

Confined Aquatic Disposal (CAD)

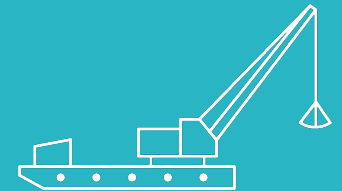
Dredging maintains safe passage for vessels making their way through the navigation channels that serve the Port of Baltimore. Removing sediment annually from the channels ensures the safety of our marine highway and helps businesses at the Port thrive.

The State of Maryland's Dredged Material Management Program (DMMP) was established to meet the requirements of a rolling 20-year dredged material management plan. The Maryland Port Administration (MPA) identified the need to investigate CAD as an alternative dredged material management option when there is a pinch point in MPA's primary dredged material management methods, which are upland placement sites and innovative reuse. CAD is a widely accepted method for managing dredged material, involving the placement of sediment into specially engineered underwater sites designed for safe long-term containment.

Underwater locations suitable for CAD include sandy material that can be dredged and used in innovative reuse or beneficial use projects. Sediment removed from the shipping channel is then confined in the resulting depression. Sand is also important to the structural integrity of the CAD cell walls, so that it doesn't lose capacity when the depression is dredged or when it is filled with sediment from the shipping channels.



MPA is responsible for waterborne commerce in the State of Maryland, which requires significant maintenance dredging of the navigation channel system.

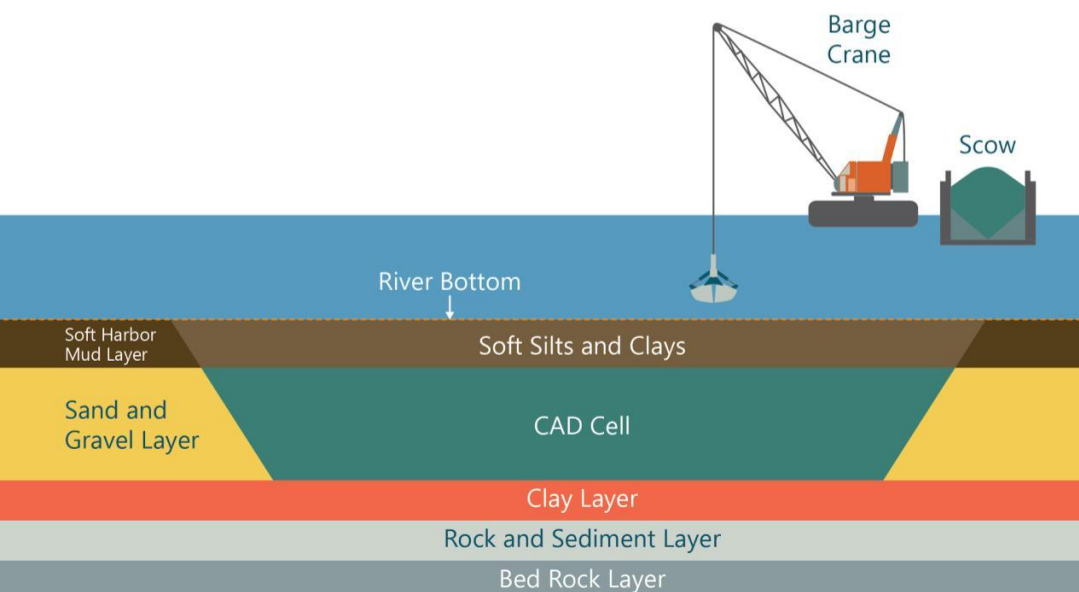


The enormous volume of dredged material generated each year to maintain safely navigable waterways means MPA is always searching for the best possible storage options for this sediment.



CAD has three key stages:

1. A depression (or cell) is excavated into the sand layer of the river bottom.
2. Excavated sand is used in a beneficial or innovative manner, such as wetland creation or structural fill.
3. The depression is then filled in with dredged material.



DREDGED
MATERIAL
MANAGEMENT
PROGRAM

www.Maryland-DMMP.com

Confined Aquatic Disposal



STATUS

A CAD project cannot and will not move forward until the data gaps identified by the Subcommittee are filled. Currently, MPA has other strategic priorities and lacks the funding to pursue CAD or other lower-priority projects. Any changes to this will be communicated through the DMMP committee process.

CAD IN BALTIMORE HARBOR

Following the 2016 CAD pilot project, in 2024 MPA created a technical advisory group – the CAD Subcommittee – involving experts from state and federal agencies, local governments, NGOs, and community stakeholders, to evaluate and guide the development of a second CAD pilot project in Baltimore Harbor with a focus on site selection, environmental impact, and public benefits.

In addition to input from committee members, the CAD Subcommittee conducted a comprehensive outreach campaign to solicit broad community input on the proposed CAD pilot project.

The results of the CAD Subcommittee’s work have been released with the Subcommittee’s consensus that current data gaps prevent MPA from proceeding with any design, engineering, or construction activities, including selecting a specific pilot location. The Subcommittee’s full report was released in 2025 and is available at Maryland-DMMP.com.

NEXT STEPS

The CAD Subcommittee recommended that MPA conduct additional investigations to continue assessing the viability of a second CAD pilot project. MPA could begin conducting studies to fill the data gaps identified when there is sufficient funding. MPA will continue to work with regulators, scientists, and engineers to implement science based solutions for its rolling 20-year dredged material management plan.



MPA is committed to providing clear information and engaging stakeholders to learn and address their concerns. The most up-to-date information about CAD is available at Maryland-DMMP.com

For projects like CAD that involve work in or near Maryland waters, both State and Federal permits and coordination are necessary. This integrated approach ensures that environmental and safety standards are comprehensively addressed.



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