

Innovative Reuse & Beneficial Use Program



Dredging maintains safe passage for vessels making their way through the navigation channels that serve the Port of Baltimore, a key economic driver for waterborne commerce in Maryland. Removing sediment annually from the channels not only ensures the safety of our marine highway but also helps business at the Port of Baltimore continue to thrive.

Finding new placement capacity is a challenge in the Baltimore region. In 2017, the Maryland Department of the Environment issued guidance and criteria for opportunities to successfully reuse dredged material in a variety of ways.

Innovative reuse is the use of dredged material in the development or manufacturing of commercial, industrial, horticultural, agricultural, or other products and includes upland uses of dredged material. This may include roadway and construction materials, manufactured soil blends, geotechnical fill, and landfill cover.

Beneficial use includes the use of dredged material 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.



The Innovative Reuse Committee (IRC) was created in 2006 to provide advice on the development of a strategy for recycling and reusing dredged material from the Baltimore Harbor. The IRC meets quarterly to receive updates and provide feedback on the MDOT MPA innovative reuse strategy goals and implementation.



Opportunities associated with beneficial use can help with climate change adaptation and resiliency.



A Request for Proposals (RFP) was advertised in November 2019 for research and development of novel dredged material end-use applications; multiple contracts were awarded under the RFP. These awards will advance the use of dredged material in areas such as manufactured building products, stormwater management, coastal resiliency solutions, and agricultural applications.

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Sample Demonstration Projects

Alternative Daily Cover at the Baltimore City-owned Quarantine Road Landfill

MDOT MPA provided ~6,000 cubic yards of dewatered dredged material from Cox Creek Dredged Material Containment Facility (DMCF) for use as Alternative Daily Cover at the Baltimore City-owned Quarantine Road Landfill. As a result of the successful demonstration project, approval for dredged material to be utilized as Alternative Daily Cover and Intermediate cover for future landfill needs was provided by MDE.

Ridgley's Cove Remedial Capping Material

Ridgley's Cove is an under-utilized park located in Baltimore City, adjacent to the Middle Branch of the Patapsco River. As part of the upland remediation efforts, MDOT MPA in close coordination with MDE, Baltimore City, TopGolf, and Baltimore Development Corporation, provided 22,000 cy of blended dredged material for use as remedial capping material to assist in re-establishing the site as a recreational asset.

PROJECT TYPES

Many options are available to safely use dredged material, including:

- Roadway and construction materials
- Manufactured topsoil
- Brownfield reclamation
- Habitat Development
- Restoration of eroded islands and wetlands

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, to promote the long-term viability of the Port of Baltimore.



"This is gold from the bottom of the channel, serving the Port of Baltimore. There is wealth in that water."

- MDOT MPA Director of Harbor Development Kristen Fidler