

FINAL DRAFT
SUMMARY OF THE DREDGED MATERIAL MANAGEMENT PROGRAM
MANAGEMENT COMMITTEE MEETING
March 27, 2019, 10:00 AM
World Trade Center
20th Floor, Stanton Room
Baltimore, Maryland

Attendees:

Association of Maryland Pilots (AMP): Eric Nielsen
Baltimore Port Alliance (BPA): Rupert Denney
Chesapeake Bay Foundation (CBF): Doug Myers
Citizens' Advisory Committee (CAC) Facilitator: Angie Ashley
Ecologix Group: Steve Pattison
Maryland Department of Natural Resources (DNR): Bruce Michael
Maryland Department of the Environment (MDE): Matt Rowe
Maryland Geological Survey: Richard Ortt
Maryland Environmental Service (MES): Tammy Banta, Olivia Gullledge, Jeff Halka
Maryland Department of Transportation: Charles Glass, Eddie Lukemire
Maryland Department of Transportation Maryland Port Administration (MDOT MPA): Sergio Adantor, Dave Bibo, Chris Correale, Kristen Fidler, Katrina Jones, Kristen Keene, Holly Miller, Gannon Price, John Vasina
NOAA; National Marine Fisheries Service: Kristy Beard
Rukert Terminals: Steve Landess
University of Maryland Center for Environmental Science (UMCES): Dr. Peter Goodwin, Dave Nemazie
US Army Corps of Engineers, Baltimore District (CENAB): Kevin Brennan, Biniam Bogale, Justin Callahan, Graham McAllister
US Army Corps of Engineers, Philadelphia District (CENAP): Jeffrey May

Action Items:

Statements for the Record:

1. Ms. Correale welcomed everyone and stated that this meeting is her last Dredged Material Management Program (DMMP) meeting before her retirement.

1.0 Introductions, Approval of Meeting Summary **Ms. Chris Correale, MDOT MPA**
Ms. Correale welcomed the attendees and called the meeting to order. Attendees were asked to introduce themselves and state whom they represent. Ms. Correale requested comments on or changes to the summary from the November 2, 2018 DMMP Management Committee meeting. A motion to accept the meeting summary passed unanimously.

2.0 Citizens Advisory Committee Report **Ms. Angie Ashley, CAC**
Ms. Ashley stated that she would be providing the Citizens' Advisory Committee (CAC) update on behalf of Adam Lindquist, the CAC Chair; Mr. Lindquist is currently away at a conference. Ms. Ashley congratulated Ms. Correale on her retirement and for her success as Director of Harbor Development.

The Annual Report was reviewed by the CAC. Committee members are supportive of the recommendations and look forward to continued progress updates.

A dredged material inflow tour was offered to all DMMP committee members on 3/18 at the Masonville Dredged Material Containment Facility (DMCF). The tour was well attended and well received, with 18 committee members ranging from all DMMP committees.

CAC members are supportive of the Masonville Cove access initiatives and the Decade of Dedication celebration of Masonville Cove's 10th year. Members are also supportive of the progress on Harbor Development projects including the Poplar Island expansion, the Mid-Chesapeake Bay Island, and Innovative and Beneficial Use of dredged material.

During the 2/13 CAC meeting, a letter of support was discussed and submitted regarding a grant application to the United States Department of Transportation (USDOT) as part of the second round of Infrastructure for Rebuilding America (INFRA) grant funding for federal funding towards the Howard Street Tunnel project.

A Friends of Hart-Miller Island (HMI) State Park Facebook page was created to increase public accessibility and spur more interest in HMI. In less than two days, the page had over 125 likes. Ms. Ashley invited meeting attendees to like the page (<https://www.facebook.com/Friends-of-Hart-Miller-Island-State-Park-2051363248489906/>). Events and activities will be updated regularly.

A Masonville CAC meeting will occur on 4/2. The committee will hear an update on the pair of nesting bald eagles including an update on site operation and access impacts. A Cox Creek Citizens Oversight Committee (COC) meeting will occur on 4/10 and will include a van tour of the Cox Creek DMCF. For the first time, the Harbor Team and DMMP CAC committee will have a joint meeting on 8/7.

3.0 Innovative & Beneficial Reuse Progress Report **Ms. Kristen Keene, MDOT MPA**

Ms. Keene stated that, in coordination with partners and with help and support from the regulatory community, dredged material has been recovered from the Cox Creek DMCF, dewatered and stockpiled, transported off-site, and is being reused in a positive and environmentally responsible way. Approximately 10,500 cubic yards (CY) of dredged material has been removed from the Cox Creek DMCF for demonstration projects: 4,500 CY for engineered fill at Hawkins Point and 6,000 CY for alternative daily cover at the Quarantine Road Landfill.

Hart-Miller Island North Cell Habitat Development Pilot Project

In summer 2017, Maryland Department of Transportation Maryland Port Administration (MDOT MPA) partnered with Mahan Rykiel Associates in a collaborative design research program, known as Design with Dredge, which explored ways that dredged material could be used innovatively and beneficially through the lens of landscape architecture in the Baltimore area.

One of the conceptual designs developed through the Design with Dredge the HMI North Cell Habitat Development Pilot Project. The project is split into four phases: concept design, design development, construction, and adaptive management. The project is currently in the design development phase, expected to be complete by the end of summer 2019. The construction phase is expected to begin late fall 2019, followed by three years of adaptive management and monitoring.

The goals of this project are to create a diverse habitat, optimize overall operation and maintenance costs for the HMI North Cell, and engage and educate stakeholders. MDOT MPA wants to use this opportunity

to build support for the Innovative Reuse (IR) program and to demonstrate how dredged material is a valuable resource that can be used in a variety of ways.

Governor Hogan's Executive Order

Ms. Keene stated that in June 2017, Governor Larry Hogan issued the Waste Reduction and Resource Recovery Executive Order, which recognizes dredged material as a valuable resource with vast reuse potential, calls on state agencies to be leaders of dredged material reuse, and prompted the creation of the Sustainable Materials Management Maryland (SM³) group.

The MDOT MPA is an active member of the SM³ group; on December 14, 2018 MDOT MPA and MES co-hosted an SM³ meeting. Three takeaways from the December SM³ meeting are as follows: dredged material was introduced in the context of waste stream recovery efforts, which brought awareness to the SM³ group of dredged material availability and its considerable reuse potential; meeting participants recognized dredged material as one component of a larger solution to improve sustainable materials management in Maryland; and significant interest was generated in conducting dredged material blending demonstration projects in collaboration with MDOT MPA.

The next SM³ meeting will be hosted by the Maryland Department of Agriculture and will be held on 4/18.

House Bill 171 Workgroup

Ms. Keene described House Bill (HB) 171 Yard Waste, Food Residuals, and Other Organic Materials Diversion and Infrastructure Study. The bill requires Maryland Department of the Environment (MDE), in consultation with other entities, to study and make recommendations regarding specified matters that relate to the diversion of yard waste, food residuals, and other organic materials from reuse disposal facilities, including the status of infrastructure in Maryland. MDOT MPA presented at the December 3, 2018 HB 171 meeting on the Port of Baltimore (IR) Program. The meeting attendees generated two specific recommendations regarding dredged material that will be incorporated into the study's final report: 1) incorporate dredged material with other waste streams to reduce the amount of material in DMCFs; and 2) blend dredged material with other material such as compost and anaerobic digestate. The report is expected to be complete July 2019.

Mr. Denney asked if integrating trash with dredged material will reverse the extensive work to disassociate dredged material from dirt/waste. Mr. Myers responded that the committee would specify that the trash is organic material, which is a valuable product that is currently being placed at landfills producing methane gas. The idea is to bring suitable mixes of organic materials together and use the material for commercial purposes; thus, reducing landfill needs and dredged material placement needs. Some of the more applicable terms that may be used for the new blends of the organic material would be soil amendments and/or organic matter.

Ms. Keene stated that the next House Bill 171 meeting will be held on 4/23.

University of Maryland Center for Environmental Science (UMCES)/MDOT MPA Workshop

UMCES and MDOT MPA hosted a workshop entitled "Use of Dredged Material to Protect Low Lying Areas of the Chesapeake Bay" on January 23 and 24, 2019. The workshop focused on the current understanding of problems and areas of vulnerability in the Chesapeake Bay, dredging and placement activity in the Bay, the state of technology in using dredged material to protect low-lying areas, and understanding impacts, limitations, and opportunities for restoration. All attendees worked together to produce recommendations which will be compiled into a report.

Mr. Myers asked which agency is compiling the report and inquired about the estimated time of completion. Ms. Keene responded that UMCES is compiling the report. Ms. Correale stated that a rough draft is currently at MDOT MPA for review, but an estimated time of completion is not yet available.

Ms. Keene stated that at the 5/28 IR Committee meeting, UMCES will give a presentation regarding the recommendations from the Low-Lying Areas Workshop and Maryland Department of Natural Resources (DNR) will present on the development of internal guidance for the beneficial use of dredged material.

Upcoming Dates

MDOT MPA will be giving a presentation on the Port of Baltimore IR program at the Society of Wetland Scientists Annual Conference in late May (5/28 through 5/31).

4.0 Seagirt Berth and Loop Project

Ms. Holly Miller, MDOT MPA

The 284-acre Seagirt Terminal is owned by MDOT MPA and operated by Ports America Chesapeake through a public/private partnership agreement. The Seagirt Terminal is the POB's dedicated container terminal, handling approximately 97% of all container volume. The marine terminal has four berths, one of which is 50 feet and is supported by 11 ship cranes, aiding in the impressive unloading and reloading rates. Seagirt Terminal has the highest productivity rates in the United States, driving significant business increases. With only one 50-foot berth, the Port is limited in the number of increasingly ultra-large container vessels (ULCV) it can accommodate.

The Seagirt loop and berth improvement projects would provide additional capacity and cargo handling capabilities for the marine terminal. The project will allow larger vessels to visit the POB and provide facilities for safer and more efficient navigation.

The Seagirt Berth 3 navigation improvements project would include: deepening the existing Berth 3 from a depth of -45 feet to -50 feet and widening portions of the Seagirt-Dundalk Connecting channel and turning basin to provide for a safety clearance when transiting to and from the terminal. Approximately 450,000 CY of dredged material is estimated to be removed for this project.

Navigational improvements to the Seagirt west loop would include deepening the remainder of the Seagirt loop to a depth of -50 feet and dredging widenings to improve safe navigation. The estimated volume of dredged material for this project is 1.5 million CY. MDOT MPA has requested that the Corps of Engineers, North Atlantic, Baltimore (CENAB) perform a feasibility study for this phase of the project. The request is pending the availability of funding.

In spring 2018 a full mission ship simulation study was conducted to determine if ULCV could safely transit to and from Seagirt Berth 3 with the channel improvements. The study was conducted with the highly experienced simulation modeling team from the Maritime Institute of Technology and Graduate Studies (MITAGS) and the ship handling expertise from the Association of Maryland Pilots. The purpose of the study was to help refine and minimize the amount of dredging needed, while also allowing for an adequate margin of safety to account for bathymetry; environmental factors such as wind, currents and waves; visibility and differences in time of day; as well as variances specific to individual vessels.

MDOT MPA conducted geotechnical investigations and chemical analysis studies. Sampling occurred December 2018 through mid-January 2019 and included collections from 17 locations for Seagirt Berth

Maryland Channels

Mr. McAllister stated that Norfolk Dredging dredged approximately 2.2 million CY of material from the Maryland approach channels between the Craighill entrance to cutoff angle from December 2018 through the end of February 2019. All material went to Poplar Island. The Curtis Bay channel is currently being dredged and is estimated to be approximately 450,000 CY of material, which will be placed at the Masonville DMCF. CENAB is in the process of developing a solicitation for a sub-contractor to dredge the Maryland approach and Baltimore Harbor channels. An estimated 1.5 million CY will be dredged from the Maryland approach channels including, Swan Point, Tolchester, and the Brewerton eastern extension. All material would go to Poplar Island. An estimated 400,000 CY to 500,000 CY of material will be dredged from the harbor channels, including Fort McHenry or Brewerton channels, and will be placed in Masonville DMCF. The solicitation is expected to be advertised in June 2019.

Virginia Channels

CENAB is working to solicit a sub-contractor in the summer of 2019 to dredge the Virginia York Spit Channel. The contract is expected to be awarded in October 2019. An environmental assessment is underway to provide a northern expansion to the Wolf Trap Alternate Placement Site (Wolf Trap).

Mr. Callahan stated that CENAB is exploring options for placement sites for dredged material from the three channels in Virginia and the dredging is expected to be completed in 2022.

50-foot Widening Study

CENAB is terminating the existing contract with MDOT MPA regarding the 50-foot widening study; a contract will be reinitiated under an existing construction agreement once CENAB determines details on Virginia placement.

Poplar Island Expansion Project

Mr. Callahan stated that the Poplar Island expansion project is funded to completion. Every contract for dike construction is either completed or underway. A remaining contract for drainage structures will be advertised in September. CENAB anticipates meeting its goal to have the expansion ready for material placement after July 2020.

The dike construction was completed in three contracts. Contract one was a small cell. Contract two included the embankment and containment for cells 8, 9, and 10. Contract three was for the expansion's upland cells. Mr. Callahan stated that the dike height varies but is approximately +10 feet mean lower low water (MLLW).

Mid-Chesapeake Bay Island Expansion

Mr. Callahan stated that the Mid-Chesapeake Bay Island Expansion project is underway. CENAB received \$4.9 million to begin the design of the project. CENAB is only approximately \$800,000 short of what is needed for the design portion of the project. The design agreement has been drafted and approved. Design work should commence June 2019 and construction could begin in federal fiscal year (FFY) 2022, pending the availability of funds.

Masonville Cove Tipping Fee

Mr. McAllister stated that the decision document that included the removal of the Kurt Iron Slip from the footprint of the DMCF was approved by CENAB headquarters in January 2018. CENAB is awaiting

guidance from headquarters on whether a new document with the new footprint of the DMCF will be required or if an addendum to the existing document will be sufficient.

6.0 Corps of Engineers, North Atlantic, Philadelphia (CENAP) Mr. Jeffrey May, CENAP
Ms. Correale welcomed Mr. May to his first DMMP Management Committee meeting.

Mr. May stated that during FFY 2019, Great Lakes Dock and Dredging started dredging in December 2018 and finished in early January 2019. Approximately 250,000 CY were placed in the Pearce Creek DMCF. The contract total is approximately \$7 million.

Surveys are being reviewed to plan for a FFY20 dredging contract of approximately 500,000 CY to 700,000 CY of material which will be placed at Pearce Creek DMCF. The dredging window begins October 1, 2019.

CENAP has applied to MDE for a new Water Quality Certification for Pearce Creek DMCF beginning of April 2019 to March 2020; the certification is expected to be received soon. The 2018 groundwater monitoring report was submitted to MDE 3/1.

Mr. Rowe asked if more dredging has occurred due to the heavy precipitation in 2018. Mr. McAllister responded that when the immediate before-dredge surveys were conducted, many sections of the Maryland approach channels were significantly higher than normally expected. Mr. Rowe asked if the higher precipitation and associated increase in dredging should be incorporated in plans for 2020. Mr. Callahan responded that the running average for dredging needs has not changed much over the past 18 years. Mr. Denney suggested that the Harbor Team reach out to the Port of New Orleans off the Mississippi River regarding the issues they have encountered due to increased precipitation and flooding to gather lessons learned.

Mr. Ortt asked if dewatering operations in the DMCFs have been affected by increased precipitation. Ms. Correale responded that time for dewatering operations at the Harbor DMCF sites have increased largely due to minimal surface area. Mr. Ortt asked if the slower dewatering operations affect the capacity and if the loss of operational capability due to climate change has been incorporated into a volumetric analysis for capacity. Mr. Callahan responded that the most important component regarding dredged material placement is surface area, and that Poplar Island expansion provides an additional 575 acres of surface area for dredged material. Originally, Poplar Island's capacity was estimated to be exhausted by 2028 but has since been increased to 2032 or 2033. Mr. Callahan believes that lack of surface area will not be an issue. Mr. Rowe suggested including climate-induced risks to the POB within a section of the Annual Report. Mr. Michael stated that in the past several weeks high flows have been present in the Susquehanna River and many spill gates of the Conowingo Dam have opened. It is not unusual to have high flows in March due to spring temperatures and snow melt. The increase in inflow could potentially affect the Chesapeake Bay water quality through the spring and summer of 2019.

7.0 Harbor Development Update Ms. Chris Correale, MDOT MPA

Cox Creek Operations and Maintenance (O&M) Complex Building: The O&M building is expected to be completed fall 2019. The building will provide meeting and office space, equipment bays, and storage.

Cox Creek Building 201 Demolition and Remediation: The polychlorinated biphenyls (PCB) found on site slowed the demolition process. Highly contaminated material above 49 parts per million (ppm) was sent to specialized disposal sites in Michigan and Texas. Material with less than 49 ppm will go to approved disposal sites in Virginia or Pennsylvania. The demolition and remediation of Building 201 is expected to be complete late summer or early fall 2019. Mr. Myers stated that some citizens are confusing the Building 201 material with dredged material. Ms. Correale responded that this topic will be addressed throughout DMMP committee meetings.

Cox Creek Base Dike Widening

A clay base dike was laid, which will support the dikes that will be raised to +60 MLLW. As clay was placed, it displaced the dredged material. This is known as a mud wave.

Masonville DMCF

The cofferdam berm, the cross-dike berm, and the dike raising are a part of the dike raising project that will raise the existing dikes to +18 MLLW. This is expected to be complete at the end of the 2019 calendar year. Old dredged material from Mercedes Hill is being moved into the Kurt Iron Slip, which is approximately 70% complete. The Kurt Iron Slip is expected to be filled by September 2019. Dike raising to +30 MLLW is in the design phase, which is expected to be complete spring 2020. A Confined Aquatic Disposal (CAD) pilot test was done at the Masonville DMCF. All monitoring tests are complete, and the regulatory agencies and the Chesapeake Bay Foundation have been briefed. MDOT MPA has started a study to determine if other sites in the harbor could potentially be viable CAD sites. As the study progresses, committee members will be informed.

Pearce Creek

In the communities surrounding Pearce Creek DMCF, 224 in-home connections and 247 total well abandonment services (some homes had multiple wells) have been completed out of 232 properties. Three homeowners (total of five properties) are refusing services; one owner cannot be contacted; another property was recently foreclosed and MDOT MPA is working with the selling agent to facilitate waterline connection; and lastly MDOT MPA is working with another homeowner on property access to complete the waterline connection. As a result of the construction associated with the waterline installation, MDOT MPA facilitated road restoration; this project is nearing completion. There was an issue with the expansion tanks installed during connection and the plumber is working to make return visits to each home to ensure that they are properly calibrated in accordance with the manufacturer's instructions. This does not affect the system itself but could affect the product warranty if not corrected. The first wave of expansion tank corrections is ongoing and is nearing completion. The grant to the Town of Cecilton has been extended to June 2020 to ensure time for all expansion tank adjustments, construction, inspection/construction management services, and completion of administrative work.

8.0 Round Table discussion: Activities and Issues of Significance

Ms. Fidler stated that the mid-year status update will be presented at the 6/26 DMMP Management Committee meeting. Based on feedback, this year's mid-year meeting will include a facilitated discussion on development of this year's Annual Report recommendations for 2020.

Mr. Ortt requested more information on the nesting bald eagles at Masonville Cove and how their presence will affect DMCF operations. Ms. Fidler stated that a pair of bald eagles have started nesting at Masonville Cove. The DMCF inflow and terminal operations will not be affected. However, the education and outreach events on the Masonville Cove campus will be restricted until mid-June when nesting season has concluded. MDOT MPA is working with US Fish and Wildlife Service (FWS) to

ensure the protection of the eagle nest as well as continuing outreach events as normal as possible. Ms. Fidler stated that MDOT MPA is working to install a nest camera for next year's nesting season.

Mr. Myers stated that long range studies are currently being conducted to analyze climate change effects on the Chesapeake Bay and the total maximum daily loads. Mr. Ortt stated that many of the current models have a 36-year range. The models use data averages from various climate change variables from the past 18 years and projects for the future 18 years before a new model is calculated. He expressed his concern that climate change is moving faster than 36 years and that the topic of sea level rise needs to be discussed.

Mr. Rowe stated that the phase three plan for the Chesapeake Bay Restoration Plan was sent to the Governor's office for review on 3/27. It will be out for public review on 4/12 and informational meetings will be held in May 2019.

Ms. Fidler recognized that the 3/27 Management Committee meeting is Ms. Correale's final meeting as Director of Harbor Development. She thanked Ms. Correale for her long-standing transparency, responsiveness, dedication, and commitment to the program. Ms. Fidler stated that Ms. Correale's involvement has been a huge part of the success of the large committee programs for the POB. Ms. Correale became the director of Harbor Development in 2015. Since then, she has achieved several major accomplishments including the Poplar Island expansion, the Cox Creek expansion, the Masonville expansion, the installation of Captain Trash Wheel, the CAD pilot project, the completion of the Hart-Miller Island public five-mile run, innovative reuse of dredged material, and securing funding for the Mid-Chesapeake Bay Island Restoration project. Ms. Fidler expressed her commitment, that she will do her best to meet the standard of transparency and responsiveness that Ms. Correale has set. She stated that Ms. Correale has been tremendously generous with her time and mentorship.

Ms. Correale stated that the accomplishments achieved under her directorship are the team's accomplishments. She stated that the team is helping to keep the POB a strong economic engine that is doing the right thing by citizens and the Chesapeake Bay. Ms. Correale stated that many of the projects Ms. Fidler mentioned were in progress when she became director of Harbor Development. She stated that she benefited from ones before her, Harbor Development and MDOT MPA team, and citizens' input. Ms. Correale is very grateful for all the support she has had throughout her career. Ms. Correale expressed her support for Ms. Fidler as the new director and congratulated her on her new position.

9.0 Closing Comments and Adjourn

Ms. Chris Correale, MDOT MPA

The next DMMP Management Committee meeting will be held on 6/26 where recommendations for 2020 will be discussed. The next two DMMP Executive Committee meetings will be held on 6/3 and 12/5. Ms. Correale stated that the DMMP Annual meeting will be held 11/8 at the Sollers Point Multi-Purpose Center. Ms. Correale thanked everyone for their attendance and the meeting was adjourned.