Mid-Chesapeake Bay Island Ecosystem Restoration Project

DREDGED MATERIAL MANAGEMENT PROGRAM

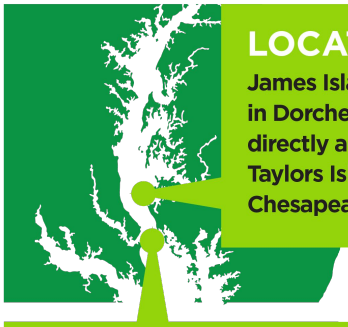
BARREN ISLAND CONSTRUCTION 2025

The Maryland Port Administration's (MPA) innovative approach to environmental restoration through the beneficial use (BU) of dredged material is the foundation for the Mid-Chesapeake Bay Island Ecosystem Restoration Project (Mid-Bay Project). Sediment dredged from navigation channels will create wildlife habitat and restore the ecosystem of the severely eroding James and Barren Islands, both located in Dorchester County. The entire project will provide more than 30 years of capacity for material dredged from Maryland Chesapeake Bay Approach Channels.

MID-BAY UNDERWAY

In 2009, the U.S. Army Corps of Engineers (USACE) completed a feasibility study that recommended using dredged material to restore eroded island habitat in the Chesapeake Bay. After gathering stakeholder input and evaluating technical, environmental, and economic factors, the restoration of James and Barren Islands were selected as the preferred solution. In 2022, USACE and MPA signed a Project Partnership Agreement, and key permits were issued that allowed for advancement of the Barren Island site.

Phase I of construction at Barren Island began in 2023 and was completed in fall 2024, and Phase II construction began in January of 2025. James Island Phase I design is complete, with construction expected to begin in 2026. The project team is actively working on the design for Phase II to enable limited placement of dredged material by early 2030.



LOCATION

James Island, located in Dorchester County directly adjacent to Taylors Island in the Chesapeake Bay

LOCATION

Barren Island, located in Dorchester County near Blackwater National Wildlife Refuge and directly adjacent to Upper Hoopers Island in the Chesapeake Bay

2,144 acres

Total anticipated restoration footprint

90–95 million cubic yards (mcy) of capacity

When Poplar Island reaches capacity **James Island** will become the primary placement site for material dredged from the Maryland Chesapeake Bay Approach Channels, used to restore the remote island habitat.

Barren Island will be a source of benefits for people and wildlife including a reduction in storm-related erosion, personal property benefits, increased recreational value, creation of habitat for ground-nesting birds and other wildlife, and protection of valuable seagrass habitat that will be utilized by wildlife such as fish and crabs.

www.Maryland-DMMP.com

Updated 11/2025

Mid-Bay Project


JAMES ISLAND
2019

MAINTAINING SHIPPING CHANNELS HELPS RESTORE HABITAT

The restoration of James Island, directly adjacent to Taylors Island in the Chesapeake Bay, will utilize dredged material from the Maryland Chesapeake Bay Approach Channels serving the Port of Baltimore to restore 2,072 acres of lost remote island habitat. Approximately 45% of the restoration project will be upland habitat and 55% wetland habitat. Restoration of Barren Island, located near Blackwater National Wildlife Refuge and directly adjacent to Upper Hoopers Island, will utilize dredged material from the local shallow draft channels to restore a minimum of 72 acres of remote island habitat. The restoration will include wetlands, the installation of large protective stone sills, a segmented breakwater, and two bird habitat islands. The newly formed wetlands and structures will slow not only the erosion of Barren Island itself but also the other nearby land.


BARREN ISLAND CONSTRUCTION
2025

ACCESS

Construction is underway and there is no public access at this time.


BARREN ISLAND CONSTRUCTION
2023

Given the success of the Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island, the restored islands are expected to provide valuable habitat to a diverse array of wildlife while maintaining the economic viability of the Port of Baltimore. This will greatly aid in achieving the Chesapeake Bay Program's Vital Habitats Goal.

"Together, we're keeping maritime commerce flowing, protecting the Bay's natural resources, and helping to secure a stronger, more sustainable future for Marylanders and our nation."

– Trevor Cyran,
U.S. Army Corps of Engineers

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