

**FINAL DRAFT**  
**SUMMARY OF THE DREDGED MATERIAL MANAGEMENT PROGRAM**  
**CITIZENS' ADVISORY COMMITTEE MEETING**  
**February 13, 2019 6:30 PM**  
**Point Breeze Maritime Center II**  
**2200 Broening Highway**  
**Baltimore, Maryland**

***Attendees:***

*Angie Ashley Consulting:* Angie Ashley  
*Association of Maryland Pilots:* Captain Jesse Buckler  
*Baltimore County Department of Environmental Protection and Sustainability (DEPS):* David Riter  
*Baltimore Office of Sustainability:* Bruna Attila  
*EcoLogix Group:* Steve Pattison  
*Fort Howard Community Association; 7<sup>th</sup> District Civic Council:* Scott Pappas  
*Hart-Miller Island Citizens Oversight Committee:* Paul Brylske  
*Kent Conservation and Preservation Alliance:* Doug West  
*Maryland Environmental Service (MES):* Olivia Gulledge, Jeff Halka, Stephanie Peters  
*Maryland Department of Transportation Maryland Port Administration (MDOT MPA):* Sergio Adantor, Dave Bibo, Chris Correale, Bertrand Djiki, Kristen Fidler, Katrina Jones, Kristen Keene, Holly Miller, John Vasina  
*National Aquarium:* Laura Bankey  
*North Point Peninsula Coordinating Council:* Fran Taylor  
*Patapsco/Back River Tributary Team:* Stuart Stainman  
*Turner Station Conservation Teams:* Gloria Nelson  
*US Army Corps of Engineers, Baltimore (USACE):* Justin Callahan  
*Waterfront Partnership of Baltimore:* Adam Lindquist

**Action Items:**

1. MDOT MPA will continue to work to improve and promote responsible, non-motorized watercraft use at Masonville Cove through informal partnerships and hosting a kayaking event to provide community members more water access opportunities. (*ongoing*)
2. Ms. Ashley will email the Annual Report Recommendations for 2019 to committee members.
3. Ms. Ashley will email additional information about Infrastructure for Rebuilding America (INFRA) grant funding and the Howard Street Tunnel project and send an electronic version of the draft letter to committee members. (*complete*)

**Statements for the Record:**

1. Ms. Correale announced her March retirement and that Ms. Fidler will be taking over her position.

**1.0 Welcome & Introductions**

*Adam Lindquist, Chair*

Ms. Ashley convened the meeting at 6:30 pm and welcomed all the committee members. Ms. Correale congratulated Mr. Lindquist and welcomed him to his first meeting as chair of the Dredged Material Management Program (DMMP) Citizens' Advisory Committee (CAC).

Ms. Fidler recognized that the February 13, 2019 CAC 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 Port of Baltimore. 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 Confined Aquatic Disposal (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 to the committee. 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 Port of Baltimore a strong economic engine that is doing the right thing by citizens and the Chesapeake Bay.

Ms. Ashley asked all in attendance to introduce themselves and their affiliated organizations. Ms. Ashley reviewed the action items from the August 8, 2018 meeting summary and stated that all have been completed.

Mr. Lindquist asked for a motion to approve the meeting summary from the August 8, 2018 meeting. The meeting summary of the August 8, 2018 meeting was approved.

## **2.0 Masonville Public Access Study Update**

*Kristen Fidler, MDOT MPA*

Ms. Fidler stated that the Masonville partners are formulating events for 2019 that will offer added access to Masonville Cove. Event ideas are being assessed for realistic availability of resources and logistical coordination and that are responsive to community feedback.

Masonville Cove was opened to the public 10 years ago; the 2019 events' theme is "Decade of Dedication." Access solutions that are currently in the informational stage go along with the 2019 theme.

Ms. Fidler clarified that 2019 is an exploratory year with no long-term commitments. Goals include identifying and prioritizing pilot projects and programs, identifying a path to resources and implementation, gathering data on pilot projects to measure impact, providing recommendations on long-term projects, and continuing to advance planning for long-term solutions.

Feedback from Masonville Cove visitors was received in order to improve safe and public access to Masonville Cove. The term 'access' is being defined broadly to include a variety of ways in which people learn about and visit the Cove. Based on feedback received from community members and stakeholders, four categories of access improvements are being explored:

Visibility and awareness: Many individuals are unaware of Masonville Cove's existence or that it was open to the public. Many also mentioned that it was difficult to find. Feedback reported that both visibility and awareness needed to be improved.

Logistical challenges: While the closest bus stop to Masonville Cove is a mile away, there are no sidewalks connecting the bus stop to the site. Physical access to Masonville Cove needs to be improved.

Hours of operation and self-guided experience: The site operates during business hours from Monday to Friday, and three hours on Saturdays. This makes it difficult for individuals with a typical work schedule to access Masonville Cove. Individuals who have visited the site have had difficulties navigating the site and understanding any background and history of Masonville Cove independently. Enhanced programming at the site and opportunities to interact with the site in a meaningful way would be beneficial.

Bike, pedestrian, and trail connectivity to other public resources in the area: Years of feedback have shown an interest in trail connectivity to other sites such as Gwynn's Falls trail. Opportunities for coordination with external projects and partners will be identified. Trails and paths that connect to other parks would be beneficial.

Short-term potential pilot projects to improve site visibility include the addition of external signage, which could potentially start by adopting portions of Frankfurst Avenue through the Adopt-a-Highway program. This program will install signage on the adopted road with monthly debris clean-ups.

Ms. Fidler stated that Maryland Department of Transportation Maryland Port Administration (MDOT MPA), Maryland Environmental Service (MES), Living Classrooms Foundation, National Aquarium, and the US Fish and Wildlife Service (USFWS) go to many community events and have many GreenPort and Port of Baltimore material giveaways. Masonville Cove-specific promotional materials could bring more attention to Masonville Cove and increase visitation and access.

Masonville Cove's website has not been updated in recent years. The web-design infrastructure is very cumbersome, it is not mobile optimized, and does not populate quickly. A slow and out-of-date website impacts google searches. Updating the website could be a large component in improving access and awareness of Masonville Cove. A simple google search of 'green spaces in Baltimore,' 'public trails in Baltimore,' or 'nature centers in Baltimore' currently do not bring up Masonville Cove and should.

Members of the Masonville Cove partnership have found that the best way to contact citizens in the Curtis Bay, Brooklyn, and Cherry Hill area is through text message. Ms. Fidler stated that leveraging social media platforms so MDOT MPA can meet these individuals in an impactful way and to get as much information out as possible is a large focus.

Ms. Fidler stated that tracking data from visitors and social media 'likes' is the best way to understand if these methods are working throughout 2019.

The examples of pilot projects to improve physical access to the site are mid- to longer-term solutions and include:

Vehicular: MDOT MPA is still working with Uber and Lyft to find out how best to implement a ride-share pilot opportunity. It may be helpful to tie in a pilot with a scheduled event or a set time period of one month. If an Uber or Lyft opportunity does not arise, a shuttle or van service could be offered. Based on metrics of usage at the end of the year, MDOT MPA will have more information to make the decision on whether purchasing/leasing a shuttle or partnering with Uber or Lyft is worthwhile.

Transit: MDOT MPA has met with Maryland Transit Administration (MTA) to learn more about what is needed in terms of updating existing routes for CityLink Silver and Local Bus Route 67. The Greater Baybrook Alliance Transportation Task Force has also met with MTA. MTA is participating in a MicroTransit pilot project in the BWI/Arundel Mills area, which may provide aide to Cherry Hill residents.

Water Access: Water access to Masonville Cove already occurs; Canton Kayak Club continues to promote responsible non-motorized water access at Masonville Cove. Feedback from Mr. Stainman and other individuals is to build on the existing relationship with Canton Kayak Club and to create new relationships with the Baltimore Rowing Center, Downtown Sailing Center, Getaway Sailing, and similar organizations. MDOT MPA will be attending these organizations' meetings to inform their members about Masonville Cove to encourage more water access to Masonville Cove.

Ms. Fidler stated that examples to enhance programming onsite include:

Limited Extended Hours: This would include some evening and Sunday hours. There will be event-specific as well as non-event openings. Data will be collected to determine whether citizens are coming to the site because of an event or to explore Masonville Cove independently.

Decade of Dedication Events: The Masonville partners plan to celebrate the Decade of Dedication year with ten events at Masonville. Events may include Captain Trash Wheel's first birthday, National Urban Wildlife Refuge Day, and National Take a Hike Day.

Directional and Informational Signage: Such signage will enhance visitor engagement and aide in navigation of the site. A laminated trail map that visitors can use while on site is an additional possibility.

Ms. Fidler stated that there are several external projects that may provide potential opportunities for partnership. The Middle Branch redesign has the closest alignment efforts for connecting with Masonville Cove. Middle Branch redesign is a Parks and People-led effort that includes Masonville Cove within the project map as a part of the study/project area. MDOT MPA is a stakeholder in the project planning; the larger effort of this redesign is to connect green spaces. Ms. Fidler stated that if a bike lane, sidewalk, or trail is added, it could potentially be connected to another green space, eliminating paths that do not connect to other access options in the community and potentially gaining more community interest.

Ms. Fidler reiterated that MDOT MPA's goal for 2019 is to gather meaningful data so that next year, investments into long-term solutions can be implemented.

Ms. Nelson stated that informing the public of events for the Turner Station Conservation Team is challenging due to the transient nature of people within the community. She stated that the best way to inform all of the community is to go door-to-door. She suggested making brochures and talking to people.

Mr. Stainman suggested dropping brochures off at Fort McHenry National Park to enhance public knowledge of Masonville Cove. Mr. Stainman asked about the role and involvement of USFWS in the project. Ms. Fidler stated that USFWS is an extremely committed, helpful, and active partner. Mr. Stainman asked if MDOT MPA is planning to request state funds in 2020 to help promote Masonville

Cove. Ms. Fidler stated that because 2019 is an exploratory year where important data is being collected, requesting state funds are not in 2020 plans at this time.

Ms. Nelson stated that many rowing/kayak clubs do not include members from the adjacent community. She requested that MPA and its partners explore offering events that are open to members of the communities adjacent to Masonville Cove. Ms. Fidler stated that MDOT MPA will follow up with the different water clubs in Baltimore to suggest a community day to provide community members more water access opportunities.

Mr. Vasina asked if the presence of nesting bald eagles at Masonville Cove has affected the number of visitors to the site. Ms. Fidler responded that the nest is the closest bald eagles' nest to downtown Baltimore City. While it is a very important mating and nesting season for the eagles, possible regulations and restrictions may cause issues with planned Masonville Cove events. Ms. Peters added that the partnership with USFWS has been valuable in ensuring human activity on site will not be detrimental to the eagle's nest. Ms. Fidler stated that the bald eagle presence is also a great educational opportunity.

Mr. Taylor stated that Fort McHenry has multiple areas with kayak access and kayak-related organizations with whom MDOT MPA could coordinate full day or half-day events or tours to and from Masonville and Fort McHenry. He stated that the historical John Smith water trail, which Masonville is now officially a part of, is nearby and could potentially be an event idea. He suggested placing an interpretive British history sign at Masonville Cove where Fort McHenry is visible. Mr. Lindquist asked if kayaks can be launched from Masonville. Ms. Fidler responded that yes, they can.

Ms. Fidler requested that committee members email her, Mr. Lindquist, or Ms. Ashley with additional suggestions, questions, or requests regarding Masonville access.

### **3.0 Innovative and Beneficial Reuse Update**

*Kristen Keene, MDOT MPA*

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

#### Cox Creek Test Nursery

Ms. Keene stated that a test nursery at the Cox Creek DMCF used a combination of dredged material, lime, compost, and one control plot of store-bought topsoil to grow grasses. The test nursery was established in October 2017 and weekly observations were recorded until the end of October 2018. The most successful plot in terms of vegetative cover was the 100% dredged material with lime. The second most successful plot had 100% dredged material. The store-bought topsoil plot was the least successful. At the beginning of the test nursery, soils were tested for heavy metals, pH, nutrients, etc. More samples will be taken in order to compare the initial tests to the end of the project. Upon request from DMMP committee members, grass clippings will also be collected to evaluate heavy metal uptake.

#### Hart-Miller Island (HMI) North Cell Habitat Development Pilot Project

In summer 2017, MDOT MPA partnered with Mahan and Rykiel Associates in a collaborative design research program, known as the Design with Dredge (DWD) internship program, to explore ways in which dredged material could be used innovatively and beneficially through the lens of landscape architecture in the Baltimore area.

The HMI North Cell Habitat Development Pilot Project originated from the DWD program and is currently in the second phase of design development to establish the construction schedule and monitoring plan. Construction is expected to begin in 2019, followed by three years of adaptive management and monitoring.

The goals of this project are to create a diverse habitat, optimize project costs, and engage and educate stakeholders. MDOT MPA wants to use this opportunity to build support for the IR program and to demonstrate how dredged material is a valuable resource that can be used in a variety of ways.

The project team designed various mounds intended to accelerate the sediment ripening process (the transition from marine sediments to a terrestrial soil), minimize the growth of *Phragmites*, and stimulate habitat development. The mounds are approximately 90 feet in diameter and 5 feet high with a perimeter trench. Based on literature research, this habitat structure is not conducive to *Phragmites* growth, thereby minimizing the effort to control for this invasive species.

The pilot project includes three different mound designs: a basic mound with a smooth surface; a surface mound that has smaller mounds on top of a basic mound to increase the exposure to air; and a habitat mound that will be constructed with immediate habitat features such as rock structures and interior vernal pools. There will be 21 mounds constructed total, with seven of each type. Each group will have one control mound and six treatment mounds. Of the six treatment mounds, three will be treated with a soil amendment such as lime, biochar, or compost, and will be planted with vegetation at years zero, one, and two. The remaining three treatment mounds will not receive a soil amendment but will also be planted with vegetation at years zero, one, and two. Over the three-year period, the effectiveness of the different mound types and applied treatments will be evaluated. The vegetation was selected based on a combination of literature research, the test plots that are currently ongoing in the north cell of HMI, and information that was sourced from the regular on-site vegetation surveys.

The success of the mounds will be evaluated by the physical, chemical, and biological ripening processes in the soil; the biodiversity and abundance of vegetation and animal species within the habitat, along with the presence and abundance of *Phragmites*; and annual topographic surveys that will be used to evaluate mound stability.

Ms. Keene explained that pentagon shape is the most efficient for the machinery that will develop the mounds. This shape will decrease the time and labor costs of developing each mound. If the pilot project demonstrates success, these designs may be extrapolated to other parts of the north cell of HMI.

#### Sustainable Materials Management Maryland (SM<sup>3</sup>)

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, calls on state agencies to be leaders of dredged material, and prompted the creation of the SM<sup>3</sup> group.

The Port of Baltimore is an active member of the SM<sup>3</sup> group and in December 2018, MDOT MPA and MES hosted the SM<sup>3</sup> meeting. Three takeaways from the December SM<sup>3</sup> meeting are as follows: dredged material was introduced into the conversation in the context of waste stream recovery efforts, which brought awareness to SM<sup>3</sup> group about dredged material availability and its vast 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.

#### MDOT State Highway Administration (MDOT SHA) Coordination

Ms. Keene stated that in coordination with MDOT SHA, MDOT MPA initiated two studies with the University of Maryland to develop and evaluate dredged material blends suitable for MDOT SHA projects, both of which will be completed in the first half of 2019.

*Topsoil Study:* The topsoil study is aimed to develop a dredged material blend with properties that meet the MDOT SHA topsoil specifications, evaluate potential leaching characteristics, and determine the geotechnical stability of the blend.

*Embankment Study:* The purpose of the embankment study is to explore the use of dredged material as potential highway embankment material. This study was conducted by amending the dredged material with quarry by-products. Geotechnical analysis was coupled with an environmental assessment to ensure satisfactory performance of the dredged material in structural fills.

Ms. Keene stated in the current MDOT SHA 920 Topsoil Specification, there is a Harmful Material provision that reads, "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." After many months of coordination with MDOT SHA and help from the MDOT Office of Environment and the Maryland Department of Environment (MDE), a specification revision was facilitated to remove the words 'dredge spoil' from the Harmful Materials provision.

The specification revision detaches the long-standing negative stigma associated with dredged material, sending a positive signal to industry and other state agencies that dredged material is a resource. The revision contributes to Governor Hogan's Waste Reduction and Resource Recovery Executive Order, which specifically calls out the reuse of dredged material. It allows for the reuse of dredged material from other sources, including sediment from behind Conowingo Dam and freshwater lakes that are not federal navigation channels. It also allows for vast reuse potential because the MDOT SHA specification book is the standard used across the state, often used by local road departments and contractors/developers on a myriad of development projects.

Mr. Pappas stated that it could be beneficial to use compounds such as silicate rock that have a natural ability to absorb atmospheric carbon dioxide to aide in longer-term issues such as climate change.

Mr. Stainman pointed out that the test nursery grass experiment was a very small sample and only conducted once. He asked if that experiment will be replicated. Ms. Keene stated that MDOT MPA DMCF project sites have demonstrated that grass naturally grows well in dredged material. The test nursery was a focused project, but MDOT MPA could consider a replicate test in the future.

#### 4.0 Corps of Engineers Report

*Justin Callahan, USACE*

Mr. Callahan stated that the US Army Corps of Engineers, Baltimore (USACE) awarded a maintenance dredging contract at the end of 2018 to Norfolk Dredging to dredge 2 million cy from the Craighill Cutoff to Curtis Bay. The contract has been raised to 2.7 million cy. Approximately 1.8 million cy have been placed at Poplar Island from the Craighill Cutoff, thus far. The contract is expected to be complete in late spring 2019.

Two awards for maintenance dredging are planned for fiscal year 2019 (FY19):

1. York Spit channel in Virginia: The York Spit contract will be advertised in June for dredging approximately 2 million cy by hopper dredge.
2. Maryland approach and harbor channels: The Maryland channels will be for 2 million cy from Brewerton Channel and will be placed at the Masonville DMCF. Dredging of Tolchester Channel and Swan Point may be included in this contract, with the material being placed at Poplar Island.

Mr. Callahan stated that USACE Headquarters approved the Masonville Decision Document on January 22, 2019, allowing the Baltimore District to enter into an agreement with MDOT MPA for placement of material from federal channels into the Masonville DMCF. USACE leadership is working with MDOT MPA on revising the tipping fee calculation to account for a change to the Masonville DMCF placement area.

Mr. Callahan stated that the 50-foot widening validation study is currently on hold. The agreement with MDOT MPA will be terminated. Once a resolution is made on where the widening material will go, the study will be resumed. Mr. Callahan stated that USACE met with MDOT MPA and the Virginia Marine Resources Commission and a resolution is still in the works.

Mr. Callahan stated that Virginia was concerned with the findings from the widening study that stated that USACE would be placing over 5 million cy of dredged material in the Wolf Trap Alternate Placement Site. USACE is working to complete maintenance dredging first. Ms. Correale explained that the widening study is a two-phase approach. The Wolf Trap Alternate open water expansion project must be approved before maintenance dredging can occur. Mr. Taylor asked if the cost of the widening study would come from the Harbor Maintenance Trust Fund. Ms. Correale responded that generally the money comes from MDOT MPA's consolidated trust fund and Maryland taxes. Captain Buckler stated that Norfolk is now using the same channels as the Port of Baltimore, making cargo ship movement and coordination more challenging. Ms. Correale stated that the Port of Baltimore is aware of this.

Mr. Callahan stated that USACE is going to undertake an individual DMMP update specifically for the Virginia channels. An abundant placement quantity was available in 2005 during the original DMMP update. However, the 2017 update did not review the Virginia channels thoroughly.

An aerial video of Poplar Island taken by MES was played while Mr. Callahan discussed Poplar Island.

Mr. Callahan stated that USACE is funded to completion of the Poplar Island expansion project. Every contract for dike construction is either completed or is underway. A remaining contract for drainage

structures will be advertised in September. USACE's goal of having the expansion ready for material placement after July 2020 will be met.

Mr. Callahan stated that the dike construction was done 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 upland cells. Mr. Callahan stated that the dike height varies but is approximately 10 feet mean lower low water (MLLW).

Ms. Ashley stated that the CAC took a field trip to Poplar Island in the fall of 2017. She stated that the island has changed substantially since that time. Mr. Callahan suggested that the CAC make another field trip to Poplar Island in 2020. The site will be complete and a drive around the entire island will be possible at that time.

Ms. Correale requested that committee members thank federal representatives for the substantial federal funding that made the Poplar Island project possible.

Mr. Callahan stated that the Mid-Chesapeake Bay Island Expansion project is underway. USACE received \$4.9 million to begin the design of the project. USACE is only approximately \$800,000 short of what is needed for the design portion of the project. Within the next four months a design agreement with the State of Maryland should be executed.

Mr. Stainman asked how long the Poplar Island DMCF will provide capacity. Mr. Callahan stated that it depends on the inflow. He stated that this year there is a significantly higher inflow than last year; however, projections show that the expanded site will last through the 2032/2033 dredging cycle. Mr. West requested the elevation of the Poplar Island dikes. Mr. Callahan stated that the elevation for the vertical expansion at the existing site goes up to +25 feet MLLW and the elevation in the lateral expansion goes up to +20 MLLW.

## **5.0 Stewardship to Scholarship**

*Katrina Jones, MDOT MPA*

Ms. Jones gave an update on DMMP outreach, including the DMMP Annual Meeting and the annual Maryland Association for Environmental and Outdoor Education (MAEOE) conference. Ms. Jones stated that the DMMP Annual Meeting is an event where the individual committees can come together to network with each other. For the 2018 DMMP Annual Meeting, a public school teacher from Cross Country Elementary/Middle School spoke about her students' experiences at Swan Creek wetlands at Cox Creek DMCF and Poplar Island, including quotes from former students who are now in high school. Ms. Jones' presentation is a comprehensive look at the last 10 years of the education and outreach program.

Ms. Jones stated that all DMCFs are available for environmental education programs as outdoor classrooms. MES conducts the on-site environmental education programs. The environmental education program informally started in the late 1990s at HMI. Ms. Jones observed students from Calvert Hall High School conducting scientific procedures at an HMI spillway and the idea was borne to formalize the environmental education program, with the help of MES. Data tracking of the environmental education program started in 2010. Since then, over 56,000 students have interacted through in-class programs, presentations, and field experiences.

The MES Education and Outreach Team was created to provide program development and support on behalf of MDOT MPA. The MES team occasionally take terrapins to classrooms as ambassadors to aide in different lesson plans and programs. Laura Baker (MES) was a former science teacher who now leads the MES Education and Outreach Team, aiding in MDOT MPA's goal of having someone versed in the Maryland State public school system to identify units set by the Maryland State Department of Education for science teachers. This allows MDOT MPA to create a program that ties directly into Maryland education curriculum requirements. By going to the DMCF sites, students can meet the requirement to participate in a meaningful Chesapeake Bay experience.

Ms. Jones stated that MDOT MPA is a partner with MAEOE, as well as one of the sponsoring organizations. MAEOE is the organization that certifies Green Schools and Centers. This program builds student-led sustainable stewardship experiences such as water conservation and recycling. Ms. Jones stated that MDOT MPA attended a MAEOE conference as an exhibitor to promote student tours at the DMCF sites. MDOT MPA DMCF tours aid in schools' qualifications to become a green school.

Every year MAEOE hosts a Youth Summit at Sandy Point State Park where approximately 3,000 students attend to receive their Green School flag. Two Governors, the Secretary of Department of Natural Resources, and the Secretary of the Department of the Environment have attended and participated in the past.

The MAEOE Conference is a place where teachers can learn about the professional development that is associated with the Green School certification. Many sessions are offered and provided by environmental education resource organizations. Occasionally MDOT MPA's environmental education team will hold sessions about the DMCF sites to encourage teachers to bring students to the sites. Ms. Jones stated that Masonville Cove Environmental Education Center is a certified Green Center, so professional development can be provided at the center.

Ms. Jones stated that this year, the 34<sup>th</sup> MAEOE conference was held at the Towson Sheraton Hotel. Approximately 550 teachers and exhibitors participate in the conference. Every year the conference offers an environmental challenge. The 2019 MAEOE conference challenge was a 50-photo scavenger hunt that included the challenge site, a person, and the conference logo. MDOT MPA collected 44 out of the required 50 photos and was named the 2019 MAEOE conference challenge winner.

Ms. Jones stated that at one of the first MAEOE conferences, Mr. Bibo started a conversation with Arlington Echo about the terrapins that would nest on the sandy beaches of Poplar Island. Arlington Echo wanted the opportunity to create a program utilizing the terrapin hatchlings. Arlington Echo developed the criteria for the Terrapin Education and Research on Poplar (TERP) and Terrapins in the Classroom program in order to meet the requirements for terrapin research performed by the University of Ohio. All data that students collect in the classroom is submitted to the University of Ohio.

Dr, Willem Roosenburg from the University of Ohio goes out to Poplar Island to identify nests and collect hatchlings. MDOT MPA has permits to hold up to 200 terrapin hatchlings for education purposes. Approximately 190 terrapins are placed in classrooms, while 10 are placed with MES for educational programs. MDOT MPA relies on their partners, MES, the National Aquarium, and Arlington Echo to distribute the terrapin hatchlings. To date more than 2,300 terrapins have been a part of the TERP program. All teachers with terrapins in their classrooms are provided training on terrapins care and data collection.

Every year between May and June, students take a field trip to Poplar Island to release the terrapins back into the wild.

MDOT MPA is a part of Governor Larry Hogan's 2017 Executive Order, Project Green Classrooms. The goal of this executive order is to give every student the opportunity to have access to nature. In 2017, MDOT MPA participated in PARKing Day by setting up a temporary park in a parking space across the street from the World Trade Center. MDOT MPA spoke to passersby about Masonville Cove because it is the closest site to downtown Baltimore. Under the Access to Nature recommendation of the Project Green Classrooms 2018 Strategies document, Parks and nature spaces, such as Masonville Cove, are included in a draft online story map created to include destinations, schools, and transportation linkages such as bike, trains, and buses. Once approved, the online map will be available for practitioners and the public.

Ms. Jones stated that 2019 is a year of celebration for MDOT MPA, with the 10<sup>th</sup> year of public opening of Masonville Cove, the 10<sup>th</sup> year of Terrapins in the Classroom, and Captain Trash Wheel's first birthday.

### **6.0 Harbor Development Update**

*Chris Correale, MDOT MPA*

Ms. Ashley stated that Ms. Correale agreed to forgo her Harbor Development update presentation in the interest of meeting time. Below is a brief summary of Ms. Correale's update.

Cox Creek Base Dike Widening: The notice to proceed for the base dike widening at Cox Creek was issued August 31, 2018. Contractor Bowen and Kron Enterprises, Inc. (Bowen & Kron) was awarded the contract in 2018. From September 6 – December 2, 2018 Bowen & Kron conducted the following: installation of erosion and sediment controls, petroleum delineation, and closure of spillway 2. Following petroleum delineation, petroleum excavation began and continued through January 2019. The next steps will be to complete sediment basin excavation and borrow excavation.

To date approximately 154,616 loose cubic yards of fill has been placed at the base of the dike in preparation for dike raising. MDOT MPA estimates that all dike raising design plans to +60 feet MLLW will be complete by summer 2019. Construction is anticipated to start winter 2020. Dike raising to +60 feet MLLW would provide an estimated capacity of 11.3 million cy.

Operations and Maintenance (O&M) Complex Building: Work on the exterior wall installation is in progress. The exterior wall enclosure of the office building is approximately 95 percent complete.

Seagirt Berth and Loop: In 2017, the Port of Baltimore handled a record 596,972 containers, an 11 percent increase from the previous record set in 2016. To accommodate the growing cargo activity, the remainder of the loop will be deepened to 50 feet and berth 3 will be deepened by 3 feet to 50 feet. This will provide a second 50-foot container berth and should allow ships to more easily, efficiently and safely turn around, thus increasing the efficiency of the Port.

To deepen the loop MDOT MPA is working with USACE on a feasibility study. The study is expected to take four years. If the study has a positive outcome and funding is appropriated by Congress, it will be approximately seven to nine years until the project is complete.

This berth 3 project is well underway with the preliminary planning, ship simulation study and geotechnical investigations and chemical analysis have all been completed. The berth 3 infrastructure design is ongoing, and the permitting process began in December 2018.

Pearce Creek: In the community surrounding Pearce Creek, 224 in-home connections and 247 total well abandonments services (some homes had multiple wells) have been completed out of 232 properties. There are three homeowners on a total of five properties that 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. As a result of the construction associated with the waterline connections MDOT MPA facilitated the road restoration; this project is nearing completion.

Mid-Bay Project: The Mid-Bay project will provide long-term capacity for dredged material placement to keep the navigation channels safe and efficient for the Port of Baltimore. It would also restore important, scarce, and remote island habitat in an ecosystem of national significance, the Chesapeake Bay.

The USACE has received \$4.9 million for Mid-Bay design. The Project management plan and design agreement between USACE and MDOT MPA are underway. MDE public notices for geotechnical boring comments are due by March 1, 2019.

**7.0 Committee Administration and Open Discussion** *Angie Ashley, Angie Ashley Consulting*  
Ms. Ashley stated that a copy of the two-page Annual Report Recommendations for 2019, along with a short summary of the meeting will be emailed to all CAC members.

Ms. Fidler stated that MDOT and MDOT MPA are submitting 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. The grant application is for federal funding towards the Howard Street Tunnel project. This application would aide in leveraging private and state funds to help in the completion of the expansion of the tunnel. The applications are due to MDOT by February 19; the MDOT project manager is looking for a letter of support from the CAC as a body. A template of a letter was distributed to attendees in case submission of a letter is of interest.

Ms. Fidler explained that expanding the infrastructure of the Howard Street Tunnel would allow double stacking of cargo on trains that move through the Port of Baltimore. Currently the tunnel inhibits efficient cargo movement. This has an impact on the competitiveness of the Port of Baltimore. Collecting the grant funds would be a major strategic advantage for the Port of Baltimore and the State of Maryland.

Ms. Ashley stated that in the past the CAC has sent letters of support for the Mid-Chesapeake Bay Island Restoration Project and the Poplar Island expansion project. The chair typically drafts the letter, the letter is discussed within the committee, and the chair sends the letter on behalf of the committee. Mr. Taylor asked if there is more information about the INFRA grant funding and the Howard Street Tunnel project accessible online. Ms. Ashley stated that more information about the INFRA grant funding and the Howard Street Tunnel project will be emailed to committee members after the meeting, as well as an electronic version of the draft letter.

Ms. Correale stated that if other organizations or businesses are interested in writing their own letter of support, MDOT MPA would gladly accept them.

Ms. Ashley reminded members that the next meetings are May 8, 2019 and August 7, 2019, which is a joint meeting with the Harbor Team.