

FINAL DRAFT
SUMMARY OF THE DREDGED MATERIAL MANAGEMENT PROGRAM
CITIZENS' ADVISORY COMMITTEE MEETING
February 7, 2018 6:30 PM
1000 Frankfurst Avenue
Baltimore, Maryland

Attendees:

Angie Ashley Consulting: Angie Ashley

Baltimore County Department of Environmental Protection and Sustainability (DEPS): David Riter
Cox Creek Citizens Oversight Committee (COC)/ South Baltimore Business Alliance (SBBA): Vince
Glorioso

EcoLogix Group: Steve Pattison

Living Classroom Foundation: Julian Whitley

Maryland Environmental Service (MES): Jeff Halka, Stephanie Peters, Chris Williams

Maryland Department of Transportation Maryland Port Administration (MDOT MPA): Dave Bibo,
Chris Correale, Katrina Jones, Kristen Keene, Shawn Kiernan, Holly Miller, John Vasina

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 (USACE), Baltimore District: Graham McAllister

Waterfront Partnership: Adam Lindquist

Action Items:

1. MDOT MPA will investigate with Baltimore City which communities will be targeted to receive storm drain insert(s).
2. MDOT MPA will provide water quality statistics and salinity data from MD Department of Natural Resources' water quality station at Masonville Cove related to raising oysters in the area to the DMMP Citizens' Committee.
3. MDOT MPA will report back to the DMMP CAC committee the number of cubic yards of Arundel clay that will be borrowed for construction of the Cox Creek Expansion.

Statements for the Record:

1. Mr. McAllister shared that the US Army Corps of Engineers Baltimore Office has moved. The new location is 2 Hopkins Plaza, Baltimore, MD 21201. All other contact information will stay the same.
2. Mr. Lindquist provided an update on Mr. Trash Wheel and Professor Trash Wheel. Professor Trash Wheel completed her first year in December. Mr. Lindquist informed the committee that Mr. Trash Wheel's eyes and web camera have been down but are being replaced and repaired. Professor Trash Wheel had six dumpsters of trash after the rain this week. Mr. Lindquist also mentioned there was an article in *City Lab* that he recommended everyone read at: <https://www.citylab.com/design/2018/01/how-baltimores-trash-collection-became-a-public-sensation/550133/>

1.0 Welcome & Introductions

Mr. Fran Taylor

Mr. Taylor convened the meeting at 6:30 pm and welcomed all the committee members. All in attendance introduced themselves and their affiliated organizations. The summary of the August 9, 2017 meeting was approved.

2.0 Innovative and Beneficial Reuse Progress Report

Ms. Kristen Keene, MDOT MPA

MDOT MPA is working on several demonstration scale projects that are anticipated to be initiated during the 2018 calendar year. The goal is to execute meaningful demonstration scale projects that will help further the Innovative Reuse Program. The projects being planned include using dried dredged material from the Cox Creek Dredged Material Containment Facility (DMCF) for alternative daily cover (ADC) at the Baltimore City Quarantine Road Sanitary Landfill and as engineered fill for the Hawkins Point South Cell. In addition, MDOT MPA developed a test nursery demonstration in October of 2017 at the Cox Creek DMCF.

Alternative Daily Cover

Using dried dredged material from Cox Creek DMCF as ADC at the Quarantine Road Sanitary Landfill has been approved by Maryland Department of Environment (MDE). MDE sent a letter to Baltimore City Department of Public Works (DPW) approving the use of the material for this demonstration project. MDOT MPA is working with the DPW to finalize an agreement for the hauling of the material from the Cox Creek DMCF drying area to the Quarantine Road Sanitary Landfill. The approval letter from MDE also outlines reporting requirements from the landfill to assess: the performance of the dredged material as ADC, the description of any operational issues encountered, the photographic documentation illustrating the field manipulation and handling of the ADC, and the description of any modification to the landfill's standard operating procedures required in using dredged material as ADC.

If dredged material is approved for extended use, the City will be required to amend the landfill's Operations & Maintenance manual to reflect the use of dredged material as ADC. Material other than Stockpile A would need to be approved by MDE. MDOT MPA is in the process of evaluating additional stockpiles at Cox Creek DMCF to serve as ADC. MDE has approved the use of approximately 1,000 cubic yards (cy) of dried dredged material; DPW estimates that 7,000 cy will be needed for the demonstration. MDE approval will be sought if any additional material is needed for the demonstration. Dredged material will only be used for daily cover, not intermediate or final cover. Application of ADC will be determined by the landfill operators.

Mr. Stainman asked who will monitor the daily loading at the Quarantine Road Sanitary Landfill. Ms. Keene replied that it will be the responsibility of the landfill operators to conduct the daily operations and to also record those observations for their report out at the end of the one-year period. The project starts at the first receipt of dredged material at the landfill, which has not yet occurred. The landfill operators will be conducting the assessments and recording the information to include in the report to MDE. MDE will then determine if the use of dredged material as ADC can be continued. Mr. Stainman also asked about who is paying for the removal of material. Ms. Keene replied that MDOT MPA is paying for the hauling of the material.

Engineered Fill at Hawkins Point

MDOT MPA is looking to officially close the South Cell of the Hawkins Point DMCF to construct an Algal Flow-way (AFW). Currently, the South Cell site is undergoing dewatering (into Thoms Cove) and crust management (i.e. material consolidation) operations. Once the South Cell has been filled and graded, construction of the AFW can begin. Approximately 19,000 cy of material is needed to fill the South Cell; the material will be comprised of dried dredged material from Cox Creek DMCF as well as on-site berm material. Hawkins Point DMCF last received material in 1997. The North Cell of the Hawkins Point DMCF was closed in 2012 and subsequently graded and planted with native tree species at 218 trees per acre to be used for Critical Area mitigation credits.

Test Nursery at Cox Creek DMCF

The test nursery was initiated in October 2017; the purpose for the test nursery at Cox Creek DMCF is to determine the ability of Cox Creek DMCF dredged material to sustain grass seed growth. The nursery (8 feet x 16 feet) was divided into eight separate plots (approx. 5 inches of material planted with native grass seed), each with a unique treatment using dried dredged material, Leafgro®, and lime with one control plot of topsoil. The plots were planted with a grass seed mix and visually observed weekly. The 100% dredged material and lime plot currently has the highest percent coverage of all the plots, with the 100% dredged material plot having the second highest percent coverage. The dried dredged material used in the study was previously tested for pH, metals, and nutrients and will be tested again after completion of the observations in late summer 2018.

Innovative Reuse RFP

In addition to the demonstration projects, Ms. Keene provided an update to the committee on the Innovative Reuse of Dredged Material and Capacity Recovery at the Cox Creek DMCF Request for Proposals (RFP). The objective of the RFP is to recover placement capacity at the Cox Creek DMCF. The proposal involves a successful offeror excavating, dewatering, characterizing, and transporting off-site a total of 500,000 cy of material for innovative reuse projects. The contract duration is 5 years. The RFP was issued by MES on behalf of MDOT MPA on December 29, 2017. Proposals are due March 6, 2018 (*Update: the proposal due date has been extended to March 20, 2018*). Ms. Keene displayed a contract drawing of the project layout indicating the location of the existing Staging Area A and potential Staging Area B adjacent to the Cox Creek DMCF. Staging Area A is the on-site area for the potential contractor to conduct the dewatering, characterizing, and temporary stockpiling operation prior to loading the material for transport. Staging Area B is an additional on-site area that the potential contractor can build out if they elect to for a combined total of four acres to use as their on-site staging area. Ms. Keene also pointed out the Innovative Reuse Project Excavation Area within the Cox Creek DMCF. This is the area inside the DMCF that engineers have determined that a contractor can safely excavate dredged material without impacting the integrity of the existing dike, will not interfere with base dike construction that will be occurring during this contract, and will prevent the excavation of previously placed material that may not be representative of maintenance dredged material.

Mr. Stainman asked about the length of the RFP. Ms. Keene responded that the RFP will cover a 5-year period, which is broken into two stages. Stage I will involve the initial two years of the contract where the contractor is required to remove 100,000 cy of material. Stage II is the remaining three years of the contract where the contractor is required to remove the remaining 400,000 cy of the material. The potential contractor can complete the project at a faster pace if possible.

3.0 Masonville Cove and DMCF Update

Ms. Holly Miller, MDOT MPA

Mitigation Projects

Construction of the Masonville DMCF has an extensive mitigation package, some of which are on site within Masonville Cove, while other portions are off site. In total there are 18 mitigation projects associated with Masonville, of which only five (5) are outstanding; the status of those projects is either in progress or pending.

The projects that are still in progress or pending are nontidal wetland creation, shad and herring restoration, trash interceptors, Biddison Run stream restoration, and conservation easement.

Nontidal wetlands

In a desire to expedite public access to Masonville Cove, the area was split into three zones, Access Zone 1 (AZ1), Access Zone 2 (AZ2), and Access Zone 3 (AZ3). The nontidal wetland creation area in AZ3 is in progress. Sculpting of the area is complete; planting is anticipated to take place in the spring. As of January 2018, six nontidal wetlands have been constructed and planted at Masonville. Three monitoring events took place over the summer in each of the completed wetlands. MDOT MPA will continue to monitor these wetlands for MDE success standards and make adjustments as needed to ensure wetland success. The seventh and final nontidal wetland to be created is currently under construction, with completion anticipated by spring 2018.

Shad and Herring Restoration

MDOT MPA provides funding to the MD Department of Natural Resources' (DNR) for the Patapsco River Shad and Herring Restoration Project. The overall objective of the Project is to introduce larval and juvenile American shad, hickory shad, alewife, and blueback herring populations to the Patapsco River, and in so doing produce adult stock of hatchery-origin fish that will return to spawn – helping to produce a self-sustaining population. The objective of the monitoring component is to determine the extent to which the overall objective has been met by assessing the contribution of hatchery fish to the adult spawning population and, in comparison, monitoring recovery of naturally produced stocks. The fifth year of adult, larvae, and juvenile shad and herring sampling was completed in September 2017. Sampling efforts include the use of seine nets and electrofishing. The project is aimed to stock American and hickory shad and river herring (alewife and blueback herring) for three years (2013 - 2015), and monitor for five years (2013 - 2017). Mr. Stainman asked what the results have been for the Project since it is in the last of its five years. Ms. Miller responded that it takes shad more than three years to reach maturity and then come back to spawn. DNR has conducted monitoring catches and they compare the hatchery fish population to the wild fish population. DNR has noted a reduction in the hatchery fish, which means there is an increase in the wild fish population.

Trash Interceptors and Debris Collection

There are five trash interceptor projects associated with Masonville mitigation package. The Jones Falls Water Wheel (“Mr. Trash Wheel”) was the first trash interceptor and has been operational since May 2014. As of February 2018, 719 tons of trash have been collected. The Masonville Cove trash wheel is currently under construction. Installation at Masonville Cove is expected to take place by April 2018. MDOT MPA is working to construct a trash interceptor at the Dundalk Marine Terminal. Construction began in spring 2017, with an estimated completion date by May 2018. It is a hydrodynamic separator that uses swirl concentration and continuous deflective separation (CDS) to screen, separate, and trap

trash and debris from storm water runoff. For the final two trash projects, MDOT MPA is working with Baltimore City on source control trash interception. One project will install solar-powered compacting trash cans. The other project is storm drain inlet devices, which catch the trash before it goes into the storm drain system.

Mr. Taylor inquired whether the storm drain project would be expanded toward the Herring Run watershed. Ms. Miller responded that last year Baltimore City completed a storm drain inserts pilot project after identifying communities in the City to test the inserts. MDOT MPA is unaware of what additional communities will be targeted to expand this storm drain insert program, outside of the ones that are closest to Masonville. One requirement to have this program in a community is that it is a part of the street sweeping program. Mr. Taylor requested information on which communities are being targeted for this program; MDOT MPA will inquire and respond. Mr. Lindquist commented that the storm drain inlet screens and inserts do work but are contingent on a street sweeping program. Mr. Lindquist also added a thank you for the solar trash compactors. Mr. Stainman further asked how the solar trash compacting trash cans work and how many are there in Baltimore City. Ms. Miller responded that the solar trash compactors do not have removable lids, but rather an insert area that stays shut. The cans compact the trash so more trash can be placed in the trash can, then notify the City when the compactor is full. MDOT MPA is working with Baltimore City to determine how many solar trash compactors will be placed during this effort.

Biddison Run Stream Restoration

MDOT MPA is coordinating with Baltimore City to help fund the restoration of the Biddison Run Stream in Back River Watershed. There is 6,900 linear ft. of restoration needed.

Conservation Easement

Currently, MDOT MPA has completed the restoration and remedial activities in Masonville Cove AZ1 and AZ2 and both are open to the public. Visitors are required to check in at the Masonville Cove Environmental Education Center before proceeding onto the property. Once MDOT MPA has completed all the activities in AZ3 the entire Masonville Cove area will be put in a Conservation Easement in conjunction with Maryland Environmental Trust.

Masonville DMCF Dike Raising

Incremental dike raising of the Masonville DMCF to +18' is underway. Over many years the dike will eventually be raised to the design elevation of +42'.

MDOT MPA has begun working on the cross dike that separates the Kurt Iron Slip terminal development from the existing DMCF as well as the cofferdam area, where there was not an existing earthen dike. In order to raise the dike a foundation dike had to be constructed. This is an on-going process. The cross dike required undercutting of unsuitable material from the footprint of the foundation of the dike in order to be structurally sound for future dike raising. The undercut was successful and the cross dike was filled to an elevation of approximately +4' above mean lower low water (MLLW).

Mr. Stainman asked if any of the Masonville environmentally mitigated areas was suitable to raising oysters, like it is in the Inner Harbor. Ms. Miller responded stating that MDOT MPA has completed substrate improvements by putting down sand and installing 2,000 reef balls in the area to create good habitat. A MD Department of Natural Resources (DNR) water quality station is located at Masonville

and reports the water is very fresh, which is not ideal for oysters. Mr. Lindquist inquired if MDOT MPA thought this water was fresher than the Inner Harbor water. Ms. Miller replied she could pull the statistics and salinity data from the water quality station. Ms. Ashley noted that there is a natural colonization of mussels on the pier. It was discussed that cages have been used for education on the pier but are not considered an environmental restoration project. The question was raised about what times the public has access to the environmental/natural area. The Living Classrooms representative present answered that AZ1 and AZ2 are open to the public Monday – Friday from 9:00 am – 4:00 pm, Saturday from 9:00 am – 1:00 pm, Sunday is closed.

4.0 Cox Creek Expanded Update

Mr. Shawn Kiernan, MDOT MPA

Cox Creek DMCF is located in northern Anne Arundel County, purchased by the MDOT MPA in 1997 as part of the MDOT MPA's 20-year dredged material management program. Mr. Kiernan reviewed the layout of the Cox Creek Expanded area. The existing DMCF is 144 acres. The Upland area is 100 acres. This area once housed a former copper refining company where 26 buildings stood; 25 of those buildings have been demolished. Building 201 is the only remaining building. Roughly 115 acres of land was entered into a conservation easement created in partnership with the North County Land Trust and Maryland Environmental Trust. An additional 12 acres of wetlands were constructed as mitigation for DMCF improvements. Mr. Kiernan brought an example of the on-site clay borrow material that will be used to build the dikes.

The Cox Creek Expanded project has three phases. The first phase is to demolish all the buildings on the site. In demolishing those 25 buildings 12,000 tons of scrap steel was recycled, 5,700 tons of parking lot/road asphalt recycled, and 52,000 tons of concrete recycled. Upland stockpiles have been moved to Masonville where 48,000 tons of aggregate (sands and clay) have already been placed at the Kurt Iron Slip to create additional marine terminal space. Regarding Building 201, due diligence prior to demolition identified high levels of polychlorinated biphenyls (PCB) contamination throughout the building, so MDOT MPA worked with the EPA to develop a remediation strategy for safely demolishing the building. EPA has approved the strategy and MDOT MPA is now preparing the work plan. The remediation and demolition of Building 201 should begin by summer 2018. The second phase is to build earthen dikes on the cleared Upland area up to +60' MLLW. The elevation of the ground at the Upland area is currently at +36' MLLW so the project would add +24' MLLW. The third phase is to raise the dikes on the existing DMCF to +60' MLLW. In the future, all of the dikes will be raised to +80' MLLW.

Remediation activities are ongoing at the Cox Creek DMCF since this is a former industrial site. Phase I of the remediation is in the borrow area where 22,270 tons of petroleum impacted soils, 1,857 tons of heavy metals impacted soils, and 1,462 tons of PCBs impacted soils are being proactively remediated. After these hotspots are remediated and the stockpiles are removed Phase II remediation will begin. Phase II of remediation includes areas impacted for metals and PCBs in the northwest corner of site under the stockpiles. These are the last remaining areas targeted for remediation that were identified during the Phase II Environmental Site Assessment investigations. This will require coordination with EPA's Toxic Substances Control Act (TSCA) program for PCB removals. Hotspots within the future upland dike footprint will be addressed next. In addition, a total of 8 underground storage tanks have been safely removed from the site to date.

The Operations and Maintenance (O&M) Complex redesign bids opened on January 25, 2018. The bids are being reviewed in order to prepare to award a contract for construction. The redesign still includes all the stormwater best management practices, including bioretention swales that were included in the previous design. Construction is expected to take about 18 months.

Mr. Halka asked how many cubic yards of clay borrow will be removed from the Upland area. Mr. Kiernan responded that he would follow up with that information. Mr. Stainman asked if Anne Arundel County is okay with the removal of the clay and how it may impact the local water supply systems. Mr. Kiernan replied that MDOT MPA completed a study related to the groundwater flow and confirmed that the groundwater flowed to the river; this should not impact any water system.

5.0 Corps of Engineers Report

Mr. Graham McAllister, USACOE Baltimore

Poplar Island/Expansion

Mr. McAllister reported that there were 31.6 million cubic yards (cy) of dredged material placed and 289 acres of wetland created, through 2017. The status of the ongoing expansion and construction contracts are as follows. Lateral Expansion Contract 1, which includes construction of perimeter dikes for the first expansion wetland cells, dredging of the northern access channel, and preparation for future lateral expansion, contracts was completed in early December 2017. Lateral Expansion Contract 2 includes construction of embayment breakwaters and containment dikes for wetland cell 8, cell 9, and cell 10. The contract was awarded in mid-September 2017. The work is scheduled for completion by early June 2019. The 2018 Sand Stockpile contract is currently scheduled for February 8, 2018. The 2018 Sand Stockpile will dredge up to 2.3 million cubic yards from the northern borrow area for stockpiling in cell 1-D and cell 7; which will be used for dike construction. Lateral Expansion Contract 3, is construction of the containment dike for Upland cell 11; the plans and specifications package is currently in development. The expansion construction is planned to be completed by mid-2020 contingent on optimal funding. The expansion site will allow placement through 2032-2033 dredging cycle. Wetland planting in cell 5A-B is scheduled to begin in April 2018.

Federal Dredged Material Management Plan

An update on the Dredged Material Management Plan (DMMP) final report was approved by Army Corps of Engineers Headquarters October 31, 2017. The report was transmitted to the Assistant Secretary of the Army for Civil Works in November 2017. The report reconfirms Poplar Island Expansion and Mid-Bay development. The DMMP recommends the use of Cox Creek DMCF, Masonville DMCF, Cox Creek DMCF Expanded, and Confined Aquatic Disposal (CAD) for harbor material.

Mid-Bay

The draft supplemental report for Mid-Bay (James Island and Barren Island) was sent to Army Corps of Engineers Headquarters in January 2018. The report validates the need for Mid-Bay's development and confirms that the chosen alignment in the Feasibility Report is still the best alternative. The package included a complete cost update and certification. Comments were received from North Atlantic Division and Army Corps of Engineers Headquarters and incorporated into the report. The USACE is awaiting further guidance and funding in the Federal Fiscal Year (FFY) FFY19 or FFY20 budgets. Ms. Correale added that the Chief signed the Final Supplemental Chief's Report February 6, 2018.

Channel Widening Project

The USACE-Baltimore met with resource agencies including National Marine Fisheries, Virginia Institute of Marine Sciences, and Virginia Marine Resources Commission agencies in November 2017 to discuss comments on essential fish habitat (EFH) and the Endangered Species Act document. The USACE-Baltimore has been requested to investigate areas north of the current Alternate Wolf Trap open water disposal site for placement of dredged material that will be generated as part of the widening project. The Alternate Wolf Trap site supports the material from the York Spit Channel. USACE-Baltimore is currently developing a cost estimate and schedule to conduct this investigation. The proposal will be shared with MDOT MPA once it is complete. Mr. Halka asked if the EFH concerns were only regarding Virginia or if there were concerns regarding Maryland as well. Mr. McAllister responded that the investigation will assess both Maryland and Virginia due to some comments from the National Marine Fisheries Service (NMFS).

Dredging Plans

The Baltimore Harbor FFY17 operations and maintenance contract was awarded to Great Lakes Dredging & Dock Company. The \$14.5 million contract is for dredging 2.2 million cy in the Cape Henry Channel. That material will be placed at the Dam Neck Open Water Placement site. The dredging in Cape Henry Channel is expected to begin April 2018 and run through mid-August 2018. The President's FFY18 budget included \$25.557 million in for the Baltimore Harbor activities. USACE-Baltimore is meeting with MDOT MPA and Association of Maryland Pilots to finalize plans for the FFY18 solicitation. Mr. Stainman inquired if \$25 million is enough money to complete the task. Mr. McAllister replied that the money has not yet been appropriated, but it is enough money. Mr. McAllister added that there may be some carry over funds from FFY17.

Masonville Tipping Fee Study

The Masonville decision document was approved by USACE Headquarters on January 22, 2018. The decision document allows the USACE-Baltimore to enter into an agreement with MDOT MPA so that material dredged from federal channels can be placed at Masonville DMCF. Mr. Stainman asked for explanation on how the negotiations take place between USACE-Baltimore and MDOT MPA. Ms. Correale responded that there is a federal law that allows MDOT MPA, if there is a need to build a placement site, to front the money for construction and then recover some costs from USACE including a reasonable return on the investment. MDOT MPA was involved in the development of the approved decision document that Mr. McAllister mentioned. MDOT MPA will be reimbursed for what federal law allows for reimbursement. In the past the law stated that non-federal sponsors did not receive reimbursement; the change in law is beneficial since MDOT MPA anticipates being reimbursed almost fifty-percent of the cost.

6.0 Committee Administration & Open Discussion

Next meetings are May 9, 2018 and August 8, 2018. A field trip will also be scheduled; a date will be forwarded to the Committee.