



State of Mississippi

TATE REEVES
Governor

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHRIS WELLS, EXECUTIVE DIRECTOR

May 1, 2025

Ms. Angelia V. Lewis
U.S. Army Corps of Engineers – Mobile District
109 Saint Joseph St.
Mobile, AL 36602
251-694-4105
Angelia.V.Lewis@usace.army.mil

Dear Ms. Lewis,

Re: U.S. Army Corps of Engineers
Mobile District
Deer Island Ecosystem Restoration Project
Harrison County
COE No. FP24-DI01-13
WQC No. WQC2025003

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Mississippi Department of Environmental Quality (MDEQ) issues this Certification, after public hearing, to the U.S. Army Corps of Engineers, Mobile District, an applicant for a Federal License or permit to conduct the following activity:

U.S. Army Corps of Engineers, Mobile District, Deer Island Ecosystem Restoration Project: Project to include restoration of approximately 400 acres of island habitat, including 128 acres of emergent tidal marsh, 78 acres of coastal maritime forest, and 86 acres of shoreline beach. The project also involves the construction of the remaining sections of the previously authorized Katrina Key breakwater, which will offer added wave and erosion reduction to the restored island.

The extension of the southern beach and dune will consist of placement of approximately 1.5 million cubic yards (mcy) of sandy material over approximately 116 acres. This proposed expansion will tie-in to the existing beach and extend it approximately one mile to the southeast to restore the island's historic footprint. Restoration of up to 40 acres of maritime forest habitat along the northeast will be achieved by restoring elevation with approximately 175,000

cy of suitable soil followed by select native species planting and controlled burning. In addition, restoration of elevation and hydrology within the existing Grand Bayou including filling of existing mosquito ditches will occur as needed to optimize various habitat types. Marsh restoration within the lagoon will be completed by the placement of material dredged from the Biloxi Harbor Federal Navigation Channel over time until restoration benefits are achieved. Material will be dredged from the Federal navigation channel and placed within the lagoon as part of previously authorized operations and maintenance dredging and placement activities. To prevent dredged material from leaving the lagoon and entering and potentially damaging surrounding marsh, a temporary berm may be constructed as needed extending the length of the lagoon where placement will occur. Another temporary berm will be constructed as needed at the mouth of the lagoon to prevent dredged material from entering the Mississippi Sound. The existing island will be expanded to restore it to the historic footprint through placement of approximately 1.8 mcy of sediment. The expansion area will serve as a combination of marsh and maritime forest habitat. The island restoration will cover approximately 260 acres of previously submerged water bottoms. The expanded area will be filled with suitable materials to bring the elevations to appropriate heights for maritime forest and marsh habitats. Maritime forest restoration will be completed by a combination of soil amendments and planting with select native species. Marsh habitat restoration will be completed by targeting elevations that allow for natural recruitment from the existing adjacent Grand Bayou marsh. The entire restored island will be monitored over a period of 5 years after construction to ensure success of the restoration effort. If the restored area does not meet success criteria, adaptive management actions may occur.

All material used for the restoration will come from a combination of sources to include: the footprint of the island restoration to construct a natural containment and create additional capacity for beneficial use of dredged material, the Biloxi Harbor Federal Navigation Channel, the Biloxi Harbor Federal Navigation project's authorized open water placement areas 6 and 7, and the previously approved borrow area for the 2008 breach and southern beach fill extension. Access channels may need to be dredged for equipment access (e.g., cranes, excavators, bulldozers and marsh buggies) to the island and along the Katrina Key extension due to water depths ranging from one to four feet through most of the restoration area. Access channels will measure approximately 150 ft. wide and 10 ft. deep and will be approximately three miles long for the Katrina Key access and approximately one mile long for Deer Island access. Material dredged from access channels will either be side-cast or used as part of the Deer Island restoration. All dredging associated with the Deer Island Ecosystem Restoration project will be completed using either a mechanical and/or a hydraulic cutterhead dredge. Material could be pumped directly on the island and/or mechanically placed from scows or offloader barges.

Work associated with the initial construction of this project is expected to commence in 2025 and extend through late 2027. Placement in the beneficial use

area, planting, and monitoring will initiate after the initial construction of the breakwater and island beach and dune features [FP24-DI01-13, WQC2025003].

MDEQ 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:

1. Best management practices should be used at all times during construction to minimize turbidity at the restoration sites. The restoration sites shall be constructed and maintained in a manner that minimizes the discharge of turbid waters into waters of the Mississippi Sound and surrounding waters. (Statement F) (11 Miss. Admin. Code Pt. 6, R. 1.1.1.B.)
2. Turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units. (Statement A) (11 Miss. Admin. Code Pt. 6, R.2.2.A.(3))
3. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse. (Statement A) (11 Miss. Admin. Code Pt. 6, R. 2.2.A.(3))

As part of the Scope of Review for Application Decisions, 11 Mississippi Administrative Code Part 6, Rule 1.3.4(B), the above conditions are necessary for the Department to ensure that appropriate measures will be taken to eliminate unreasonable degradation and irreparable harm to waters of the State, such that the activity will not meet the criteria for denial:

- (A) The proposed activity permanently alters the aquatic ecosystem such that water quality criteria are violated and/or it no longer supports its existing or classified uses. An example is the channelization of streams.
- (B) There is a feasible alternative to the activity which reduces adverse consequences on water quality and classified or existing uses of waters of the State.
- (C) The proposed activity adversely impacts waters containing State or federally recognized threatened or endangered species.
- (D) The proposed activity adversely impacts a special or unique aquatic habitat, such as National or State Wild and Scenic Rivers and/or State Outstanding Resource Waters.
- (E) The proposed activity in conjunction with other activities may result in adverse cumulative impacts.
- (F) Nonpoint source/storm water management practices necessary to protect water quality have not been proposed.

(G) Denial of wastewater permits and/or approvals by the State with regard to the proposed activities.

(H) The proposed activity results in significant environmental impacts which may adversely impact water quality.

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 you have any questions, please contact Carrie Barefoot.

Sincerely,



Becky Simonson
Environmental Permits Division

BS: mb

cc: Alyssa Timbs, Mississippi Department of Marine Resources
Paul Necaie, U.S. Fish and Wildlife Service
Kelly Shotts, NOAA National Marine Fisheries Service
Jamie Becker, Environmental Protection Agency