FINAL DRAFT
SUMMARY OF THE DREDGED MATERIAL MANAGEMENT PROGRAM
MANAGEMENT COMMITTEE MEETING
September 26, 2018, 10:00 AM
World Trade Center
20th Floor, Stanton Room
Baltimore, Maryland

***Attendees*:**

Angie Ashley Consulting: Angie Ashley
Association of Maryland Pilots/Baltimore Port Alliance (BPA): Eric Nielsen
Citizens Advisory Committee (CAC): Fran Taylor
Ecologix Group: Steve Pattison
Mahan Rykiel Associates (MRA): Isaac Hametz
Maryland Department of Natural Resources (DNR)/Maryland Geological Survey (MGS): Richard Ortt
Maryland Department of Transportation, The Secretary's Office (TSO): Eddie Lukemire
Maryland Department of Transportation Maryland Port Administration (MDOT MPA): Sergio Adantor, Dave Bibo, Chris Correale, Bertrand Djiki, Jennifer Guthrie, Katrina Jones, Kristen Keene, Holly Miller, Gannon Price, John Vasina
Maryland Environmental Service (MES): Tammy Banta, Jeff Halka, Benjamin Langer, Melissa Slatnick
US Army Corps of Engineers, North Atlantic, Baltimore District (CENAB): Yvonne Barrett, Kevin Brennan, Justin Callahan, Patrick Findlay, Amy Guise, Valentina Morrison, Andrew Roach
US Army Corps of Engineers, North Atlantic, Philadelphia District (CENAP): Gavin Kaiser
University of Maryland Center for Environmental Science (UMCES): Dr. Peter Goodwin, Dave Nemazie
Waterfront Partnership: Adam Lindquist

Action Items:

1. MDOT MPA will internally discuss MDOT MPA contacts for Poplar Island upland development questions and will follow up Mr. Callahan.

Statements for the Record:

1. None.

1.0 Introductions, Approval of Meeting Summary — 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. Mr. Taylor introduced Mr. Adam Lindquist, who is the Chair-elect of the Citizens Advisory Committee (CAC). Ms. Correale requested comments on or changes to the summary from the June 27, 2018 Dredged Material Management Program (DMMP) Management Committee meeting. Mr. Taylor requested a change to the summary to reflect that he will not be retiring from the CAC, only stepping down as the committee chair. Mr. Taylor made a motion to accept the meeting summary once revised. Mr. Nemazie seconded the motion, and the motion passed unanimously.

2.0 US Army Corps of Engineers, North Atlantic Coast Comprehensive Study (NACCS)

Amy Guise, CENAB
Andrew Roach, CENAB

Ms. Correale stated that the first presentation will be given by Ms. Amy Guise and Mr. Andrew Roach from the US Army Corps of Engineers, North Atlantic, Baltimore District (CENAB) on the US Army Corps of Engineers (USACE)'s North Atlantic Coast Comprehensive Study (NACCS).

Ms. Guise introduced herself as the Chief of Planning for CENAB. In January 2013, Congress passed the *Disaster Relief Appropriation Act of 2013*, which appropriated more than $5 billion to the USACE for the restoration and construction of federal projects in areas impacted by Hurricane Sandy. Up to $20 million of these funds were provided to the USACE to conduct a comprehensive study from Virginia through Maine to address flood risk of vulnerable populations within areas affected by Hurricane Sandy. Ms. Guise stated that the USACE appointed CENAB to lead/manage the NACCS and she was Chief of the Command Center. USACE was instructed by Congress to complete the NACCS within two years. Ms. Guise stated that CENAB was able to submit the NACCS two days ahead of schedule and $5 million under budget due to funding being provided up-front and without a cost-sharing and negotiation phase.

The NACCS is a comprehensive plan to address vulnerable coastal communities, formalize a consistent framework for detailed site specific coastal evaluations, integrate state-of-the-art tools and techniques, and equip all levels of government and other stakeholders with data and tools to make informed cost-effective coastal risk management decisions. The NACCS is not a decision document authorizing design and construction, a National Environmental Policy Act (NEPA) document evaluating impacts of any specific solutions, or a USACE-only plan. Ms. Guise stated that, through the NACCS, a full-array of structural, non-structural, and programmatic coastal storm risk management measures were developed. These measures can be accomplished through a shared responsibility of risk management, rethinking approaches when adapting to coastal storm risks, and considering combinations of solutions across agencies.

The NACCS includes a nine-step coastal storm risk management framework that is customizable for any coastal area or watershed and is repeatable at state and local scales. The NACCS completed the first five steps on a conceptual level on the area of study: initiate analysis, characterize conditions, analyze risk and vulnerability, identify possible solutions, and evaluate and compare solutions. The remaining four steps are to be completed in future replications of the framework at refined scales and include: select a plan, develop an implementation plan, execute the plan, and monitor and adapt as necessary. The main goal of the framework is to determine who/what is exposed to flood risk, location of the flood risk, the appropriate strategies and measures to reduce flood risk, the relative cost of the anticipated risk reduction, available data to make risk informed decisions, and the residual risk. To accomplish this goal, a coastal geographic information system (GIS) geo-database was developed. The database divided the study area into multiple reaches and populated it with GIS data layers for population/infrastructure density, socioeconomic factors and trends, ecosystems adaptive capacity, and sea level change. Ms. Guise explained the map's color key to the Committee; green denotes low risk areas, yellow denotes medium risk areas, and red denotes high risk areas.

Ms. Guise discussed a subset of the products, planning tools, and models that were developed to assist decision-makers through each step of the NACCS coastal storm risk management framework. The Coastal Program Guide informs states and communities about the range of programs and assistance available across agencies and can guide them in planning, mitigating, and adapting to coastal storm risks. The Fish and Wildlife Planning Aid Report was developed in partnership with the United States Fish and Wildlife Service (USFWS) and characterizes the entire east coast from a habitat and species

perspective. The web-based Conceptual Regional Sediment Budget shows patterns and rates of sediment transport; shows engineering activities such as dredging, placement, and volumetric changes for coastal and estuarine regions; and identifies opportunities for projects and strategic placement sites. The Natural and Nature-Based Features (NNBF) Report discusses how NNBFs can contribute to coastal resiliency and can be found online at http://www.nad.usace.army/CompStudy and http://www.EngineeringWithNature.org. The Regional Storm Suite Modeling program provides a standardized approach for establishing coastal community risk based on models of possible future storm events. This model serves as a primary requirement for project performance evaluation.

The economics developed through the NACCS include depth-damage functions, depth-fatality relationships, depth-emergency cost, infrastructure damage relationships, emergency costs incurred, and second and third order effects.

The NACCS identified nine high-risk focus areas that warranted additional analysis. Section 3026 of the Water Resources Reform and Development Act (WRRDA) of 2014 required the Secretary to make project-specific recommendations based on the NACCS. The President's FY16 budget request includes funding for the additional analysis of these nine focus areas: 1) Rhode Island coastline; 2) Connecticut coastline; 3) New York-New Jersey harbor and tributaries; 4) Nassau County back bays, New York; 5) New Jersey back bays; 6) Delaware inland bays and Delaware Bay coast; 7) the City of Baltimore; 8) the District of Columbia; and the 9) the City of Norfolk. Some opportunities that were developed through the NACCS include mitigating future risk with improved pre-storm planning, identifying acceptable flood risks at community and state scales, prioritizing critical infrastructures, rebuilding with redundancy, developing creative incentives to promote the use of resilience measures, utilizing a collaborative regional governance structure, developing public-private partnerships for coastal risk management, integrating natural-based features in coastal risk management systems, and encouraging design flexibility and adaptive management.

Ms. Guise introduced Mr. Roach to the committee and explained that Mr. Roach will be discussing a potential study area in the Baltimore metropolitan area. Mr. Roach stated that the potential study area would be the tidally influenced area surrounding the Baltimore City metropolitan area. The northern extent would be the Gunpowder River in Baltimore County and the southern extent would be Pinehurst in Anne Arundel County. This area was included in the NACCS Maryland Appendix as one of the 37 Risk Area Identification Tier 1 sites. Risk reduction measures were identified and classified for the Tier I areas. A Tier II analysis was performed on the City of Annapolis dividing the area into eight smaller risk areas. Each area was evaluated for relative costs associated with management measures.

The Tier I areas identified in the Baltimore metropolitan area were Bowleys Quarters, Fort Howard/Edgemere, Curtis Bay, Fort McHenry, Baltimore Inner Harbor, Gwynns Falls, and north Curtis Bay. Mr. Roach emphasized that the majority of this area's shoreline is man-made structures, such as bulkheads. Other risk areas identified in the NACCS focus area include Fells Point, Middle Branch Patapsco waterfront, Curtis Bay, various areas in Baltimore City, various areas in Baltimore County (Sparrows Point, Bowleys Quarters firehouse, wastewater pump stations, Back River Wastewater Treatment Facility), Maryland port facilities, Curtis Creek in Anne Arundel County, and Anne Arundel County's shoreline. The measures and solutions will incorporate existing plans, such as structural, non-structural, NNBF, Programmatic, the 2012 Maryland State Hazard Mitigation Plan, the 2012 Baltimore County Multi-Hazard Mitigation Plan, the 2004 Baltimore City All Hazards Plan, Baltimore City's Disaster Preparedness and Planning Project (DP3), and Anne Arundel County plans. The USACE feasibility study will conclude with a 3-year, $3 million constructible project. The cost share percentage

for the feasibility phase of the project is 50% federal and 50% non-federal; the preconstruction, engineering, and design and construction phases will be 65% federal and 35% non-federal; the operation and maintenance phase will be 100% non-federal. As of September 2018, the USACE has been coordinating with the Maryland Department of Natural Resources (DNR) and possibly other project partners for a feasibility cost-sharing agreement. The first segment of the project will include developing the scope, schedule, and budget, coordinating with cost-sharing partners and stakeholders, identifying problem areas, and formulating the initial project solutions. After three years, the USACE expects a completed Chief of Engineers Report, recommending a project to be authorized and implemented.

Mr. Bibo asked if Howard County would be within the scope of the NACCS. Mr. Roach responded that the scope of the study only includes tidally influenced and storm flooding areas. Mr. Halka asked if the USACE updated the Regional Sediment Management (RSM) plan subsequent to Hurricane Sandy and if the plan was incorporated into the NACCS. Ms. Guise responded that she is unaware if the RSM was updated through the NACCS and stated that some of the USACE Districts have sought funding through the RSM program to update their RSM plans. Mr. Callahan added that CENAB is awarded small grants through the RSM program to perform work at Assateague and Ocean City; Ms. Guise added that they are very competitive. Mr. Goodwin asked if the areas identified through the Tier I risk assessment were at the same risk tolerance level. Ms. Guise responded that the areas identified through the Tier I risk assessment only denote the presence of a risk and not what amount of risk reduction could be achieved and stated that risk tolerance can be determined once the study area is refined. Mr. Goodwin commented that it is great to see this type of comprehensive systems analysis and offered to provide other community data that USACE might find useful in these studies.

Ms. Guise informed the Committee that there is also a South Atlantic Coast Comprehensive Study, which is currently in scope development.

Mr. Taylor stated that he is part of a community organization within the proposed Baltimore metropolitan study area and asked if any outreach is being conducted. Mr. Roach responded that the NACCS and outreach materials for it can be found online; as for the Baltimore study, an outreach plan will be developed once the study area has be fully defined. Ms. Correale asked if the USACE will relax the federal standard for the use of dredged material in these projects as environmental benefits will be obtained that have not been considered. Ms. Guise responded that while environmental and economic benefits are currently not included in the benefit-cost ratio, they are presented and will be part of the justification and decision-making process. Mr. Nemazie asked how much new modeling will be needed to understand the inundation of water versus how much of it is economic based on the current model. Ms. Guise responded that it is user dependent; the USACE would refine the current model using local data.

3.0 Citizens Advisory Committee (CAC) Report — Fran Taylor, CAC

Hart-Miller Island (HMI)

Mr. Taylor stated that the HMI Citizens Oversight Committee (COC) is continuing to transition into an HMI Friends Group; HMI COC Chairman Paul Brylske has been actively reaching out to local organizations for new members of the HMI Friends Group. Even though bad weather has caused a noticeable drop in weekend visitors, over 1,000 people have visited the South Cell for bike rides, hikes, and the HMI 5-Miler race. Mr. Taylor informed the Committee that one of the HMI COC's goals is to help make HMI more accessible to the public. Mr. Taylor commented that the amount of water onsite for 2018 remained relatively the same as approximately 45 million gallons of water was released through spillways and 45 million gallons of water was regained through rain events. Mr. Taylor stated that the

HMI COC is excited about the HMI North Cell Habitat Development project, and informed the Committee that Mr. Hametz will discuss the project in further detail later in the agenda.

Harbor Team
The Harbor Team toured and met at Masonville dredged material containment facility (DMCF) on July 26, 2018. The next Harbor Team meeting will be on October 25, 2018.

CAC Update
Mr. Taylor stated that CAC meeting attendance remains high. Mr. Taylor reminded the Committee that community access to sites are one of the major selling points of a project. Mr. Taylor invited the Committee to attend the CAC tour of Pearce Creek, while space remains. The CAC was the avenue for citizens to raise concerns regarding the Pearce Creek reactivation. The Pearce Creek project will be further discussed later in the agenda.

Mr. Taylor reminded the Committee that, after 14 years of service, he will be stepping down as Chairman of the CAC but will remain as a committee member. Mr. Taylor introduced Mr. Lindquist as the Chair-elect of the CAC and stated that Mr. Lindquist will bring a youthful perspective. Mr. Lindquist stated that he was honored to be nominated and elected as Chairman of the CAC and is looking forward to his new role. Mr. Lindquist has a Master's Degree in Community Planning and is the Director of the Waterfront Partnership: Healthy Harbor Initiative. Through coordination with the Port and other local agencies, Mr. Trash Wheel and Professor Trash Wheel were developed and are run by the Waterfront Partnership. The Waterfront Partnership also partners with the Chesapeake Bay Foundation on the Great Baltimore Oyster Partnership, which is in the process of planting over one million baby oysters in Baltimore Harbor which will be maintained by volunteers. The oyster partnership was designed to maximize community engagement and education.

4.0 Innovative & Beneficial Reuse Progress Report Kristen Keene, MDOT MPA
Ms. Keene provided a brief update on the Innovative Reuse (IR) demonstration projects.

Alternative Daily Cover (ADC) at Quarantine Road Landfill
The Quarantine Road Sanitary Landfill will use approximately 6,000 cubic yards (cy) of dried dredged material from the Cox Creek DMCF for Alternative Daily Cover (ADC). Ms. Keene stated that the hauling agreement between the MDOT MPA and Baltimore City Department of Public Works has been finalized. Once Quarantine Road Landfill has installed erosion and sediment control measures, hauling of the dried dredged material is expected to commence within 30 days.

Engineered Fill
MDOT MPA plans to use dried dredged material from the Cox Creek DMCF as engineered fill in the South Cell of Hawkins Point to assist the MDOT MPA Safety, Environment, and Risk Management (SERM) office in the construction of an Algal Flow-way. The south cell has been dewatered and erosion and sediment control measures have been installed. Hauling of dried dredged material is expected to commence within 30 days.

MDOT SHA Coordination
Ms. Keene stated that, after extensive coordination with the MDOT State Highway Administration (MDOT SHA), the MDOT Office of Environment, and Maryland Department of the Environment (MDE), MDOT SHA will be updating the 920 Furnished Topsoil Specification to remove the words "dredge spoil" from the Harmful Materials Provision: "Topsoil shall not contain substances in

concentrations that are harmful to human health, water quality, or plant growth. Industrial waste such as ash, slag, raw sludge, dredge spoil, or similar materials shall not be soil components." The specification revision is anticipated to be complete in October.

The benefits of revising the specification include: detaching the long-standing negative stigma associated with dredged material and sending a positive signal to industry and other state agencies; contributing to Governor Hogan's Waste Reduction and Resource Recovery Executive Order, which specifically calls out the reuse of dredged material; allowing for the reuse of dredged material from all other sources, not just MDOT MPA federal navigation channel material, including sediment from behind the Conowingo Dam and freshwater lakes; and facilitates vast reuse potential as the MDOT SHA specification book is the gold standard used across the state by MDOT SHA as well as local road departments and contractors/developers on a myriad of development projects.

Additional IR Updates

The American Society of Landscape Honor Award was presented to Mahan Rykiel Associates (MRA) for their Design with Dredge (DwD) program efforts. This reward received national attention and helped bring awareness to the Port's DMMP, and more specifically the opportunities surrounding the innovative reuse and beneficial use of dredged material.

The Morgan State University School of Architecture and Planning offered a Fall 2018 lecture series which included a segment on "Dredging the Future," led by MRA. MRA presented on the collaborative DwD program, which aims to find innovative reuse and beneficial use opportunities for dredged material from the Baltimore Harbor to support public health, habitat restoration, coastal resiliency, and environmental justice. . The Morgan State University lecture series provided the Port with an opportunity to reach a broader audience and connect a diverse group of stakeholders to the DMMP.

5.0 Design with Dredge Program – HMI Pilot Project Isaac Hametz, MRA

Mr. Hametz thanked MDOT MPA, MDE, and Maryland Environmental Service (MES) for their collaboration with MRA for the DwD program. In the summer of 2017, MDOT MPA partnered with MRA in a collaborative design research program, known as DwD, to explore ways in which landscape architecture could reuse and reimage harbor channel material in applications that promoted economic sustainability and resilient landscape features, with a shared goal of furthering the IR Program.

Phase I of the DwD program consisted of the concept design. Through the DwD process, the team reviewed and synthesized sediment quality data, environmental regulations, DMCF operations, DMMP goals and the challenges of maintaining a 20-year rolling plan for placement capacity, coastal resiliency studies, vegetation reports, and stakeholder input. This detailed investigation supported the development of conceptual-level designs for innovative and beneficial use solutions in the Harbor. This includes the HMI North Cell Habitat Development project.

Phase II of the DwD program consisted of design development. During this phase the previously developed concept design was further established. Through this project, micro-landforms will be created on 23 acres in the northwest portion of the HMI North Cell that will: support a fluctuating hydrologic regime and diverse vegetation structure, resulting in improved soil and water quality conditions; promote educational outreach and stakeholder engagement in a low-cost constructive framework that incorporates principles from a landscape architecture perspective; manage dredged material in innovative ways; and optimize operational costs. MRA performed field work, reviewed literature, and

worked with on-site MES operators to develop a preliminary design development scenario that can be used to further evaluate project phasing and implementation.

The goals of the project are to create diverse habitat, improve water and soil quality, create upland and wetland habitat, and establish upland and wetland vegetation while optimizing project costs. The design team developed three distinct landform typologies that attempt to (1) accelerate sediment ripening, (2) mitigate the invasion of *Phragmites*, and (3) stimulate habitat development.

Three landform typologies were included in this project. The first was a basic landform that is anticipated to provide the lowest initial cost and lowest initial habitat value. The second was a surface area landform that is anticipated to have a moderate initial cost and moderate initial habitat value. The third was a habitat landform that is anticipated to have the highest initial cost and highest initial habitat value. To study the effectiveness and cost of habitat establishment in each of these landform types over time, the team proposed a control and two treatment options for each landform type. These would be applied at initiation, 1 year, and 2 years. Each of the three landforms would have one control and six treatment mounds. The treatment options include soil amendment prior to vegetation and no soil amendment prior to vegetation. Soil amendments can include materials such as lime, biochar, and compost; soil amendments will be determined via adaptive management and monitoring.

A diagram of the proposed mounds was shown to the Committee. The draft master plan includes a pathway through the mounds that will be suitable for foot and/or machinery traffic. Additionally, each 4-mound configuration will have an open space or plaza in the center that can be utilized for educational, outreach, and management purposes.

Phase III of the project consists of construction of the 21 mounds and is expected to occur in spring 2019. Phase IV, which is an adaptive management & monitoring plan, will be developed to evaluate the success of each type of mound and will begin immediately following the completion of construction.

Mr. Callahan asked if each mound was approximately one acre and asked if the trench excavation would balance the cut and fill between the mound. Mr. Hametz responded in affirmation. Mr. Findlay asked where funding was being obtained for the project. Ms. Correale responded that the project will be funded by the MDOT Consolidated Transportation Program. Mr. Goodwin asked if there are any hydrological connections on HMI. Mr. Hametz responded that it is not the intent of the project to connect the hydrology. Ms. Correale added that the dike at HMI is +48’ and the pond elevation is approximately +38’; therefore, the project is not connected to the hydrology of the Bay other than the spillways. Ms. Miller stated that onsite hydrology would be investigated if the pilot project is successful and feasible as a project for the entire North Cell. Mr. Goodwin asked if the project design could be implemented elsewhere. Mr. Callahan responded that this design could be used at Poplar Island to condition the upland cells. Ms. Correale stated that the project is primarily focused on HMI but could be redesigned for use on Poplar at a later time. Mr. Nemazie stated that HMI has ongoing issues with standing water with low pH levels.

6.0 US Army Corps of Engineers, North Atlantic, Baltimore (CENAB)

Kevin Brennan, CENAB
Justin Callahan, CENAB

Dredging Projects

Mr. Brennan stated that CENAB completed the Cape Henry Channel dredging just prior to Hurricane Florence approaching North Carolina. CENAB awarded the $24.2 million contract to Norfolk Dredging

for the removal of 1.5 million cubic yards (mcy) of dredged material from the Craighill Channels with placement at Poplar Island. This contract also has an option of dredging 400,000 cubic yards from the Curtis Bay Channel with placement at Masonville. CENAB has a contract out for solicitation to dredge 2 mcy from the York Spit Channel with placement at the Wolf Trap Alternative Placement Site. The York Spit will be mechanically dredged due to Virginia's concern regarding overwintering crabs. The bid opening was delayed twice with the current bid opening set to occur on October 25, 2018.

Mr. Nemazie stated that dredging companies could perform a channel realignment, if needed, for Cape Fear in North Carolina due to the damage caused by Hurricane Florence. Mr. Nemazie asked if current and planned dredging operations could occur faster due to the possibility of reassignment to assist in the Cape Fear project in North Carolina. Mr. Brennan responded that the protocol that allows for the emergency redirecting of contractors from other locations is called "Raising the Flag." Mr. Brennan stated that the smaller navigation adjustment projects that rely on USACE Special Use Dredges, such as those in Assateague and Ocean City, may be a challenge to complete. Mr. Callahan stated that an increase to the unit cost per cubic yard per dredging project may be seen if the "flag is raised."

Mr. Halka asked when the York Spit project will begin. Mr. Brennan responded that the York Spit dredging is planned to occur in spring 2019.

Baltimore Harbor Drift Collection and Removal Unit

Mr. Brennan stated that the Baltimore drift crew has been busy due to the Conowingo Dam being opened repetitively. Ms. Correale stated that debris from the Ellicott City flood drifted into the South Locust Point Marine Terminal. CENAB's Baltimore Harbor Drift Collection and Removal Unit were able to clear the debris before the arrival of a scheduled cruise ship. The funding for this Unit is very important for such events.

Fleet Week

Mr. Brennan stated that CENAB will be participating in fleet week with the Reynolds drift removal boat and the Catlett survey vessel the weekend of October 6 and encouraged the Committee to attend.

Masonville

Mr. Brennan stated that the CENAB is awaiting a Masonville tipping fee decision for the Curtis Bay additional dredging option from the Craighill Channel dredging. The decision document was completed, but the size of Masonville has been decreased as MDOT MPA decided to exclude the Kurt Iron Slip (KIS) for material placement. CENAB is actively revising numbers with their economist from the New England District to determine impacts.

Poplar Island

Mr. Callahan stated that the final dike construction contract for the expansion was awarded to H&L Contracting from Bayshore, New York, for $34.7 million. Dike construction is on schedule, expected to be completed by summer 2020, and extends the capacity life of Poplar Island through the early 2030s. The only remaining expansion contract is for spillway structures and is expected to be out for bid in 2019.

Mr. Callahan stated that CENAB is in the beginning stages of the upland development team and asked who would be the proper MDOT MPA contacts. Ms. Correale stated that MDOT MPA will internally discuss MDOT MPA contacts for Poplar Island upland development questions and will follow up with Mr. Callahan.

Mid-Bay

Mr. Callahan reminded the Committee that $644,000 was included in the federal fiscal year 2018 Work Plan for the Mid-Bay project, allowing pre-construction engineering and design. Mr. Callahan stated that he has been in coordination with MDOT MPA for a design agreement which is expected to be executed January 1, 2019. The Barren Island component of Mid-Chesapeake Bay Island Restoration Project (Mid-Bay) will use material from local federal navigation channels to create wetlands; a breakwater will be constructed to protect submerged aquatic vegetation. The Barren Island design schedule is 27 months. The James Island component of Mid-Bay will restore the island to 2,000 acres with a design schedule of 47 months. Construction of both components will occur concurrently and is expected to begin in federal FY21.

50-Foot Widening

Mr. Callahan stated that the 50-foot widening project is currently on hold. CENAB is awaiting guidance from USACE Headquarters regarding the feasibility study and if the study must conform to the 3x3x3 rule. The 3x3x3 rule states that a planning study shall be no more than $3 million, 3 years, and 3 concurrent levels of review; the 3-year timeframe begins once the feasibility cost sharing agreement has been executed and ends once the Chief's Report has been signed; a study that exceeds 3 years or $3 million requires an exemption by the Assistant Secretary of the Army for Civil Works. The cost sharing agreement between CENAB and MDOT MPA was executed in August 2014. Therefore, CENAB is awaiting guidance regarding the need for a waiver since the 3-year window has expired.

7.0 US Corps of Engineers, North Atlantic, Philadelphia (CENAP) Gavin Kaiser, CENAP

Mr. Kaiser introduced himself to the committee as the project manager for the Chesapeake and Delaware (C&D) Canal.

Upcoming Dredging Plans

CENAP awarded a $7.2 million contract in early September 2018 to Great Lakes Dredging to dredge 400,000 cy of material from Wharton Point, Pooles Island, Town Point, and a small part of the C&D Canal at Welch Point. The material will be placed at Pearce Creek DMCF. While a notice to proceed has yet to be issued and the schedule for the project is not developed, Great Lakes Dredging typically begins dredging projects in November. Depending on weather conditions Great Lakes Dredging may need to continue this project in spring 2019. CENAP's Water Quality Certification for this project allows dredging from October 1, 2018 until March 31, 2019.

Pearce Creek

Mr. Kaiser thanked Ms. Keene and MDOT MPA for coordinating and scheduling site visits to the Pearce Creek DMCF and for the coordination throughout the entire project. CENAP will be meeting with the DMMP CAC and will facilitate site visits with elected officials, giving CENAP a chance to showcase past accomplishments and future plans. Ms. Correale added that the CAC site visit to Pearce Creek will be on October 11. Mr. Kaiser stated that the CAC tour will include a tour of the C&D Canal museum in Chesapeake City, a potential tour of the Cecilton water treatment plant, a tour of the Pearce Creek DMCF, and a driving tour of the communities that were connected to the City of Cecilton's waterline as a result of MDOT MPA's provision of funding and outreach efforts.

Mr. Kaiser stated that an application for a new Water Quality Certification was sent to MDE as the current Pearce Creek Water Quality Certification expires in March 2019. MDE will only allow the USACE to apply for a one-year extension of the existing Pearce Creek certification.

8.0 Harbor Development Update — Chris Correale, MDOT MPA

Cox Creek Expanded

Ms. Correale stated that the existing Cox Creek DMCF is being expanded into the upland portion of the MDOT MPA-owned property. MES, on MDOT MPA's behalf, awarded the $29.4 million base dike widening contract to Bowen and Kron (B&K) on July 19, 2018. A notice to proceed was issued on August 31, 2018. Mr. Price stated that B&K is currently mobilizing on site and installing erosion and sediment controls. Ms. Correale stated that the 60% designs for the +60' dike raising are expected to be completed in October 2018.

Mr. Brennan asked when inflow to the new portion of the DMCF is expected. Mr. Price responded that that the new portion of the DMCF is expected to be ready for inflow by mid-2020.

Cox Creek Remediation

Ms. Correale stated that Phase I of the upland remediation was completed and approved by MDE on July 11, 2018. Phase II of the upland remediation is underway; the field delineation was completed on September 14. Next steps for Phase II include the development of a remedial workplan, US Environmental Protection Agency (EPA) approval of the workplan, remediation of identified areas, and completion of a final report. Phase II is expected to be completed by February 2019.

Cox Creek Building 201

Ms. Correale stated that the EPA approved the remediation and demolition workplan for the demolition of Building 201. B&K is currently mobilizing on site. MDOT MPA expects the building demolition and remediation to be completed by July 30, 2019.

Cox Creek Operation and Maintenance (O&M) Complex

Ms. Correale stated that the new Operation and Maintenance Complex at Cox Creek is expected to be constructed over 18 months and completed in fall 2019.

Masonville Dike Raising

Ms. Correale stated that the dikes at Masonville DMCF are currently above +10' mean lower low water (MLLW). The +18' dike raising along the cofferdam is underway with a current elevation of +6'. The KIS +10' cross dike is underway. The remainder of the dike construction will commence upon MDE approval of the erosion and sediment controls; approval is expected in October 2018. The +18' dike raising is expected to be competed in spring 2019.

Seagirt Berth & Loop

Ms. Correale stated that the remainder of the Seagirt Loop and Berth 3 will be deepened to 50 feet as 2018 was a record setting year; 596,972 containers were handled in 2017, which is an 11% increase from the record set in 2016. Recent industry intelligence indicates that the Port of Baltimore is perceived as berth-constrained in its ability to efficiently handle larger numbers of 10,000 Twenty-Foot Equivalent Unit (TEU) and up vessels requiring 50-foot berths. MDOT MPA is looking to the USACE to perform a cost-sharing feasibility study for the deepening of the remainder of the Seagirt Loop. MDOT MPA will apply for a USACE permit to deepen Berth 3, which is expected to be online by late 2020.

Mr. Taylor asked if studies are performed on existing roadways to determine if they can handle additional cargo transportation caused by increasing Port terminal space and accessibility. Ms. Correale responded affirmatively.

Mr. Findlay asked for MPA's desired completion date of the USACE feasibility study for Seagirt Loop. Ms. Correale responded that it could take 8 to 13 years for the USACE to perform a 3x3x3 feasibility study, and for the project to receive authorization, appropriations, design and construction funding, and actual dredging.

Pearce Creek

Ms. Correale added to Mr. Kaiser's update on the Pearce Creek project. Ms. Correale stated that 224 of the 232 properties eligible to be connected to the new potable water system have been connected. There are seven properties which have not been connected to the public system. Of this, two homeowners who own a total of four properties refuse to connect; one property owner was unable to be contacted; one property has been relinquished to the mortgage company due to the passing of the owner; and the final property connection is pending based on coordination with the homeowners to facilitate access into the home. Ms. Kristen Fidler and Ms. Keene have been leading community outreach for the past several years. Ms. Correale stated this project would not have been possible without the Town of Cecilton willing to extend their water lines to these communities.

Mid-Bay

Ms. Correale added to Mr. Callahan's update on the Mid-Bay. Ms. Correale stated that MDOT MPA is hoping to bring the project design agreement before the Maryland Board of Public Works (BPW) on November 14, ahead of the December 2018 project schedule date. Prior to presenting at the BPW, MDOT MPA will bring the project before the Maryland Port Commission on November 7, 2018.

Water Resources Development Act (WRDA) of 2018

Ms. Correale stated that the Water Resources Development Act (WRDA) of 2018 is included in the America's Water Infrastructure Act (AWIA) of 2018. AWIA 2018 was passed by the United States House of Representatives the week of September 10, 2018. The bill moves to the United States Senate for an up or down vote with no amendments.

Ms. Correale discussed some of the language included in WRDA 2018 that will be beneficial to the Mid-Bay project. Ms. Correale stated that the "sunset" period has been extended from seven to ten years for projects authorized under the Water Resources Reform and Development Act of 2014 and that MDOT MPA, as a non-federal sponsor, can now advance funds for aquatic ecosystem restoration projects such as Mid-Bay. Ms. Correale added that MDOT MPA will only advance funds if Mid-Bay is in jeopardy of losing authorization.

Ms. Correale informed the Committee that the USACE FY19 budget finances the Poplar Island project under the USACE's navigation business line; Poplar Island was previously budgeted under the USACE's environmental business line as an aquatic ecosystem restoration project. Ms. Correale added that MDOT MPA was concerned for the project as budgets under the navigation line must provide benefit-cost ratios, which was not needed for aquatic ecosystem restoration projects under the environmental business line. Ms. Correale stated that, if approved, WRDA 2018 will ensure that existing project requirements will remain unchanged if budgeted under a new business line.

9.0 Round Table Discussion: Activities and Issues of Significance

Mr. Taylor thanked Mr. Kaiser and stated that he is looking forward to the DMMP CAC tour of Pearce Creek. Mr. Taylor informed the Committee that 2018 marks the 10th anniversary of the Masonville CAC and thanked Mr. Mike Sakowski for his work as Chairman of the Masonville CAC since its inception.

Mr. Nemazie invited the Committee to attend the Horn Point Laboratory Open House in Cambridge on October 13, 2018. Mr. Nemazie stated that the event will include programs for adults and children, several displays on Poplar Island studies regarding ecosystem and grass growth, and the Oyster Hatchery. The Open House usually has 500-700 attendees visiting from outside of Cambridge due to the laboratory's reputation and the enticing studies performed.

Mr. Ortt referenced discussions on the Hyperloop from a previous meeting and discussed the magnetic levitation train (Maglev) project. The Maglev project will produce approximately nine to ten mcy of material which will have to be managed through various uses.

10.0 Closing Comments and Adjourn Chris Correale, MDOT MPA

The next DMMP Management Committee meeting will be held in conjunction with the DMMP Annual Meeting on November 2, 2018 at the Sollers Point Multi-Purpose Center. The next DMMP Executive Committee meeting will be held on November 28, 2018. As there were no additional comments, Ms. Correale thanked everyone for their attendance and the meeting was adjourned.