

**FINAL DRAFT
SUMMARY FOR THE HARBOR TEAM MEETING
July 26, 2018; 6:00 PM
1000 Frankfurst Ave
Baltimore, MD**

Attendees:

Angie Ashley Consulting: Angie Ashley

Anne Arundel County Public Works: Chris Phipps

Baltimore County Environmental Protection and Sustainability: David Riter

EcoLogix Group: Steve Pattison, Eli Gartner (intern)

Living Classrooms Foundation: Lorraine Warnick

Maryland Environmental Service (MES): Jeff Halka, Christine Holmburg

Maryland Department of Transportation Maryland Port Administration (MDOT MPA): Sergio Adantor, Dave Bibo, Chris Correale, Bertrand Djiki, Kristen Fidler, Kristen Keene, Holly Miller, John Vasina

Patapsco Back Rivers Tributary Team: Stuart Stainman

Northgate Environmental: Nancy Leitner

North Point Peninsula Council: Fran Taylor

South Baltimore Business Alliance: Mike McGeady

Straughan Environmental: Jeff Nelson

Terracon: Nancy Straub, Aditya Rayudu

Tradepoint Atlantic: Pete Haid

Turner Station Conservation: Gloria Nelson

U.S. Army Corps of Engineers (USACE): Graham McAllister

Action Items:

- 1.) Holly Miller (MDOT MPA) will provide the Confined Aquatic Disposal (CAD) Pilot Project monitoring data to Russ Donnelly.
- 2.) Holly Miller (MDOT MPA) will provide the cost estimate of the Masonville mitigation projects to Mr. Haid.
- 3.) Provide information on solar installation at the terminals.

Statements for the Record:

- 1.) None.

1.0 Welcome & Introductions

Mr. Steve Pattison

Mr. Pattison welcomed the attendees, and everyone introduced themselves.

2.0 Approval of Summary from Last Meeting

Team

Mr. Pattison asked for a follow-up regarding the action items from the April 26 meeting. Ms. Miller stated the Confined Aquatic Disposal (CAD) Pilot Project monitoring data is now available, and it will be provided to Russ Donnelly. The approximate cost per cubic yard (cy) for the material dredged and placed during the CAD Pilot Project was \$74. It was noted that this cost did not account for the cost savings earned from the use of sand dredged from the CAD cell at Masonville for construction purposes. Normally, this sand would have to be purchased. Factors such as scale

of the project and constant mobilization and demobilization of the contactor's equipment for ship traffic also inflated the price of the project. In response to Mike McGeady's request for the construction cost estimate of the Algal Flow-Way System, Ms. Keene stated it is approximately \$3 - \$5 million. The Harbor Team approved the April 26 meeting summary as written.

3.0 Masonville Mitigation Projects

Ms. Holly Miller, MDOT MPA

Ms. Miller stated that the Masonville Dredged Material Containment Facility (DMCF) construction included an extensive mitigation package for both on- and off-site projects. The on-site mitigation project is almost entirely contained in the Masonville Cove area, which has been separated in to Access Zones (AZ) 1, 2, and 3. The areas were separated to allow MDOT MPA to provide public access as each zone is finished, rather than waiting for the entire site to be completed before allowing public access. Most of the mitigation projects are completed or in progress. Many of the projects located within the Masonville Cove area have been completed. Varying types of mitigation are being implemented including upland habitat development, tree plantings, tidal and non-tidal wetlands, substrate improvement, and reef creation. Five areas of non-tidal wetland plantings have been completed and are being monitored to determine if they meet the Maryland Department of the Environment success standards. The final wetland located in AZ3 has been constructed and planting is anticipated at the end of the summer.

Another mitigation project is the Shad and Herring Restoration Project which is a partnership between MDOT MPA and the Maryland Department of Natural Resources (DNR). The goal was to stock hatchery-raised fish on the Patapsco River to facilitate a self-sustaining population of fish. Three years of stocking occurred, followed by six years of monitoring. The project is in the final year of monitoring. The monitoring has shown an incremental increase in fish populations, believed to be attributed to the stocking program.

Five trash interceptor mitigation projects are associated with Masonville. Mr. Trash Wheel has been operational since May 2014 and has collected about 900 tons of trash. Captain Trash Wheel was operational as of May 2018. The Dundalk Marine Terminal trash interceptor uses hydrodynamic separation to remove trash from stormwater and has been in operation since April 2018. Approximately 200 solar compacting trash cans will be placed in the local communities of Cherry Hill, Curtis Bay, Brooklyn, and the Masonville Cove area. Coordination with Baltimore City is ongoing for placement of storm drain inserts to prevent trash from reaching the waterways.

The Biddison Run stream restoration project is a stream restoration project in the Back River watershed. Coordination with Baltimore City is ongoing. Baltimore City is currently working on the design of the project and obtaining Right-of-Entry agreements from adjacent property owners, which has caused some delays in the overall schedule.

Once the on-site mitigation projects are completed and MDOT MPA closes out the Consent Order, the property will be entered in to a conservation easement with the Maryland Environmental Trust. Remediation of AZ1 and AZ2 has been completed. Remediation of AZ3 is expected to be completed in fall 2018. Mr. Haid asked if the Consent Order was an offset mitigation project. Ms. Miller stated that the site had some contaminated sediments and trash/debris, so the site needed to be cleaned up and a remedial action plan in place to minimize contact with the contaminated soil

before any projects could begin. A 2-foot soil cap covers most of the 52 acres of the Cove area to address heavy metal hot-spots that were identified.

Mr. Halka stated, relative to the shad and herring restoration project, that the Bloede Dam is in the process of being removed and the work should be completed by September. This removal will allow the shad and herring to travel further upstream. Ms. Miller added that upstream would be a better spawning habitat. Ms. Fidler asked if all of the mitigation projects fell under the same permit. Ms. Miller replied that they did and stated that the mitigation projects are a result of the construction of the Masonville DMCF. Ms. Fidler asked who decided the extent and types of mitigation projects. Ms. Miller stated that some of the mitigation choices were required and other mitigation decisions were coordinated with the citizens and stakeholders. Priority projects were identified for the mitigation package which was sent to the regulators. Mr. Haid asked for the cost of the mitigation projects. Ms. Miller stated that MDOT MPA can provide the cost estimate. Mr. Taylor asked if access to Masonville was considered mitigation. Ms. Miller stated that site access is considered a community enhancement, but MDOT MPA is undertaking the project to provide access because it is important to the local communities.

4.0 Masonville Public Access Study Update

Ms. Kristen Fidler, MDOT MPA

Ms. Fidler stated that the goal is to provide enhanced and safe public access to Masonville. This has been a longstanding objective of MDOT MPA, partners, communities, and citizens. A feasibility study was conducted in partnership with the Federal Highway Administration grant program in 2016. The results and next steps of the feasibility study are now available. Ms. Fidler reminded the Harbor Team committee that Masonville Cove is adjacent to active marine terminals and the Masonville DMCF.

As background, the Masonville DMCF is one of two DMCF sites which are available to place dredged material from the Harbor's federal navigation channels each year. Placement of dredged material from the Baltimore Harbor began at Masonville in 2010. MDOT MPA is actively raising the dikes. Approximately 500,000 cy of dredged material can be placed each year. Masonville Cove is home to the Masonville Cove Environmental Education Center (MCEEC), which is run by the Living Classrooms Foundation (LCF), holding numerous programs for area students focusing on environmental stewardship, and science, technology, engineering, and math. Masonville Cove features a pier, walking paths, restored and created wetlands, and shoreline habitat. Safe pedestrian or bicycle access for members of the communities adjacent to the site has been challenging due to the location of Interstate 95, the CSX rail tracks and the absence of sidewalks along Frankfurst Avenue.

In 2013, Masonville Cove was designated as the nation's first Urban Wildlife Refuge Partnership which includes MDOT MPA, LCF, US Fish and Wildlife Service (USFWS), and the National Aquarium. The Urban Wildlife Refuge designation and partnership with USFWS enables MDOT MPA to apply for federal grants. In 2015, MDOT MPA and USFWS partnered to apply for the Federal Land Access Program (FLAP) grant through the Federal Highway Administration.

The study assessed the feasibility of multi-modal transportation options to Masonville Cove such as Lyft/Uber shared ride services, water access, pedestrian/bicycling access, public transit and shuttle/van options. The study purpose and scope were to identify feasible multi-modal options

that could provide enhanced and safe access to the site from the local communities, as well as the greater Baltimore region. MDOT MPA hosted two stakeholder input meetings at Benjamin Franklin High School in 2017. The first meeting included displays of the design concepts, and discussions of the possible options that were being considered. The second meeting presented preliminary results of the analysis that were developed into the final report. Input from local stakeholders, agencies, and organizations were taken into consideration. The project team also received input from community groups, organizations and local agencies. The report is available on the MDOT MPA [website](#).

MDOT MPA investigated a variety of options including shuttle service and rideshare. Contracting a shuttle service provider, or partnering with a local organization that already has a shuttle service or renting/owning vans for use when needed were investigated. Utilizing rideshare such as Lyft or Uber would be implemented through a sponsor setting up an account to fund rides to and from Masonville Cove.

Pedestrian options (including cyclists) were split in to two options. The first includes “sharrows” where bicycles and vehicles would share the road and bike boxes would be added to intersections. The other option assessed was a separate bike and pedestrian track, or a “cycle track.” Either option would require significant engineering and safety analysis and coordination with Baltimore City Department of Transportation.

For water options, kayaking and water taxis were investigated; currently kayakers from Canton Kayak Club access the site. MDOT MPA continues to promote responsible kayak access. The water taxi option was removed from consideration due to navigational concerns from reef balls, potential pier refurbishments needed to support the water taxis, and scheduling conflicts between site and taxi operation hours. The goal is to provide direct access for the nearby communities. However, if community members cannot reach the site by land, providing them with water access does not alleviate the issue. Water access would primarily benefit communities located across the Patapsco River, rather than the local communities.

The BaltimoreLink public transit service was also evaluated in the study. There is no bus service along Frankfurst Avenue at this time, but in the future MDOT MPA may be able to explore Mobility on Demand grant funding opportunities, which is a shuttle service that could close the gap between Masonville Cove and the last bus stop, approximately a mile away.

Options removed from consideration as a solution included the intersection improvements for the “sharrows” option due to a lack of adequate safety provided by the shared use roadway. Contracting a shuttle provider was removed due to the cost. Entering into partnership with a locally operated provider was removed due to logistic concerns regarding who would pay for operations, maintenance, riders traveling elsewhere, etc. The water taxi was removed as an option due to navigation issues related to the in-water reef balls.

Possible short-term options include rideshare (Lyft/Uber) and kayaking. Long-term options include shuttle rental, shuttle purchase, intersection improvements through the separated “cycle track,” and continuing to evaluate transit options through potential “last mile” grant funding opportunities.

The report was finalized in April 2018. While this study was occurring, other projects and organizations in the area began to emerge. MDOT MPA is working to ensure that any access solutions pursued take into consideration these other initiatives, priorities and project timeframes. Next steps include seeking greater feedback from the communities regarding their current transportation priorities. A presentation was given to the Greater BayBrook Alliance, the large umbrella community group for this area, on July 25 to share the findings of the study and gather information on their priorities and input. MDOT MPA is reaching out to a variety of stakeholders and partners involved in several projects that are moving forward with momentum, such as the Hanover Street Bridge Corridor Study and the Middle Branch redesign. MDOT MPA will be working with Baltimore City Department of Transportation and other partners to determine their scope of their projects and the possibility of including access to Masonville Cove. There is also the Rails to Trails East Coast Greenway, which includes a proposed trail from Cherry Hill to Masonville Cove. The potential for transit options will also continue to be explored. MedStar Health has already created a Lyft/Uber/ account to provide free patient access. MDOT MPA will be contacting them for more information to gather lessons learned and identify other feedback to inform pursuing this potential short-term solution. A major Middle Branch redesign process is underway, led by Parks and People Foundation, and the South Baltimore Gateway Partnership is looking to connect Port Covington parks. Baltimore City is working on traffic calming and streetscape projects in the Brooklyn commercial district. There may be opportunities for MDOT MPA to work with these partners and leverage funding opportunities to provide safe and enhanced access in a way that meets the needs of the communities and businesses in the area.

MDOT MPA will move forward with gathering community feedback, input and engagement. MDOT MPA will also re-engage with agency partners on the potential for coordination with other projects in the area and develop a menu of short-term pilot(s) and access improvements. The success or lack of use will inform further planning, funding, and justification for longer-term solutions. The goal is to implement the pilot(s) in 2019 and MDOT MPA will continue to plan for long-term solutions.

Mr. Stainman asked if Masonville would allow kayaks from Baltimore rowing club to visit the site. Ms. Warnick stated that some clubs already make trips to Masonville Cove. Mr. Stainman asked if an estimated cost of the pedestrian paths was available. Ms. Fidler stated that the costs were available in the feasibility report. Mr. Stainman asked if any interest has been shown by the City Council representative or State delegates. Ms. Fidler stated that Delegate Robyn Lewis from District 46 attended the meeting held on July 25 with the Greater Baybrook Alliance. Also, Delegate Brooke Lierman from District 46 expressed interest and stated that the City Council is supportive and interested in the access to Masonville Cove.

MDOT MPA realizes that many locals still do not know that Masonville Cove is available for use. MDOT MPA must share with the local communities what is occurring at Masonville Cove. Ms. Ashley stated that a larger study is occurring for the entire Middle Branch that includes 11 continuous miles of shoreline. Approximately 47,000 people live within a 10-minute walk of the shoreline but are unable to get there due to physical barriers and dangerous routes. Mr. McGeady asked if MDOT MPA has been in contact with Bikemore or Bike Maryland. Ms. Fidler stated that they are on the list of those MDOT MPA still needs to contact. Ms. Ashley attended a meeting for

MDOT MPA with Bikemore. They are very involved in the Middle Branch process as well as Rails to Trails.

5.0 Innovative & Beneficial Use Progress Report Ms. Kristen Keene, MDOT MPA

Ms. Keene briefly reviewed the upcoming and ongoing Innovative Reuse (IR) demonstration projects. Currently, MDOT MPA is working with Baltimore City Department of Public Works (DPW) to finalize a memorandum of understanding (MOU) to haul dry dredged material to the Quarantine Road Landfill to be used as alternative daily cover (ADC). Finalization of the MOU is expected within the next 30 days. The small test nursery using various mixtures of dredged material is ongoing. The test plot with 100% dredged material and lime and the test plot with 100% dredged material are still showing the best vegetative growth and coverage results. MDOT MPA will continue recording observations until early fall 2018. Dried dredged material will be used as engineered fill material to help facilitate the development of the South Cell of Hawkins Point; hauling is expected to begin in the next 60 days. For the Hart-Miller Island North Cell Habitat Development project, currently MDOT MPA is in the data collection phase, which will support preliminary design scenarios for micro-landforms that will support a diverse habitat. MDOT MPA continues to seek additional opportunities to conduct demonstration projects and asked the Harbor Team to submit any ideas.

Several IR presentations have been given at local conferences including the North American Dredging Summit held May 2-3, 2018, the Maryland Recycling Network and the Solid Waste Association of North America Mid Atlantic Annual Conference held June 20, 2018, and the Maryland Environmental Service (MES) Environmental Business Leadership Conference held on July 19, 2018. Additionally, a Chesapeake Bay Journal article, written by Tim Wheeler, featured the beneficial use of dredged sediment and focused on the Turner Station/Fleming Park project proposal that was developed under the summer 2017 *Design with Dredge* program. This article indicates a paradigm shift in the way dredged material use is being viewed by communities.

Regarding the Maryland Department of the Environment (MDE) Guidance Document, the National Parks Service made a request to use dredged material in agricultural applications. Therefore, MDE and the Maryland Department of Agriculture have developed new language that will be incorporated into the Guidance Document. Regarding the IR Request for Proposals (RFP), the RFP was cancelled by MES, on behalf of MDOT MPA on June 22, 2018. The proposals exceeded the available funding; the high costs were partially due to the current space constraints at the Cox Creek DMCF. MDOT MPA is actively pursuing acquisition of additional space near the Cox Creek DMCF to conduct cost effective, large-scale IR operations.

MDOT MPA is currently focusing on advancing the demonstration projects, collaborative efforts and alternative funding opportunities. These efforts include the Sustainable Materials Management Maryland (SM³) which is a private sector-led and supported coalition of businesses from multiple sectors, who are committed to working collaboratively with MDE and other state agencies to help meet the goals outlined in Governor Hogan's Waste Reduction and Resource Recovery Executive Order. Working groups under the SM³ umbrella are being developed to focus on different areas such as innovation, technology, and how to efficiently use dredged material.

MDOT MPA continues to work towards completing IR Strategy Item #6: Explore alternative means of funding and financing for IR, and Strategy Item #7: Investigate opportunities to foster research and innovation such as tax credit programs, incubators and university programs such as the Maryland Industrial Partnerships (MIPS) program at University of Maryland. MDOT MPA has also been working with the State Highway Administration (SHA) and the University of Maryland on the environmental testing of an embankment fill material blend and a topsoil blend using dredged material; encouraging preliminary results have been received for both studies. Once the studies have been finalized, MDOT MPA will share the results. This environmental testing serves as a critical component to updating the SHA technical specifications to allow for the use of dredged material.

The Department of Natural Resources (DNR) is developing internal guidance for Beneficial Use applications. DNR is working to establish desktop analysis guidance for identifying thin-layer placement (TLP) project sites. Two projects are moving forward through DNR's Community Resilience Grant Program that will incorporate the beneficial use of dredged material for the development of living shorelines. One project is at Franklin Point State Park in Anne Arundel County and the other is at Hurst Creek in Dorchester County.

MDE hosted a public meeting for solid waste managers, which included discussion of the Innovative Reuse and Beneficial Use of Dredged Material Guidance Document and procedures for obtaining approval to use dredged material or other potentially impacted soil at landfill locations. MDE also developed a Category Calculator Tool to assist environmental professionals in evaluating the nature and probability of adverse human health effects from the exposure of contamination in soil, and to assist environmental professionals to categorize soil for use as fill material. Currently the tool is not available online but can be provided by MDE upon request.

Mr. Stainman asked if the MDE Guidance Document was relevant for the Conowingo Dam dredged material. Ms. Keene replied that the guidance document can be used by any entity that is looking to reuse dredged material innovatively for on land applications or beneficially for in-water applications in Maryland. Mr. McGeady asked if any of the proposals for the RFP described a commercial process regarding aggregate. Ms. Keene stated that due to the State procurement process MDOT MPA is unable to comment on specific proposals received.

6.0 DMMP Outreach – DMMP Annual Meeting Feedback

Ms. Kristen Keene, MDOT MPA

Ms. Keene stated that the Dredged Material Management Program (DMMP) Annual Meeting will be held on November 2. Surveys were sent to members of every DMMP committee for feedback and improvements regarding the DMMP Annual meeting. There were responses from 35 people. Of those that responded, 19% were from non-profit organizations, 22% were from government (federal, state, and/or local agency), 27% were from the business industry, and 32% were community members. Committee members were asked their preferred time for the DMMP Annual Meeting to be held. The majority of responses replied between 9am-12pm, which is the timeframe in which the meeting is currently held. Committee members were asked what they found to be the most valuable from the DMMP Annual Meeting. The majority responded that the annual meeting was most valuable for understanding the DMMP recommendations and receiving an update on the state of the Port. The survey also asked how the DMMP Annual Meeting could be improved. The

majority responded that the annual meeting could be improved by engaging the audience to a greater degree and inviting individuals/organizations from outside of the DMMP stakeholder structure. MDOT MPA believes that making the annual meeting more interactive and increasing the attendance by those from outside of the DMMP structure would be a great benefit. Other suggestions included having a presentation regarding the proceedings and issues from the GreenPort Congress and engaging private businesses. MDOT MPA is hoping to use this information to make the annual meeting the best it can be.

Mr. Stainman stated that MDOT MPA should engage MDOT and other modal agencies that relate to the port such as highways and rail connections. Ms. Straub stated that civil engineering associations should also be invited to the annual meeting.

7.0 Harbor Development Update

Ms. Chris Correale, MDOT MPA

Cox Creek Expanded

Ms. Correale stated the base dike contract has been awarded and the Notice to Proceed will be given soon. Mobilization is expected in August or September of this year. Construction of the base dike is expected to be completed in 2022. Regarding dike raising to +60 ft Mean Lower Low Water (MLLW), the 30% designs were completed in July. Phase I remediation is complete. MDOT MPA received the sign-off letter from MDE in July. The Environmental Protection Agency (EPA) has approved the remedial action plan for Building 201; demolition should begin in August or September.

The Operations and Maintenance Complex construction contract was awarded in April, it should take 1.5 years to construct and will include a meeting space for the Cox Creek Citizen Oversight Committee (COC) and Harbor Team meetings.

Masonville Dike Raising

Ms. Correale stated that the cross dike for the Kurt Iron Slip (KIS) has been completed and is currently being filled so it can be used as terminal area. MDOT MPA is waiting for the Erosion and Sediment Control (ESC) permit to be issued for the dike raising. Once the ESC permit is received, MDOT MPA will begin raising the dike.

Dredging

Ms. Correale stated that the Port of Baltimore had an 11% increase in cargo in 2017 (a record of 600,000 containers). The Port is on track to increase again this year. To better accommodate these increases, a second 50-foot berth is needed. Berth 3 at Seagirt and the remainder of the Seagirt Loop will be deepened to 50-feet and the entire loop widened. Approximately 1.5 million cubic yards (mcy) will be removed from the berth and loop area. The estimated dredging volume is included in the long-term capacity numbers. The project is expected to begin in late 2020.

Energy & Donor Port

Ms. Correale stated that approximately 200,000 cubic yards of material has been dredged around the Dundalk Marine Terminal utilizing Energy & Donor Port funding. The work was completed in July 2018. Approximately \$3.96 million was received for further Energy & Donor Port projects from the US Army Corps of Engineers (USACE) Fiscal Year 2018 Work Plan. Mr. Stainman asked Ms. Correale to explain the meaning of “Energy & Donor Port”. Ms. Correale stated that the Water

Resources Development Act of 2014 had set aside funds for Energy Ports and Donor Ports. An Energy Port is determined by a certain number of twenty-foot equivalent units (TEU) and a certain percentage of the total cargo must be an energy commodity. The numbers were based on 2012 statistics and the coal which passes through the Port of Baltimore meets the requirements of an Energy Port.

Mr. Stainman asked if there were any other ports with 50-foot berths on the east coast besides Baltimore and Norfolk. Ms. Correale replied that Miami and New York/New Jersey also has 50-foot berths. Baltimore is competitive and increasing in business. Norfolk is placing a request to deepen their port to 55-feet however an approved feasibility study is needed from the USACE. Baltimore has advantages such as being an efficient port and close to large consumer groups (approximately 7-million people). The Port of Baltimore is also close to the mid-west. These advantages help the Port of Baltimore when competing for shipping.

Mr. Taylor asked if there were any concerns regarding the volume and growth of the port regarding the tariff issues. Ms. Correale stated that tariffs are a concern, adding that there is a large amount of uncertainty surrounding the issue.

Mr. Phipps asked, with the construction pending at two of the DMCF's, how will the port minimize disruption of inflow of dredged material. Mr. Bibo stated that construction and inflow activities at the DMCF's are managed as a system rather than separately. It requires a large amount of coordination. Inflow will alternate between sites depending on construction and scheduling needs for the USACE, private sector, and state dredged material. Ms. Miller added that it is stipulated in the construction contracts that activities must allow for active inflow of dredged material.

Mr. McGeady asked about the double stack issue. Ms. Correale replied that MDOT MPA is working on the issue.

8.0 Upcoming Meetings

Mr. Steve Pattison

Mr. Pattison stated that the next Harbor Team meeting is scheduled for October 25, 2018.

The National Aquarium is holding an Alley Art event on 8/4 in Curtis Bay, which will clean and paint an alley to encourage keeping the area clean.

Ms. Miller stated that there is an article in the Baltimore Sun regarding ozone monitoring conducted by the National Air and Space Administration (NASA) and MDE, which took place at Hart-Miller Island. Mr. Taylor stated that the HMI 5-miler race was a success, and many people are looking forward to return for future races. The partnership included the Friends of Maryland State Parks, the Running Organization, Maryland Department of Natural Resources, and MDOT MPA. In addition to bicycles there are paddle boards, and kayaks available for visitors. Ms. Miller stated that rentals have been decreased due to the rains this season.

Ms. Straub asked if installation of solar trees in terminals has been considered. Ms. Correale will investigate lease requirements and discuss the possibility of installation of solar trees in terminal lots with MDOT MPA Safety, Environment and Risk Management (SERM) department. Ms. Miller stated that the cruise terminal has solar panels on the roof.

9.0 Adjourn