Sediment to Solutions: Beneficial Use (BU)



Beneficial Use (BU) of dredged material means using sediment dredged from the Chesapeake Bay and its tributaries for the restoration of underwater grasses, island restoration, stabilization of eroding shorelines, the creation or restoration of wetlands, and the creation, restoration, or enhancement of fish or shellfish habitats. Beneficial use of dredged material is a critical component of the Dredged Material Management Program (DMMP). With strong community support and increasing educational efforts, the Maryland Port Administration (MPA) continues to implement its innovative reuse and beneficial use strategy which provides clear policy, regulatory, and technical actions.



THE BENEFITS OF BENEFICIAL USE

- Preserves existing island habitat
- Restores islands and coastal wetlands
- Reduces erosion to local shorelines
- Enhances habitat for native and migratory birds and fish
- Sustains reliable, navigable shipping channels



GOAL

To make long-term, sustainable innovative reuse and beneficial use programs and projects to address capacity recovery an implemented component of the DMMP in Maryland and to promote the long-term viability of the Port of Baltimore.



DREDGED MATERIAL IS BRINGING ISLANDS BACK TO LIFE

The Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island is world-renowned for its beneficial use of dredged material to restore remote habitat, helping mitigate the effects of sea-level rise. The restored island, located in Talbot County, is a popular stopover site for migratory birds along the Mid-Atlantic flyway and provides a home to a wide variety of other wildlife. Poplar Island is now home to 250 species of birds, the largest nesting colony of terns, 16,500+ diamondback terrapins more.





Beneficial Use



ADDRESSING COASTAL RESILIENCE

MPA is an active participant in the Maryland Commission on Climate Change and works closely with sister agencies and academic partners to identify opportunities to proactively plan and implement measures to reduce climate change impacts. The beneficial use of dredged material is an essential tool, with projects providing sediment to build more resilient shorelines and adding elevation capital to habitats. MPA is committed to becoming resilient in the face of climate change by:

- Working with partners to research, plan, and implement sound resilience and adaptation policies and projects
- Advancing the 2020 Innovative Reuse and Beneficial Use (IRBU) Strategy to "Investigate how beneficial use of dredged material can be expanded to address Maryland's coastal resiliency needs"

Did you know you can request dredged material from MPA?

MPA has a formal process for requesting dredged material. Anyone can request any quantity ranging from a 5-gallon bucket for scientific study to larger quantities for wetland creation/beneficial use projects or to be used as engineered fill material for upland placement. To learn more about this process and/or to officially request dredged material please visit the MPA's Innovative Reuse and Beneficial Use Program website.

THE FUTURE OF BENEFICIAL USE: MID-BAY UNDERWAY

Mid-Chesapeake Bay Island Ecosystem Restoration **Project** (Mid-Bay) is integral to the MPA's 20-year **DMMP** strategy. beneficial use of dredged material at this site will support the necessary depth of bay channels and reverse years of ongoing and accelerating erosion at James and Barren Islands. Located Dorchester in Maryland, the project will restore 2,144 acres of remote islands in the Chesapeake Bay, reduce storm-related shoreline erosion rates by up to 30% on neighboring shorelines, and create vibrant wetland and upland habitats for native plants, fish, and migratory and native birds. The project is projected to receive nearly 2 million cubic yards of sediment each year. That's the equivalent of a 16-foot wide road from Baltimore to San Francisco.



"There is growing recognition that dredged material can often be put to beneficial use...and that certain uses of this material can be fully protective of public health and the environment as well as being economically beneficial."

 Maryland Department of the Environment





