FINDING OF NO SIGNFICANT IMPACT

Mid-Chesapeake Bay Island Ecosystem Restoration Project: Barren Island Borrow Area

In accordance with the National Environmental Policy Act of 1969 (NEPA), including guidelines in 33 Code of Federal Regulations (CFR), Part 230 (Procedures for Implementing NEPA), the Baltimore District of the U.S. Army Corps of Engineers (USACE), in partnership with the Maryland Department of Transportation's Maryland Port Administration, the non-federal sponsor, has prepared this Finding of No Significant Impact (FONSI) and supplemental Environmental Assessment (sEA) for the dredging of sand from a borrow area for the Mid-Chesapeake Bay Island Ecosystem Restoration Project: Barren Island (Mid-Bay Island Project). The Mid-Bay Island Project recommends remote island restoration at two locations, James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, Maryland, through the beneficial use of dredged material. Section 7002 of the Water Resources Reform and Development Act of 2014 authorized the Mid-Bay Island Project, as described in the Chief's Report, dated August 24, 2009, and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated June 2009. The record of decision was signed in July 2019 initiating the next phase of the project, Preconstruction Engineering and Design (PED). A FONSI was signed in March 2022 for Phase 1 of the Barren Island Restoration Project.

This sEA evaluates alternative sites as well as impacts and benefits associated with various sources of suitable material for use in future phases of the Barren Island portion of the project. Suitable material is needed for foundation replacement along a section of the northeast sill, bird island development, and the containment (geotubes) associated with development of the wetland cells.

The purpose of the Mid-Bay Island Project is to: restore and protect wetland, aquatic, and terrestrial island habitat for fish, reptiles, amphibians, birds, and mammals; protect existing island ecosystems to minimize further loss of island and aquatic habitat; provide dredged material placement capacity for Federal navigation channels; increase wetlands acreage in the Chesapeake Bay watershed; decrease local erosion and turbidity; and promote conditions to establish and enhance submerged aquatic vegetation and promote conditions that support oyster recolonization.

The Southern Borrow Area is approximately 85 acres of open water within the Chesapeake Bay located west of the Barren Island restoration project. Through the NEPA evaluation, the Southern Borrow Area was narrowed to two focus areas, Focus Area A and B. Focus Area B is the preferred site. The spatial impact associated with acquiring the material needed for the project would be limited to a maximum of approximately 40 to 50 acres.

This sEA evaluated a No Action alternative and five (5) alternatives. The preferred alternative would involve dredging approximately 300,000 cy of material from the Southern Borrow Area within the bounds of Focus Area A and/or B, with the goal of limiting dredging to the footprint of Focus Area B.

Phase I of the restoration of Barren Island project is underway and includes the construction of the confining sills and breakwaters. Material dredged from the Southern Borrow Area would be

used in future phases (Phases 2 and 3) to fill geotubes for containment of dredged material to restore wetlands habitat, complete a section of the northeast sill that requires foundation replacement, and construct bird nesting islands. The geotubes are planned to be opened, and the material incorporated through grading into the restored habitats during final habitat development. Because multiple dredging cycles will be required to meet the material capacity of the proposed wetland acreage, this is considered to be a long-term restoration project.

Temporary impacts associated with the dredging of the Southern Borrow Area include localized increased turbidity, reduced water quality/clarity, and increased noise levels; disruptions to aesthetics, recreation, and fishing (commercial and recreational); and the temporary displacement of some wildlife from the area. Dredging operations would have direct and multi-year effects to the bathymetry and benthic community.

Bathymetry in the dredged areas would be deepened by 5 ft (plus 1 to 2 ft of overdepth) until a future time when the area shoals to depths similar to existing conditions. It is anticipated that sand would fill in and return the bathymetry to comparable elevations in subsequent years. It is also anticipated that the benthic community would return within 2 to 3 years to a comparable assemblage.

As a result of dredging, current benthic habitat and non-motile species within the dredging footprint would be adversely impacted while mobile species are expected to move from the area. Comparable organisms would likely recolonize the channel within a short period of time. Areas adjacent to the footprint of the preferred alternative would likely experience a short-term, and direct negative impact due to degraded water quality parameters including increased turbidity, reduced dissolved oxygen, and possibly small increases of nutrients. These disturbances will cease upon completion of dredging operations. Water quality and turbidity monitoring will be performed prior to, during, and post-construction in accordance with any issued permits. Additional measures will be utilized as required to protect natural resources.

Construction is expected to cause a short-term disruption to crab harvesting activity based on proximity of crab pots to construction activities. Crabbers who utilize the Bay bottom within the footprint of the Southern Borrow Area would be displaced from those fishing areas during dredging operations. It is expected that the crab harvesting activity would relocate to other locations in the region during dredging. It is expected that crabbing activity could return following dredging, but productivity may be altered until the site returns to pre-dredging conditions.

Through the NEPA process as well as the PED Phase, every effort has been made to minimize impacts. Extensive natural resource agency coordination has been undertaken and will continue throughout the final design and construction process. Input provided by resource agencies throughout the design phase has been utilized to develop the project presented in this sEA. Multiple considerations and alternatives were evaluated in an effort to reduce the quantity of material needed for the project.

All applicable laws, executive orders, regulations, and local government plans were considered in the evaluation of alternatives. Based on this report, the reviews by other federal, state and

local agencies, tribes, input of the public, and the review of my staff, it is my determination that the Proposed Action alternative would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

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Date

Esther S. Pinchasin
Colonel, U.S. Army
Commander and District Engineer