

2022 MID-YEAR REPORT

MDOT MPA DREDGED MATERIAL MANAGEMENT PROGRAM

2022: Innovating, Investing, and Implementing

In 2021, the Dredged Material Management Program (DMMP), with input from our stakeholders, put forward these recommendations determined to usher the Port of Baltimore into a period of success that will benefit our region economically, environmentally, and socially for decades to come.

» Funding & Policy Recommendations

1. Engage the Congressional delegation, as well as federal and state partners, to support sufficient funding via WRDA legislation and appropriations bills for priority DMMP projects; prioritize Mid-Bay, Seagirt Loop Improvements, and maintenance by the Corps as part of the authorized Baltimore Harbor and Channels 50-foot Maryland & Virginia federal navigation project and Intracoastal Waterway, Delaware River to Chesapeake Bay, Delaware & Maryland federal navigation project.
2. Work in coordination with the American Association of Port Authorities to ensure favorable legislation and funding for the Corps navigation program and projects that benefit Port channels, while coordinating with the Ports Climate Program to favorably position the Port of Baltimore in new legislation related to resiliency and climate change.
3. Leverage partnerships and collaborations with sister state agencies and related collaborative efforts such as the Maryland Commission on Climate Change to ensure the DMMP evaluates external risks, maximizes opportunities, and successfully adapts to changing circumstances while accounting for Port growth, dredging needs, and climate change.

» Planning & Operations Recommendations

1. Conduct capacity and demand planning beyond a 20-year timeframe to support long-term sustainable dredged material management options while considering capacity recovery from Innovative Reuse and Beneficial Use.
2. Continue to implement the 2020 Innovative Reuse and Beneficial Use Strategy and pursue the acquisition of the Tronox property for implementation of long-term, large-scale Innovative Reuse and capacity recovery efforts.
3. Incorporate the potential impacts resulting from climate change into DMMP project planning, DMCF design, and project implementation while leveraging the best science available to quantify carbon sequestration benefits from the beneficial use of dredged material.
4. Support the efforts of the Mid-Bay Resiliency workgroup.
5. Advance MDOT MPA Critical Project priorities:
 - a: Mid-Chesapeake Bay Island Ecosystem Restoration Project
 - b: Expansion of Cox Creek and Masonville DMCFs
 - c: Seagirt Marine Terminal Loop Study
6. Evaluate future alternative management solutions such as CAD in Baltimore Harbor.
7. Explore alternative funding to advance the habitat design and future management of Hart-Miller Island in partnership with DNR.
8. Engage the Corps, Commonwealth of Virginia, resource agencies, and other stakeholders to identify suitable, cost effective dredged material placement options for the Virginia Channels.

» Outreach & Education Recommendations

1. Adapt outreach and education programs to align with COVID requirements and promote the inclusive and meaningful involvement of all people in the implementation of the DMMP by effectively educating and engaging all stakeholders equitably to increase the public's knowledge of the Port of Baltimore and dredging program, and their importance to the State of Maryland.
2. Engage stakeholders and recruit DMMP committee members that reflect the diversity of the communities adjacent to, and impacted by the Port of Baltimore, and ensure the benefits of MDOT MPA restoration projects and programs are distributed equitably without disproportionate impacts on vulnerable populations.
3. Create equitable access to DMMP sites to intentionally engage urban youth in targeted environmental programs as a pathway to careers in STEM and the maritime industry.

Progress to Date

The DMMP continues to innovate while delivering on the mission to maintain the Port's 50-foot-deep channel system and its commitment to science-informed decision making and pursuing outcomes that equitably benefit all Marylanders. Capitalizing on the substantial investments made over the past several years, numerous multi-year planning efforts have provided the foundation for a very successful first half of 2022.

Reporting in on 2022

» Funding & Policy

- The Infrastructure Investment and Jobs Act (IIJA) President Biden signed into law in November 2021 invests more than \$17 billion in port infrastructure and waterways. The IIJA port funding addresses the backlog of infrastructure and maintenance needs. The IIJA designates \$450 million annually for the Maritime Administration (MARAD) Port Infrastructure Development Program (PIDP) discretionary grant program.
- The MDOT Maryland Port Administration (MPA) applied for the “Maryland Investment to Support Supply-Chain Infrastructure to Obtain Net-Zero (MISSION) Project at the Port of Baltimore” to both the MARAD PIDP discretionary grant program and the USDOT Infrastructure for Rebuilding America (INFRA) discretionary grant program. The MISSION Project will add a third 50-foot berth at Seagirt Marine Terminal, a new grain transfer facility, and further densify and electrify the container yard.
- The Mid-Bay Ecosystem Restoration Project, a top priority for the Port and Maryland's Congressional Delegation, received \$84 Million in federal construction funding on behalf of the US Army Corps of Engineers (USACE) IIJA supplemental work plans to advance the Barren Island and James Island portions of the project. The USACE IIJA supplemental work plans also included funding for operations and maintenance of several shallow draft navigation channels in the Chesapeake Bay, some of which may be utilized to restore Barren Island.
 - > The Mid-Bay Resiliency Working Group has been established to identify, evaluate, and recommend design and habitat features that enhance climate resiliency and strengthen carbon sequestration while contributing to ecological improvement in or near the Mid-Bay Island Ecosystem Restoration Project.
 - > The Masonville Dredged Material Containment Facility (DMCF) expansion has received funding, and construction related to the Masonville DMCF base dike widening began in January.
 - > A Memorandum of Agreement was executed between the MPA, Department of Interior, and Federal Highways Administration to fund the design and construction of a recreational shared use path along Frankfurst Ave. linking Masonville Cove to the Gwynns Falls Trail and adjacent communities.

» Planning & Operations

- Inflow continues at Poplar Island Expansion as well as Cox Creek and Masonville DMCFs.
- Increasing capacity at the Cox Creek and Masonville DMCFs is critical to maintaining a long-term plan for placement capacity of Harbor material and maintaining the 50-foot channel system necessary for the competitive movement of cargo and thousands of jobs associated with the Port.
 - > The Cox Creek DMCF expansion is occurring vertically and laterally. Nontidal wetland permits from MDE and the USACE have been obtained, and heavy earthwork activities are underway. Waterside dike raising commenced in March and will continue into Summer to raise the dikes to +60'. The expansion will provide 8.8 million cubic yards (mcy) of additional capacity for a total of 15.3 mcy.
 - > Construction of the Cox Creek DMCF North-South Cross Dike between the existing DMCF and the expanded material borrow area is complete. This dike separates the existing DMCF from the borrow area and serves as a location to dry and process dredged material for innovative and beneficial reuse, and allows the facility to continue to receive inflow projects during the construction expansion.
 - > The associated mitigation project at the Genesee Valley Outdoor Learning Center is on a separate but parallel path, with the design and permitting near completion. Both the expansion project construction and associated mitigation projects remain on schedule.

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- > Masonville DMCF expansion is underway as the base dike widening is being constructed in preparation for the dikes being raised from +18' to +30' and a final elevation of +42'. The expansion will result in the site gaining approximately 4 mcy of capacity.
- > The conservation easement for Masonville Cove with Maryland Environmental Trust and Baltimore Green Space was finalized, conserving, in perpetuity, 47 acres, thus preserving the long-term environmental benefits of this natural area.
- MDOT MPA and MES continued exploring funding options for North Cell Habitat Development of Hart-Miller Island and are looking into cost-saving opportunities, including options to utilize onsite staff and equipment to work towards North Cell development.
- The Barren Island design is underway and continues to progress on schedule as part of the Mid-Bay Project. Permitting for the Barren Island portion of the restoration project is in its final phases. A public review of the supplemental Environmental Assessment has been completed. James Island design has begun.
- Implementation of the 2020 Innovative Reuse and Beneficial Use Strategy is well underway:
 - > Seven Research and Development Innovative Reuse projects are underway to allow MDOT MPA to identify high-volume, sustainable reuse applications to support long-term strategic planning and identify the critical steps to making large-scale innovative reuse a reality at the Port of Baltimore.
 - > Innovative Reuse and Beneficial Use website tool launched in late 2021 continues to serve as a resource and provides a formal dredged material request process.
- Confined Aquatic Disposal (CAD) preliminary planning and investigative efforts are underway, including geotechnical investigations and hydrodynamic modeling within Baltimore Harbor, to inform the siting of the next CAD pilot cell locations. Based on lessons learned from the first pilot project, the DMMP aims to identify a site by the end of June 2022. A second pilot project will provide an opportunity to study the CAD concept under different environmental conditions and refine filling and monitoring techniques when compared to the first pilot project.
- The Seagirt Marine Terminal Berth 3 Deepening is complete. The Seagirt Loop Feasibility Study, a 3-year feasibility study between MDOT MPA and USACE, is underway. This study will guide efforts to relieve the terminal's berth capacity bottleneck, increase operational and commercial flexibility, and enable vessels to move in and out of the terminal more efficiently.
 - > The Draft Seagirt Loop Integrated Feasibility Study and Environmental Assessment Report was released in February for public comment, and a public meeting was hosted. Optimization of the plan design continues with the Agency Decision Milestone scheduled for mid-2022.

» Outreach & Education

- Masonville Cove partners hosted U.S. Department of the Interior Secretary Deb Haaland to Masonville Cove, the nation's first Urban Wildlife Refuge Partnership, to learn about the Partnership's significant contributions to the local economy and ongoing efforts to enhance Baltimore communities through recreation opportunities, restoration, and outdoor education. Additional programming includes:
 - > Masonville Cove's First National Literacy Celebration and Celebrate Trails Day 2022, both hosted in April.
 - > U.S. Fish and Wildlife Service (USFWS) hosted an engaging community science program at the Masonville Cove Environmental Education Center, allowing citizen volunteers to join USFWS biologists as they investigate the animals that roam Masonville Cove after dark. Participants appreciated the opportunity to become community scientists and learn the importance of wildlife management in cities and how biologists track and identify mammals.
- Baltimore Port Alliance hosted its third Hiring & Career Expo, bringing together over 35 employers in the maritime industry and hundreds of individuals seeking employment in the industry at all levels ranging from high school seniors to seasoned professionals, thus strengthening the Port of Baltimore by growing the workforce.

Reporting in on 2022

- Hart-Miller Island State Park opened on May 21, 2022 for visitors to boat, grill, camp, or swim. Restored by the MDOT MPA to 1,100 acres after decades of erosion using sediment dredged from Port of Baltimore shipping channels, Hart-Miller Island also is well-known for its migrating bird populations.
- Mid-Bay public outreach and stakeholder engagement efforts are ongoing.
- Fleming Park Shoreline Restoration Project, which aims to add new resiliency and ecological benefits to Fleming Park, hosted an Open House on May 25 to allow the community to meet the project team, see the latest design updates, share comments and take a tour of the site.

Looking Ahead: Expected Milestones this Year

- USACE is scheduled to award the first contract for construction at Barren Island as part of the Mid-Bay Project in Fall 2022.
- Poplar Island Tours and Mid-Bay Community Meeting events will be held in Summer 2022.
- Enactment of the fiscal 2023 Energy & Water Development Appropriations Act or similar legislation will allocate approximately \$3.22 million in the Administration's proposed FY23 budget to dredge the Honga River and Tar Bay, improving access for watermen. Some of the material may be beneficially used to create wetlands at Barren Island.
- Construction of the waterside dike to elevation +44' will be completed. BPW approval is expected to secure the easement and begin construction for the Genesee Valley Outdoor Learning Center mitigation project for the Cox Creek DMCF expansion.
- The design of the Swan Creek Nature Trail, a community enhancement recommended by the Cox Creek Citizens Oversight Committee, will continue and is expected to be completed in early 2023. Valuable input from stakeholders on the design and external funding for some project elements have helped advance this project on schedule.
- MDOT MPA continues to advance discussions with property owners to acquire property adjacent to the Cox Creek DMCF to further long-term capacity recovery efforts through large-scale IR of dredged material and future cargo terminal/maritime use.
- Additional results from the Research and Development Innovative Reuse contracts are expected.
- Thirty percent of the design will be complete for the Fleming Park Shoreline Restoration project in partnership with the Turner Station Community. This project aims to provide ecological uplift and restoration to Fleming Park, taking steps to address coastal resiliency with the beneficial use of dredged material.
- The design process will begin for a shared use path along Frankfurst Ave. linking Masonville Cove to the Gwynns Falls Trail and adjacent communities.
- Virginia Channels BEWG will complete their Phase 1 milestone to identify and rank potential alternative solutions for dredged material placement in the Commonwealth of Virginia from the Virginia Chesapeake Bay Approach Channels subset of the Baltimore Harbor and Channels Civil Works Project.
- In July, the inaugural Youth Birding Week will be hosted at all four MPA DMCF sites for 12 students from underserved South Baltimore communities. Students will participate in this week-long immersive program to learn about habitat loss, how it affects local bird populations, and how habitats can be restored to support bird survival.
- The 3rd Annual Hart-Miller Island 5-Miler will be held to benefit the Friends of HMI and Maryland State Park Foundation.