred to as Deer Island Marsh Restoration Two (DIMR2) and would be located adjacent and immediately to the west side of Deer Island Marsh Restoration One (DIMR1). The proposed project would create approximately 40 acres of salt marsh and approximately 5 acres of a Chenier (upland ridge) along the southern boundary of the site. The applicant proposes to construct a 3200 foot long dike along the proposed northern border of the site which would run parallel to the north shore of Deer Island. Upon completion, the site would be able to contain approximately 400,000 cubic yards of dredged material.

The proposed dike would be mechanically constructed from borrow areas

within the site. It would be raised to an elevation of between +4 to +7 feet, Mean Lower Low Water (MLLW). The area encompassed by the new dike would be located in shallow water, mostly above -2 feet MLLW, currently composed of sandy material. It would be constructed to run parallel to the north shore of Deer Island. The western end of the dike would be constructed to either curve to the southwest and continue for approximately 600 feet to reattach to Deer Island; or end in open water and not rejoin Deer Island. Wave protection at the western end would probably not be required and leaving it open could improve flushing and allow the interior marsh to interact ecologically with the surrounding environment.

The Chemier would be constructed on the current southern portion of Deer Island as suitable materials become available from area dredging projects. The ultimate dimensions of the Chemier would depend upon the availability of materials suitable for construction. The exterior of the dike would be constructed at a 1:5 slope to mimic the natural slope at the existing site. The interior area would be managed by mechanical equipment to ensure elevations are consistent with marsh establishment. The new marsh areas would be allowed to vegetate naturally as the dredged material consolidates to marsh elevations but may also be augmented by plantings as resources become available and specific needs related to habitat or erosional stability are recognized. The Chemier area would receiving plantings, particularly of live oaks to help anchor and stabilize the feature as well as provide additional habitat value. [SAM201100129KMN, WQC2011004].

The Office of Pollution Control certifies that the above-described activity will be in compliance with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

- No sumps shall be created in open waters by proposed placement of dredge spoil material. The water bottom elevations shall gradually decrease to open water.
- 2. The permittee shall contact the Department for further consultation regarding testing protocols for dredged material obtained from waterways with a completed Total Daily Maximum Load for toxics, phenols, mercury, and PCBs-Dixon; and from waterways listed on the 303(d) list for biological impairment. Further information may be obtained from Greg Jackson, Chief of the Water Quality Modeling Branch.
- 3. The permittee shall contact the Department for further consultation regarding testing protocols for dredged material obtained from waterways affected by a CERCLA/Uncontrolled Site as identified by the

Groundwater Assessment and Remediation Division. Further information may be obtained from Trey Hess, Chief of the Brownfields Branch.

- 4. Turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units. The turbidity within the beneficial use restoration project areas may reasonably exceed this turbidity standard for temporary periods of time and shall not result in permanent environmental harm.
- 5. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

This certification is valid for the project as proposed. Any deviations without proper modifications and/or approvals may result in a violation of the 401 Water Quality Certification. If we can be of further assistance, please contact us.

Mry M. Wilson III, P.E., DEE

Chief, Environmental Permits Division

HMW fw

cc: Kaaren M. Neumann, U.S. Army Corps of Engineers, Mobile District Willa Brantley, Department of Marine Resources
Paul Necaise, U.S. Fish and Wildlife Service
Bill Ainslie, Environmental Protection Agency



STATE OF MISSISSIPPI

Haley Barbour Governor

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

William W. Walker, Ph.D., Executive Director

April 21, 2011

Mr. George Ramseur, Jr.
Mississippi Department of Marine Resources
Mississippi Beneficial Use of Dredge Material Program
1141 Bayview Avenue
Biloxi, MS 39530

RE: SAM-2011-00129-KMN; DMR-090302; Permit

Dear Mr. Ramseur:

Please find enclosed the original and one copy of the Permit issued to the MS Department of Marine Resources, MS Beneficial Use of Dredge Material Program by the Mississippi Commission on Marine Resources on April 19, 2011.

Please execute this Permit by signing both documents and returning the copy to the Department of Marine Resources.

The Department of Marine Resources has also coordinated a review of your project through the Coastal Program review procedures and determined that the project referenced above is consistent with the Mississippi Coastal Program, provided that you comply with the noted conditions.

If you have any questions regarding the Permit or this correspondence, please contact Rebekah Ray with the Bureau of Wetlands Permitting at 228-523-4104.

Sincerely,

William W. Walker, Ph.D.

Executive Director

WWW/rrr

Enclosures

cc: Ms. Kaaren Nuemann, USACE

Ms. Florance Watson, OPC

Mr. Raymond Carter, SOS

Permit No.: DMR-090302 Type:

Permit

Date:

April 21, 2011

WHEREAS, application by: MS Department of Marine Resources, MS Beneficial Use of Dredge Material Program for a Permit under the provisions of Chapter 27, Mississippi Code of 1972, as amended, to perform certain works affecting the coastal wetlands of the State of Mississippi on Deer Island near Biloxi, Mississippi, was approved by said State of Mississippi Commission on Marine Resources on April 19, 2011.

NOW THEREFORE, this Permit authorizes the above named applicant hereinafter called Permittee, to perform such works in adherence to the following conditions contained herein:

- 1. Approximately 50 acres of water bottoms shall be filled using up to 400,000 cubic yards of beneficially used dredge material as indicated on the attached diagram;
- 2. A dike 3,200 feet in length and 12 feet in width with an approximate 5:1 slope ending in open water shall be created from on-site borrow material to contain the beneficially used dredge material as indicated on the attached diagram;
- 3. A dike 600 feet in length and 12 feet in width with an approximate 5:1 slope and rejoining Deer Island may be created depending on the need to protect the containment area against wave action as indicated on the attached diagram:
- 4. Approximately 50 acres of tidal salt marsh and associated Chenier habitat shall be created by natural regeneration and plantings of appropriate marsh or wetland species as required and as indicated on the attached diagram;
- 5. A variance to Chapter VIII, Section 2, Part III.O.1., is hereby granted;
- 6. Best Management Practices shall be used as needed during construction based upon visual observations of significant volumes of high turbidity leaving the project area by MDMR or partner Beneficial Use Group personnel:
- 7. Vegetated wetlands shall not be impacted; and,
- No construction debris or unauthorized fill material shall be allowed to enter coastal wetlands or waters.

This authorization is contingent on clearance from the Mississippi Department of Archives and History (MDAH), Water Quality Certification from the Mississippi Department of Environmental Quality (DEQ) and the Permittee shall maintain all water quality standards, regulations, and restrictions as set forth by the DEQ.

Any deviations beyond the restrictive conditions as set forth in your permit shall be considered a violation and may result in the revocation of the permit. Violations of these conditions may be subject to fines, project modifications and/or site restoration. Both the permittee and the contractor may be held liable for conducting unauthorized work. A modification to these conditions may be requested by submitting a written request along

with a revised project diagram to DMR. <u>Proposed modifications to dimensions</u>, <u>project</u> <u>footprint</u>, <u>and/or procedures must be approved in writing prior to commencement of work</u>.

Issuance of this certification by DMR and acceptance by the applicant does not release the applicant from other legal requirements including but not limited to other applicable federal, state or local laws, ordinances, zoning codes or other regulations.

This certification conveys no title to land and water, does not constitute authority for reclamation of coastal wetlands and does not authorize invasion of private property or rights in property.

Please notify this Department upon completion of the permitted project so that compliance checks may be conducted by DMR staff.

This certification shall become effective upon acceptance by the applicant and receipt of the executed copy by the Director.

Please execute this certification by signing both documents and returning the copy to the Department of Marine Resources.

Work authorized by this certification must be completed on or before April 21, 2021.

Enclosed is a "Notice of Compliance" which must be conspicuously displayed at the site during construction of the permitted work.

The Department of Marine Resources has also coordinated a review of your project through the Coastal Program review procedures and determined that the project referenced above is consistent with the Mississippi Coastal Program, provided that you comply with the noted conditions and reviewing coastal program agencies do not disagree with said plans. By copy of this certification, we are notifying the U.S. Army Corps of Engineers of this determination.

THE PERMITTEE BY ACCEPTANCE OF THIS PERMIT AGREES TO ABIDE BY THE STIPULATIONS AND CONDITIONS CONTAINED HEREIN AND AS DESCRIBED BY THE PLANS AND SPECIFICATIONS SUBMITTED AS PART OF THE COMPLETED APPLICATION.

STATE OF MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

11

BY: William W. Walker, Executive Director		<u></u>	
Accepted this the	day of	And the state of t	, 20
BY:			

MISSISSIPPI



Department of Marine Resources

NOTICE OF COMPLIANCE DMR- 090302 PERMIT THIS NOTICE ACKNOWLEDGES THAT:

DATE: April 21, 2011

George Ramseur, Jr.
MS Department of Marine Resources
MS Beneficial Use of Dredge Material Program
1141 Bayview Avenue
Biloxi, MS 39530

HAS, THROUGH APPLICATION TO THIS DEPARTMENT, DULY COMPLIED WITH THE MISSISSIPPI COASTAL WETLANDS PROTECTION LAW TO:

- 1. Approximately 50 acres of water bottoms shall be filled using up to 400,000 cubic yards of beneficially used dredge material as indicated on the attached diagram;
- 2. A dike 3,200 feet in length and 12 feet in width with an approximate 5:1 slope ending in open water shall be created from on-site borrow material to contain the beneficially used dredge material as indicated on the attached diagram;
- 3. A dike 600 feet in length and 12 feet in width with an approximate 5:1 slope and rejoining Deer Island may be created depending on the need to protect the containment area against wave action as indicated on the attached diagram;
- Approximately 50 acres of tidal salt marsh and associated Chenier habitat shall be created by natural regeneration and plantings of appropriate marsh or wetland species as required and as indicated on the attached diagram;
- 5. A variance to Chapter VIII, Section 2, Part III.O.1., is hereby granted;
- 6. Best Management Practices shall be used as needed during construction based upon visual observations of significant volumes of high turbidity leaving the project area by MDMR or partner Beneficial Use Group personnel;
- 7. Vegetated wetlands shall not be impacted; and,
- 8. No construction debris or unauthorized fill material shall be allowed to enter coastal wetlands or waters.

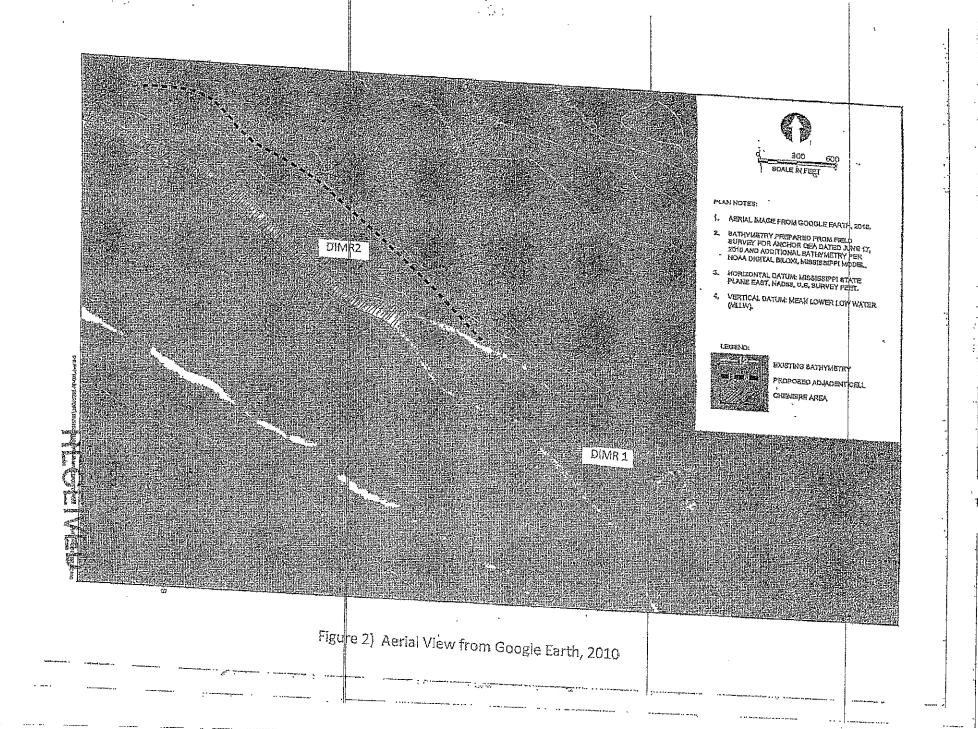
On Deer Island near Biloxi, Harrison County, Mississippi.

No construction debris or unauthorized fill material shall be allowed to enter coastal wetlands or waters.

FURTHERMORE, THIS PROJECT AS PROPOSED HAS BEEN FOUND TO BE CONSISTENT WITH ALL GUIDELINES FOR CONDUCT OF REGULATED ACTIVITIES IN COASTAL WETLANDS AS SET FORTH IN THE MISSISSIPPI COASTAL PROGRAM.

Executive Director

POST THIS NOTICE CONSPICUOUSLY AT SITE OF WORK





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office 263 13th Avenue South St. Petersburg, FL 33701-5505 (727) 824-5312, FAX (727) 824-5309 http://sero.nmfs.noaa.gov

AUG 03 2011

F/SER31:RGH

Ms. Kaaren M. Neumann Coastal Branch, Regulatory Division Mobile District Corps of Engineers P.O. Box 2288 Mobile, AL 36628-0001

Re: SAM-2011-129-KMN

Dear Ms. Neumann:

This replies to your March 2, 2011, letter requesting National Marine Fisheries Service (NMFS) concurrence with your project-effect determinations pursuant to Section 7 of the Endangered Species Act (ESA) for the referenced Army Corps of Engineers (COE) Mobile District's construction permit application by the Mississippi Department of Marine Resources (MDMR). The applicant, MDMR, is proposing to create a 50-acre Beneficial Use Site on the northeastern shore of Deer Island. NMFS Protected Resources Division (PRD) requested additional information from the COE via e-mail on March 22, 2011, and a response was received on April 21, 2011. Additional concerns were discussed by Mark Thompson of NMFS Habitat Conservation Division via e-mail on April 28, 2011, and a response was received on June 27, 2011. You determined the project may affect but is not likely to adversely affect Gulf sturgeon, and may affect but is not likely to adversely affect Gulf sturgeon critical habitat. NMFS' determinations regarding the effects of the proposed action are based on the description of the action in this informal consultation. You are reminded that any changes to the proposed action may negate the findings of the present consultation and may require reinitiation of consultation with NMFS.

The proposed project is located at latitude 30.370089°N and 88.828603°W (North American Datum 1983) within the Mississippi Sound, adjacent to Deer Island, Biloxi, Harrison County, Mississippi, within ESA-designated critical habitat Unit 8 for Gulf sturgeon. The project is known as the Deer Island Marsh Restoration Two (DIMR2), which will be adjacent and immediately west of the Deer Island Marsh Restoration One (DIMR1). The proposed project would create approximately 40 acres of salt marsh and approximately 5 acres of upland ridge (Chenier) along the southern boundary of the site. The applicant proposes to construct a 3,200 foot long dike that will create the project site's northern border and will parallel the north shore of Deer Island. The proposed dike will not enclose the "containment area" on the western end of the project area, essentially allowing the containment area to naturally flush. The dike will be mechanically constructed by excavator or dragline to an elevation of 4 to 7 feet above Mean Low Lower Water (MLLW) from a borrow area located between the dike footprint and the Deer

Island shoreline. Estimates provided by the applicant note that the borrow area conceptually could average 3,200 feet long by 75 feet wide by 10 foot deep in order to generate enough material to construct the dike. In contrast, the majority of the project site within the area contained by the dike is between 0 to -2 feet below MLLW. Upon completion, the project site will be able to contain approximately 400,000 cubic yards of dredged material provided by the State of Mississippi's Beneficial Use (BU) program. The goal of the BU program is to develop projects capable of accepting material from multiple sources over the life of the 10-year permit. The effects of the dredged material to be placed in this containment area from the BU program have been considered in this consultation; however, the dredge projects donating the material will need to be consulted on separately. Material slated to be placed within the containment dike will be accomplished via shallow-draft transport barges and hydraulically placed using highsolids "sludge" pumps to minimize turbidity and consolidation time. Surveys of the project over the past 5 years during all seasons have not detected seagrass beds. A recent benthic survey conducted on April 19, 2011, by Dr. Richard Heard of the Gulf Coast Research Lab confirmed a benthic community lacking in variety of species and significant numbers, and conditions generally unsuitable for seagrass colonization due to wave energy and salinity. Due to the fact that the fill material is generally sand, turbidity curtains will not be utilized during construction activities, as the sand is expected to drop out of the water column quickly. The applicant will comply with NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions, dated March 23, 2006. Upon completion of the permitting and contracting process, the proposed project will take 30-45 days to construct the containment dike and an additional 90-120 days to place the material from the primary contributing BU dredge project.

Five ESA-listed species of sea turtles (the endangered leatherback, Kemp's ridley, and hawksbill; the threatened/endangered green; and the threatened loggerhead) and Gulf sturgeon may occur at the project sites. The proposed project is located within ESA-designated Gulf sturgeon critical habitat Unit 8, Lake Pontchartrain - Mississippi Sound.

NMFS has analyzed the routes of potential effects from the proposed project and determined that listed sea turtles and Gulf sturgeon are not likely to be adversely affected. Effects on sea turtles and Gulf sturgeon include the risk of injury from construction activities, which will be discountable due to the species' mobility and the implementation of NMFS' Sea Turtle and Smalltooth Sawfish Construction Conditions. These species may be affected by being temporarily unable to use the site for forage or refuge habitat due to potential avoidance of construction activities (e.g., dredging and filling) and related noise but these effects will be insignificant, given the size of the area impacted. The effects on Gulf sturgeon due to loss of foraging habitat will be insignificant. Due to the shallow water depths along the proposed project site (less than 2 m), this portion of the project area provides poor foraging habitat for sturgeon and this fact has been confirmed by the benthic survey on April 19, 2011. Gulf sturgeon are suction feeders, using their relatively narrow mouths to funnel water and prey items. Because of their feeding morphology, they are usually found at slightly deeper depths (greater than 2 m) where there is lower wave energy at substrate level, which interferes less with feeding, compared to the shallower swash zone located at the project site. 2-3

¹ Green turtles are listed as threatened, except for breeding populations in Florida and the Pacific coast of Mexico, which are listed as endangered.

² Fox, D.A., J.E. Hightower, and F.M. Parauka. 2002. Estuarine and nearshore marine habitat use by Gulf sturgeon from Choctawhatchee River system, Florida. American Fisheries Society Symposium 28: 111-126.

Critical Habitat

NMFS believes the project is not likely to adversely affect Gulf sturgeon critical habitat in Unit 8. NMFS and the U.S. Fish and Wildlife Service jointly designated Gulf sturgeon critical habitat on April 18, 2003 (50 CFR 226.214). The features essential for the conservation of Gulf sturgeon present in Unit 8 include: abundant prey items; water quality and sediment quality necessary for normal behavior, growth, and viability of all life stages; and safe and unobstructed migratory pathways necessary for passage within and between riverine, estuarine, and marine habitats. Of these essential features, NMFS believes water quality, sediment quality, prey abundance, and safe and unobstructed migratory pathways may be affected. Water quality impacts from project activities will be discountable because increases in turbidity will be temporary, and sediments will settle out quickly due to the high sand content. Sediment quality impacts from project activities will be insignificant due to the similarity of dredged material with adjacent sediment. Potential effects to adjacent sediment quality will be temporary and subside quickly upon completion of the dredging. Prey availability to Gulf sturgeon at the project site will be affected by removal of species and exclusion of prey during dredging of approximately 90,000 cubic yards of substrate to create the dike. Over the life of the proposed project area, approximately 400,000 cubic yards will affect bottom sediments during the placement of dredged material. However, results from the April 19, 2011, survey by Gulf Coast Research Lab confirmed that the benthic community, at the proposed project site lacked species variety and significant numbers, thus effects to Gulf sturgeon prey (such as amphipods, lancelets, polychaetes, gastropods, ghost shrimp, isopods, mollusks, and crustaceans) will be limited due to the poor habitat and sparse prey availability. Project activities will permanently change the habitat use from open water to emergent estuarine/beach/upland ridge habitat, however, the scope of this dredging project will have a limited impact on prey availability and will be insignificant compared to the total area of the critical habitat unit of 881,230 total acres in Unit 8. Gulf sturgeon migrate upriver annually to spawn from late March onward into the summer months and need clear access from marine/estuarine environs to their river spawning sites and for their subsequent return trip in September/October. There is some seasonal variation within these migratory months due to seasonal variations between years in both marine and river water temperatures and other abiotic factors, 4 thereby making it necessary to ensure protection for migratory pathways over a range of months. Consistent with the Gulf Sturgeon Recovery Plan.⁵ individual management of Gulf sturgeon stocks must ensure unobstructed migratory access to natal rivers during spawning season, since there is a strong correlation between individual sturgeon stocks and their natal river spawning sites.⁶⁻⁷ Dredging and fill activities within the action area will be limited to the shallow littoral shelf of Deer Island and will not obstruct migratory access to natal rivers and therefore will be discountable.

³ Ross, S.T., B.R. Krieser, W.T. Slack, M.A. Dugo, R.J. Heise, B.R. Bowen, and P. Mickle. 2004. Movement, spawning sites, habitat use, and genetic structure of Gulf sturgeon (*Acipenser axyrinchus desotoi*) in Pascagoula drainage, Mississippi. Report to the U.S. Fish and Wildlife Service (Year VII). 109 pp.

⁴ Fox, D.A., J.E. Hightower, and F.M. Parauka. 2000. Gulf sturgeon spawning migration and habitat in the Choctawhatchee River system, Alabama-Florida. American Fisheries Society 129:811-826.

⁵ U.S. Fish and Wildlife Service and Gulf States Marine Fisheries Commission. 1995. Gulf Sturgeon Recovery Plan. Atlanta, Georgia. 170 pp.

⁶ Stabile, J., J.R. Walman, F. Parauka, and I. Wirgin. 1996. Stock structure and homing fidelity in Gulf of Mexico sturgeon (*Acipenser oxyrinchus desotoi*) based on Restriction Fragment Length Polymorphism and sequence analyses of mitochondrial DNA

and sequence analyses of mitochondrial DNA

Dugo, M.A., B. R. Kreiser, S.T. Ross, W.T. Slack, R.J. Heise, and B.R. Bowen. 2004. Conservation and management implications of fine-scale genetic structure of Gulf sturgeon in the Pascagoula River, Mississippi. J. Appl. Ichthyol. 20:243-251.

This concludes your ESA consultation responsibilities with NMFS for the proposed project. Be advised that the consultation must be reinitiated if a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action.

We have enclosed additional information on other statutory requirements that may apply to this action, as well as information on NMFS' Public Consultation Tracking System (PCTS) that allows you to track the status of ESA consultations. We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat.

If you have any questions on this consultation or PCTS, please contact Ryan Hendren, ESA Consultant, at (727) 551-5610, or by e-mail at Ryan.Hendren@noaa.gov.

Sincerely

Roy E. Crabtree, Ph.D. Regional Administrator

Enclosures (2)

File: 1514-22. F.4

Ref: I/SER/2011/00699

PCTS Access and Additional Considerations for ESA Section 7 Consultations (Revised 7-15-2009)

Public Consultation Tracking System (PCTS) Guidance: PCTS is an online query system at https://pcts.nmfs.noaa.gov/ that allows federal agencies and U.S. Army Corps of Engineers' (COE) permit applicants and their consultants to ascertain the status of NMFS' Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations, conducted pursuant to ESA section 7, and Magnuson-Stevens Fishery Conservation and Management Act's (MSA) sections 305(b)2 and 305(b)(4), respectively. Federal agencies are required to enter an agency-specific username and password to query the Federal Agency Site. The COE "Permit Site" (no password needed) allows COE permit applicants and consultants to check on the current status of Clean Water Act section 404 permit actions for which NMFS has conducted, or is in the process of conducting, an ESA or EFH consultation with the COE.

For COE-permitted projects, click on "Enter Corps Permit Site." From the "Choose Agency Subdivision (Required)" list, pick the appropriate COE district. At "Enter Agency Permit Number" type in the COE district identifier, hyphen, year, hyphen, number. The COE is in the processing of converting its permit application database to PCTS-compatible "ORM." An example permit number is: SAJ-2005-00001234-IPS-1. For the Jacksonville District, which has already converted to ORM, permit application numbers should be entered as SAJ (hyphen), followed by 4-digit year (hyphen), followed by permit application numeric identifier with no preceding zeros. For example: SAJ-2005-123; SAJ-2005-1234; SAJ-2005-12345.

For inquiries regarding applications processed by COE districts that have not yet made the conversion to ORM (e.g., Mobile District), enter the 9-digit numeric identifier, or convert the existing COE-assigned application number to 9 numeric digits by deleting all letters, hyphens, and commas; converting the year to 4-digit format (e.g., -04 to 2004); and adding additional zeros in front of the numeric identifier to make a total of 9 numeric digits. For example: AL05-982-F converts to 200500982; MS05-04401-A converts to 200504401. PCTS questions should be directed to Eric Hawk at Eric.Hawk@noaa.gov. Requests for username and password should be directed to PCTS.Usersupport@noaa.gov.

EFH Recommendations: In addition to its protected species/critical habitat consultation requirements with NMFS' Protected Resources Division pursuant to section 7 of the ESA, prior to proceeding with the proposed action the action agency must also consult with NMFS' Habitat Conservation Division (HCD) pursuant to the MSA requirements for EFH consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-.930, subpart K). The action agency should also ensure that the applicant understands the ESA and EFH processes; that ESA and EFH consultations are separate, distinct, and guided by different statutes, goals, and time lines for responding to the action agency; and that the action agency will (and the applicant may) receive separate consultation correspondence on NMFS letterhead from HCD regarding their concerns and/or finalizing EFH consultation.

Marine Mammal Protection Act (MMPA) Recommendations: The ESA section 7 process does not authorize incidental takes of listed or non-listed marine mammals. If such takes may occur an incidental take authorization under MMPA section 101 (a)(5) is necessary. Please contact NMFS' Permits, Conservation, and Education Division at (301) 713-2322 for more information regarding MMPA permitting procedures.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office 263 13th Avenue South St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

