

## FINDING OF NO SIGNIFICANT IMPACT

### Mid-Chesapeake Bay Island Ecosystem Restoration Project: Barren Island

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 Mid-Chesapeake Bay Island Ecosystem Restoration Project (Mid-Bay Island Project) at Barren Island. 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).

This sEA serves to update NEPA compliance during the PED Phase, prior to construction of the Barren Island portion of the project. The sEA evaluates impacts and benefits associated with the current design, identifying changes to the Barren Island project component since 2009. An additional NEPA Compliance document will be developed prior to construction of the James Island component of the Mid-Bay Island Project.

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 prevent 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; promote conditions to establish and enhance submerged aquatic vegetation (SAV); and promote conditions that support oyster recolonization.

The Barren Island restoration project is the smaller portion of the Mid-Bay Island Project. Currently, Barren Island is approximately 138 acres (ac) in size, and portions of it are protected by 4,850 linear ft of stone sill.

This sEA evaluated a No Action alternative and eight (8) alternatives for protective measures and habitat restoration at Barren Island. The preferred alternative for the restoration project will include the construction of new and modified stone sills, segmented breakwaters to provide increased protection to the eroding Barren Island and to the extensive SAV beds to the east of Barren Island, installation of two bird islands (approximately 8.5 ac total), and restoration of approximately 83 ac of wetlands and mud flats.

The first phase of the project includes the construction of the confining sills and breakwaters. Authorized maintenance material dredged from small local federal navigation channels will be placed behind the confining stone sills to restore wetland and mud flat habitats. Because several

dredging cycles will be required to meet the material capacity of the proposed restored wetland acreage, this is considered to be a long-term restoration project. Wetlands restored through the beneficial use of dredged material will include low and high marsh plantings as well as intertidal mudflats. During final wetland development planning, current conditions will be evaluated with respect to sea level rise projections and sustainable marsh elevations will be determined to identify high to low marsh ratios. Tidal exchange will be established through use of open tidal guts or outfall structures after the material is stabilized. Design of the wetland surface (i.e., elevation and geometry) will be coordinated with the resource agencies. To the extent practicable, wetlands will be designed to allow for estuarine connectivity via gaps and tidal creeks to maximize value to fisheries resources.

Identification of a clean sand borrow source for use in limited foundation replacement, construction of interior dikes for wetlands restoration, and bird island restoration is in progress. This sEA covers all Barren Island project components except the possible borrow area for clean sand. Any borrow area selected will be covered by a future NEPA document once an area is identified and coordinated with the resource agencies.

This project is an ecosystem restoration project that will provide environmental benefits including but not limited to; shoreline protection for remote island habitat as well as the neighboring mainland, protection of over 1,000 ac of existing and potential SAV beds, improvement of water quality, wetland/habitat restoration, and the creation of high-quality nesting habitat for several avian species.

Impacts are associated with construction of the sills, breakwaters, bird islands and restoration of wetlands and mud flats. These include temporary impacts to 1.4 ac of existing wetlands; short term localized increased turbidity and noise levels; temporary impacts to aesthetics, recreation, and fishing; and the temporary displacement of some wildlife from the area. There would be a long-term, permanent conversion of approximately 121 (120.7) ac of shallow water subtidal estuarine habitat to 81.4 ac of wetlands, 8.5 ac of nesting bird islands, and approximately 30.8 ac of sills and breakwaters. There is the potential to impact SAV habitat that may have encroached into areas planned for wetland restoration since the feasibility phase was completed in 2009. A portion of the Great Bay Bar (Maryland Historic Oyster Bar) within Tar Bay would be permanently impacted.

Through the NEPA process as well as the PED Phase, every effort has been made to maximize environmental and ecosystem benefits while minimizing 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. Guidance provided by USFWS in a Planning Aid Report (Appendix F3) has been incorporated to enhance the value of the project for wildlife and to document possible impacts. Time of year restrictions for construction activities have been negotiated with the state and federal resource agencies to protect vulnerable resources, and these restrictions will be incorporated into the permits for the project. Coordination with the resource agencies will continue as the project progresses through construction and into the adaptive management phase.

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 for the Barren Island project component would not cause significant adverse effects on the quality of the human environment; therefore, preparation of a Supplement to the 2009 Environmental Impact Statement is not required for the Mid-Chesapeake Bay Island Ecosystem Restoration Project (Mid-Bay Island Project) at Barren Island.

\_\_\_\_ 7 March 2022 \_\_\_\_ Date

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