## FINAL SUMMARY OF THE DREDGED MATERIAL MANAGEMENT PROGRAM EXECUTIVE COMMITTEE MEETING December 4, 2023, 2:00 PM Maryland Department of Transportation (MDOT) Headquarters Harry Hughes Conference Room 7201 Corporate Center Drive, Hanover, Maryland 21076

## Members Attending:

Chesapeake Bay Foundation (CBF): Allison Colden
DMMP Citizens' Advisory Committee (CAC) Liaison: Adam Lindquist
Maryland Department of Natural Resources (DNR): Secretary Josh Kurtz
Maryland Department of the Environment (MDE): Matthew Rowe
Maryland Department of Transportation (MDOT): Secretary Paul Wiedefeld
U.S. Army Corps of Engineers (USACE), North Atlantic Division, Baltimore District (CENAB): Colonel Estee Pinchasin
USACE, North Atlantic Division, Philadelphia District (CENAP): Lieutenant Colonel Jeffrey Beeman
University of Maryland Center for Environmental Science (UMCES): Dave Nemazie

### **Others Attending:**

Angie Ashley Consulting: Angie Ashley

Baltimore Port Alliance (BPA): Rupert Denney

Council Fire: George Chmael II

DNR: Kristen Fidler, Richard Ortt

Maryland Port Administration (MPA): Rachael Gilde, Jennifer Guthrie, Margie Hamby, Holly Miller, Rachel Miller, Robert Munroe, Bill Richardson, Richard Scher, Darren Swift

Maryland Environmental Service (MES): Dr. Charles Glass

USACE CENAB: Eric Lindheimer, Graham McAllister, William Sieb, Doug Stamper

USACE CENAP: Michael Hart

UMCES: Elizabeth Price, Dr. Lisa Wainger

## 1.0 Convene: Introductory Comments

The December 4, 2023, Dredged Material Management Program (DMMP) Executive Committee meeting was convened, and attendees introduced themselves and their affiliations. Secretary Wiedefeld put forth a motion to approve the August 21, 2023, DMMP Executive Committee meeting summary as written. The Executive Committee unanimously approved the August 2023 meeting summary.

# 2.0 Port Highlights Robert Munroe, MPA

Mr. Munroe emphasized the crucial role of DMMP stakeholders, including the DMMP Executive Committee, elected officials, community organizations, private businesses, maritime partners, nonprofit organizations, and educational institutions, in building the DMMP's future. These collaborations create a tapestry of partnerships, fostering teamwork and camaraderie that sustains the Port of Baltimore (POB) as a leading national port and a vital link in the nation's supply chain, driving Maryland's economy and supporting waterborne commerce while preserving natural resources.

While economic success is pivotal, it represents just one of the foundational elements essential for future development. The DMMP adopts a comprehensive approach to safeguarding air, land, and water quality; promoting biodiversity; and supporting human health. The DMMP focuses on restoring Chesapeake Bay

# Secretary Paul Wiedefeld, MDOT

ecosystems, advocating for coordinated management programs to protect habitats, and seeking collaboration opportunities to integrate innovative reuse and beneficial use (IRBU) into climate resilience and adaptation policies. Stakeholder collaboration aims to establish a DMMP that ensures equitable distribution of benefits, creates opportunities to explore Maryland's natural resources, develops educational and outreach programs for youth and communities, and protects vulnerable communities from disproportionate costs associated with POB activities.

Economically, the POB has successfully rebounded from the substantial impact of the COVID-19 pandemic on the global maritime shipping industry. Despite persistent worldwide supply chain challenges, fiscal year 2023 (FY23) saw the POB achieving a record in handling 11.6 million tons of general cargo. Thus far in FY24, a notable 28% increase in roll-on roll-off construction machinery and a 6% increase in imported containers is leading to another record-breaking year for the POB. Current trends suggest the POB is poised to set a record in overall cargo tonnage at state-owned ports in FY24. The cruise industry is also experiencing a robust post-pandemic recovery, with all cruise ships departing from the POB operating at full passenger capacity. The recent return of Norwegian Cruise Line for the fall and winter schedule, along with year-round cruising offerings from Carnival and Royal Caribbean, further contributes to the POB's positive outlook. The economic success achieved is heavily reliant on the DMMP, ensuring the safety and navigability of the navigation channels serving the POB.

Mr. Munroe extended gratitude to the USACE for their leadership and diligence in planning, designing, and executing maintenance dredging, which is crucial for keeping the POB operational. Recognition was given to Ms. Holly Miller, Director of Harbor Development at Maryland Port Administration (MPA), and the Harbor Development team for their persistent efforts in shaping the future of the DMMP through strategic planning, coordination, and implementation of important initiatives. Appreciation was also expressed to the DMMP Executive Committee and all attendees for their commitment to collaborative teamwork, proactive consideration of community impacts in planning and managing DMMP operations, and their contribution to fostering thriving communities through meaningful dialogue, shared goals, and collective accountability.

**3.0** Cox Creek Sediment Technology and Reuse (STAR) Facility Darren Swift, MPA Mr. Swift presented on the future of innovative reuse (IR) at the Cox Creek STAR Facility, located north of the Cox Creek Dredged Material Containment Facility (DMCF). The Cox Creek STAR Facility plays a crucial role in advancing the IRBU Program, focusing on large-scale capacity recovery from the Cox Creek DMCF. MPA purchased the approximately 140-acre property in December 2022, with about 120 acres to be developed for IR operations. The site features a CSX rail line, convenient access to major highways, and potential maritime access.

The Cox Creek STAR Facility, formerly an industrial property used for titanium dioxide manufacturing, requires remediation before initiating IR operations. MPA is working through an administrative consent order with the previous property owner and MDE to guide the ten-year phased remediation process. MPA is actively developing a Remedial Action Plan (RAP) for each of the five operable units to be submitted to MDE for approval before moving forward with remediation activities and, ultimately, site development. The first phase of remediation focuses on an area designated for large-scale dewatering operations and stockpiling of dewatered dredged material within the next two years. A second phase of remediation will involve a larger dewatering area, potentially allowing for additional stockpiling of dewatered dredged material with property remediation. MPA is crafting a Master Plan for full site development and is exploring various scenarios to identify suitable contracting

options for private development of the Cox Creek STAR Facility. This strategic effort is instrumental in advancing large-scale IR, which is crucial for ensuring that MPA has a twenty-year rolling plan in place for the effective management of dredged material.

Through a Request for Proposals (RFP) issued by MPA in 2019, seven Research and Development (R&D) contracts were awarded for projects involving diverse reuses of dredged material. These projects aim to enhance capacity recovery from the Cox Creek DMCF. All projects and products have been tested in accordance with the MDE Guidance Document, which outlines a framework for dredged material reuse. Five of the seven R&D projects have been completed, showing promising results for potential large-scale implementation of IR. A notable project recently completed a milestone for their project at the Cox Creek DMCF. CSI-Environmental employed geotextile tubes (geotubes) as a method of dewatering, followed by utilizing the geotubes for shoreline erosion control. The process involved hydraulically pumping material into the geotubes and employing a polymer to separate solids from water, effectively drying the material.

## 4.0 Harbor Development 2023 DMMP Annual Report

## Holly Miller, MPA Dave Nemazie, UMCES

Ms. Miller discussed the 2023 DMMP Annual Report, covering highlights and recommendations for 2024. The Annual Report places the year's work in the context of advancing MPA's mission, highlighting the significance of the POB and long-term dredged material management plans. The Annual Report summarizes the key accomplishments towards the 2023 DMMP Recommendations and emphasizes partnerships with stakeholders that are essential to mutually beneficial outcomes and successes. The Annual Report also provides recommendations for sustaining DMMP excellence in 2024.

This year, MPA, guided by the DMMP, invested in infrastructure, equipment, and processes for lasting economic and ecological benefits. Capacity-building projects were implemented, and effective working relationships were strengthened with the private sector, federal government, sister state agencies, and diverse stakeholder communities. MPA's ongoing efforts focus on planning and providing sustainable dredged material management options for twenty years and beyond, contributing to Maryland's economic growth, prosperity, and sustainability.

Ms. Miller organized report highlights into three categories mirroring the recommendations: Funding & Policy; Planning & Operations; and Outreach & Education.

# Funding & Policy

Securing ample funding for projects benefiting the POB and waterborne commerce remains a key focus for MPA. MPA participates in the American Association of Port Authorities (AAPA) Quality Partnership Initiative and the Harbors and Navigation Subcommittee, a collaboration between AAPA and the USACE aimed at enhancing strategic and operational efficiencies in the nation's maritime transportation system. Collaborating closely with AAPA members, MPA contributed to the drafting of language in Congress's 2022 reauthorization of the Water Resources Development Act (WRDA) for the benefit of all ports.

In coordination with MPA, USACE has recently concluded the modification of the Baltimore Harbor Anchorages and Channels Modification of Seagirt Loop Channel, Maryland Feasibility Study (Seagirt Loop Modification) to evaluate relieving the terminal's bottleneck and enabling more efficient vessel movement. The Seagirt Loop Modification project is set to progress to Preconstruction, Engineering, and Design upon the execution of a design agreement with USACE. MPA is working with the Maryland Congressional delegation to secure construction authorization for the Seagirt Loop Modification project in WRDA 2024.

In February 2023, MPA and DNR met to explore collaboration opportunities on coastal resiliency, considering the incorporation of IRBU of dredged material into projects statewide. MPA, in partnership with the University of Maryland, secured a Federal Highway Administration (FHWA) Climate Challenge grant to study the life cycle analysis and the development of an environmental product declaration for constructing vegetative infiltration berms for flood protection using Baltimore Harbor dredged material and dredged material blends.

### Planning & Resilience

The DMMP continues to invest in long-term capacity planning and strategic capacity recovery efforts. While current overall capacity has the potential to accommodate the next twenty years of dredging needs, there are near-term pinch points in the current plan for material dredged from the Baltimore Harbor channel segments. Planning efforts show that MPA can accommodate all anticipated USACE maintenance dredging, planned maintenance dredging projects from local governments and the private sector, as well as the Seagirt Loop Modification project in the short-term.

Estimates indicate that IR will play a crucial role in optimizing placement site capacity, ensuring MPA can accommodate projected dredging needs within the twenty-year planning period. Continued planning and an acceleration of material recovery schedules is essential to maintain sufficient capacity beyond the twenty-year mark. To maximize capacity, facilities must be diligently managed, adhere to project construction schedules, incorporate capacity recovery and dewatering strategies, and explore alternative dredged material management solutions. The timing of dredging needs and available capacity is critical, and challenges may arise if funding is not available for capacity-generating projects when needed.

## Planning & Operations

The robust pipeline of IR R&D projects is a pivotal factor in defining the need for the Cox Creek STAR Facility. In addition to the seven R&D projects, MPA is currently evaluating three additional R&D proposals indicating a strong interest from industry in assisting to find innovative solutions for meeting capacity needs. The robust response to the R&D RFP demonstrates the need for the Cox Creek STAR Facility.

In 2011, the DMMP Harbor Team recommended Confined Aquatic Disposal (CAD) as an alternative to the limited capacity available in the DMCFs. In 2016, MPA initiated a pilot CAD cell at the Masonville Vessel Berth, conducting a thorough two-year study on this dredged material management approach. Monitoring of the CAD pilot project concluded in 2019, leading to an evaluation of lessons learned and identification of a proposed site for a second CAD pilot cell located southeast of the Cox Creek DMCF. Due to concerns about the proposed location, the CAD pilot project has been paused to facilitate a comprehensive outreach process. This includes reengaging the Bay Enhancement Work Group (BEWG) in January 2024 to evaluate CAD as a concept while simultaneously implementing an extensive outreach and engagement strategy focused on CAD in the Baltimore Harbor, emphasizing the importance of exploring emerging dredged material management solutions. This strategy is designed to create an inclusive, collaborative, and transparent process for informing, engaging, and establishing constructive dialogue with project stakeholders.

Notable progress for the POB and the DMMP has been made in 2023. MPA significantly increased capacity by completing expansions at two existing facilities, Cox Creek DMCF and Masonville DMCF,

and beginning construction at a new site, the Mid-Chesapeake Bay Island Ecosystem Restoration (Mid-Bay) Project. MPA is developing the state's first center for IR, a crucial component for the program's long-term sustainability.

The Mid-Bay Project encompasses restoration of both Barren and James Islands. Phase I of Barren Island construction began in March 2023 and has made significant progress. Throughout 2023, MPA and USACE collaborated with community members, especially watermen, to mitigate the impact of construction on livelihoods. MPA conducted targeted outreach and public meetings to foster positive relations with the watermen and the construction contractor, ensuring safe navigation during fishing and crabbing season. The James Island portion of Mid-Bay is currently in the design phase and progressing as scheduled. MPA and USACE are conducting workshops to gather input and ideas from resource and regulatory agencies, with the aim of incorporating more nature-based solutions into the James Island design. This collaborative effort will extend into 2024 and throughout the duration of the project. Mr. Denney recommended that communities near the Mid-Bay Islands. Ms. Miller responded that, due to proximity, the public in these communities may find it more accessible to visit Poplar Island and supported the suggestion.

The expansion of the Cox Creek DMCF is ongoing to increase its capacity, and in 2023, MPA achieved a significant construction milestone by raising the dike to +60 feet. This accomplishment contributes to MPA's ability to fulfill its twenty-year planning mandate. The Cox Creek Citizens Oversight Committee (COC) continues to offer valuable input regarding facility operations and recommendations for minimizing potential impacts on local communities and natural resources. In collaboration with the Cox Creek COC and community stakeholders, the Swan Creek Nature Trail (SCNT) has been conceived as a community enhancement project, establishing a two-mile trail in the Cox Creek forested conservation easement area. The final design of the SCNT is nearing completion, and construction is planned to commence in the summer of 2024, with the objective of opening the trail to the public by 2025.

The Masonville DMCF is currently undergoing an expansion to increase capacity. The dike raising to +18 feet was successfully completed in 2021, and the base dike widening, initiated in 2022 to prepare for additional elevation, was completed under budget in early 2023. Construction is currently in progress for the dike raising to +30 feet, with an estimated completion time of approximately thirty months. The goal is to raise the dikes to +42 feet by 2029.

This year commemorates the tenth anniversary of Masonville Cove's designation as the nation's first Urban Wildlife Refuge Partnership (UWRP). While Masonville Cove has evolved into a recognized educational and recreational community asset, accessing the site remains challenging. In line with its commitment to restore access to the waterfront for communities surrounding the Masonville DMCF, MPA has secured two grants from the FHWA Federal Lands Access Program (FLAP) to design and construct the Masonville Cove Connector (MCC), a shared use path. The MCC will integrate with a network of over twenty miles of trails, providing walking and biking connectivity to numerous neighborhoods, a regional hospital, and wellness facilities. Currently in the planning stages, the development team is actively collaborating with community members and current users of Frankfurst Avenue to gather input and ensure the MCC aligns with the diverse needs of all users. Two traffic studies have been conducted, and a series of design concepts have been developed. The final design is anticipated to be completed in early 2025, followed by construction.

HMI serves as a haven for boaters, offering recreational opportunities and the chance to encounter

various species, including migrating bird populations. In 2023, HMI attracted over 44,500 visitors participating in recreational activities. Tours at HMI experienced a notable increase, with more than 750 people visiting through MPA's site tours. Currently, restoration planning for the 800-acre North Cell is underway, involving MPA, DNR, and input from community partners. MPA is exploring multiple habitat development designs and is investigating alternatives that align with shared goals between DNR and MPA for the project. With the cessation of inflow at HMI, the HMI COC has shifted its focus to developing a site closure plan. Additionally, a Friends of HMI group has been established to enhance community access through twice-monthly site and birding tours, with bonus dates added as requested.

#### Outreach & Education

Outreach and engagement remain a top priority for MPA, with a focus on environmental justice, diverse representation reflecting the communities MPA serves, and increasing the public knowledge about the POB to pursue outcomes that equitably benefit all Marylanders. In 2023, MPA's outreach and education efforts resulted in nearly 21,000 engagements across almost 400 events. Demonstrating a commitment to inclusivity and equitable access, MPA introduced outreach initiatives provided in Spanish. Key outreach materials, including fact sheets, are now available in both Spanish and English, and Spanish-speaking staff are present at events as appropriate. A notable highlight of the 2023 outreach program was the Latino Conservation Day celebration on July 30, 2023, at Masonville Cove, attended by 118 people, including families from the surrounding area and from Latinx communities in Baltimore. The Chesapeake Bay Trust, Maryland Ornithological Society, and MPA sponsored the second annual Youth Birding Week in July 2023. Eleven youth from the Baltimore area spent a week learning birding basics, exploring habitats at the DMCF sites, and visiting restoration sites like the Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island (Poplar Island).

MPA is a proud member of the Baltimore Port Alliance (BPA) and is dedicated to enhancing workforce development in the maritime, transportation, and logistics industries. With support from MPA and industry professionals, the BPA hosted the fifth Hiring & Career Expo. The event attracted 38 employers and nearly 250 job seekers, making it the largest expo to date. Remarkably, 100% of surveyed exhibitors expressed a desire to participate in similar future events. Throughout 2023, the formal DMMP committee structure, adult education programs, student-focused education programs, and expanding stakeholder partnerships have been bolstered by new relationships, including collaborations with local Historically Black Colleges and Universities (HBCUs), civic organizations, and local faith-based congregations.

Mr. Nemazie emphasized that the 2024 Recommendations align with MPA's commitment to long-term success, benefiting the region economically, environmentally, and socially. The DMMP Management Committee has crafted thirteen forward-looking recommendations categorized into Funding & Policy; Planning & Operations; and Outreach & Education.

The Funding & Policy Recommendations underscore collaboration, partnerships, and enhanced climate resilience planning. Emphasizing collaboration is crucial to securing funding for DMMP-related greenhouse gas emissions reduction projects at the state and federal levels to meet Maryland's target of 60% reduction by 2031 and net zero by 2045. The Planning & Operations Recommendations include detailed considerations for climate resilience, equitable access, continued DMCF expansions, and initiatives related to the Cox Creek STAR Facility. Emphasis is placed on advancing IR and capacity recovery, recognizing the challenge of planning beyond the twenty-year timeframe to facilitate long-term dredged material management options. The Outreach & Education Recommendations center on enhancing transparency and collaboration with DMMP stakeholders, emphasizing environmental justice efforts. Additionally, a recommendation is tailored to the CAD project, highlighting the intensified

outreach focus for 2024.

The Executive Committee unanimously accepted the 2023 DMMP Annual Report and 2024 Recommendations.

#### 5.0 USACE Reports

## Lt. Colonel Jeffrey Beeman, CENAP Colonel Estee Pinchasin, CENAB

#### USACE North Atlantic Philadelphia District (CENAP)

Lt. Colonel Beeman reported that the 2024 maintenance dredging contract was awarded in September 2023. The anticipated dredging volume, based on recent survey data, is approximately 500,000 cubic yards (cy). This dredging will take place in the upper Chesapeake Bay with most of the material being removed from the Worton Point area. The contract also encompasses dredging at the basin at Chesapeake City. Dredging operations are slated to commence the first week of December 2023 and conclude by mid-March 2024.

Progress is underway on the \$50 million St. George's Bridge rehabilitation project with anticipated completion in October 2024. The bridge is currently closed to all vehicular traffic and there are no permanent channel obstructions or air gap restrictions linked to the remaining work activities.

A contract, valued at \$7.5 million, was recently awarded to Silver Lake Construction for repairs on the Reedy Point Bridge. The repair work encompasses replacement of the existing bearings, miscellaneous steel repairs, and concrete pier repairs. Repair work is expected to commence in Spring 2024, with completion anticipated in April 2025. There are no anticipated channel obstructions or air gap restrictions associated with the repair activities. The Reedy Point Bridge, ordinarily featuring two travel lanes in each direction, will be reduced to one travel lane in each direction for the duration of the repair work.

#### USACE North Atlantic Baltimore District (CENAB)

Colonel Pinchasin reported the completion of the federal fiscal year 2023 (FFY23) Baltimore Habor contract. Approximately 350,000 cy of material was dredged from Brewerton Angle and placed at the Cox Creek DMCF and approximately 1.5 million cubic yards (mcy) of material was dredged from Craig Hill Angle, Brewerton Eastern Extension, and Tolchester Channel and was placed at Poplar Island. The FFY24 Baltimore Harbor Maryland approach contract dredging has commenced. Approximately 400,000 cy of material is expected to be dredged from the Curtis Bay Channel and placed at the Cox Creek DMCF, while around 1.3 mcy is anticipated to be dredged from the Brewerton Eastern Extension and beneficially reused at Poplar Island.

For the FFY24 Baltimore Harbor Virginia approach channels, approximately 1.7 mcy of material is expected to be dredged from York Spit and placed at Wolf Trap Alternate Northern Extension Placement Site. The environmental compliance package, including a Federal Consistency Determination, was submitted to the Virginia Department of Environmental Quality (DEQ) in June 2023. Despite ongoing coordination, the critical condition of York Spit has increased concerns. As such, USACE anticipates that awarding of the contract will be delayed from early 2024 to the middle of 2024.

Regarding the Mid-Bay Project, Phase I of Barren Island construction is making progress and is approaching 44% completion, with an anticipated completion date in October 2024. Phase II of Barren Island is advancing to 95% design and will involve dredging in the Honga River, with the material placed at Barren Island. This contract is likely to be awarded in spring 2024. Modeling and design work for James Island is underway, and the first contract is expected to be awarded in fall 2025, with construction

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commencing shortly after. Once Poplar Island reaches capacity, estimated between 2028 and 2032, material will be placed at James Island. Poplar Island currently has approximately 25 mcy, or 37%, of material capacity remaining. The next inflow is anticipated in January 2024, with spillway rehabilitation projects scheduled before the start of that inflow.

The Seagirt Loop Modification project reached a significant milestone with the signing of the Chief's Report in June 2023. The recommended plan involves completing the channel to its authorized dimensions, with a 50-foot depth and an average width of 760-feet. Additional widening at bends is included to ensure safe navigation. Subsequently, the Chief's Report was submitted to the Assistant Secretary of the Army for Civil Works (ASA) for review and transmission to the Office of Management and Budget and then the U.S. Congress. In August 2023, the ASA's office directed USACE to initiate the Preconstruction, Engineering, and Design phase utilizing the remaining budget from the Seagirt Loop Modification Study. This decision was made as the study was completed three months ahead of schedule and approximately \$800,000 under budget.

Regarding the Wicomico River maintenance dredging, the containment structures were completed in May 2023, enabling dredging operations to commence in October 2023. The dredging is progressing as planned and is expected to be completed by the end of December 2023. Subsequent activities involve vegetation planting, scheduled to begin at the start of the 2024 growing season.

## 5.0 DMMP Committee Reports

Mr. Lindquist highlighted significant strides in revitalizing water-based recreation back into Baltimore Harbor. The Waterfront Partnership of Baltimore unveiled the Baltimore Blueway Master Plan in August 2023, outlining a curated network of water trails and access points for paddlers in the Baltimore Harbor. Additionally, in November 2023, the Waterfront Partnership of Baltimore announced plans to host a public plunge event, Harbor Splash, in the Baltimore Harbor in 2024. Improved water quality in the Baltimore Harbor now allows for periods when water-based recreation, including swimming, is deemed safe as it meets water quality standards through routine testing.

# DMMP Citizens Advisory Committee (CAC)

Mr. Linquist stated that the CAC remains dedicated to supporting MPA's prioritization of community outreach and engagement. MPA has successfully built a valuable social infrastructure and effective tools to address public reservations about dredged material placement. The CAC supports the 2023 DMMP Annual Report's visions and recommendations, emphasizing environmental justice, diverse DMMP committee membership, equitable access to DMMP sites, and a robust outreach strategy for the proposed CAD pilot cell.

# 6.0 Comments from the DMMP Executive Committee

Secretary Wiedefeld welcomed questions and comments from the DMMP Executive Committee. Mr. Denney suggested exploring if private entities can use dredged material, such as in construction projects, and receive mitigation credits. Dr. Glass shared that the Climate-Ready Workforce Letter of Intent (LOI), submitted in late November 2023, included supporting the POB with stream and shoreline restoration using dredged material, showcasing collaborative opportunities for federal funding and partnerships in climate resiliency including workforce training focused on climate resilience concepts, principles, techniques, and implementation.

# 7.0 Adjourn

Secretary Wiedefeld expressed gratitude to the presenters and committee members for their attendance

## Adam Lindquist, CAC Chair

and adjourned the meeting.