

**FINAL DRAFT
SUMMARY FOR THE HARBOR TEAM MEETING
January 26, 2017; 6:00 PM
2200 Broening Highway
Baltimore, MD**

Attendees:

Angie Ashley Consulting: Angie Ashley
Anne Arundel County Department of Public Works: Chris Phipps
Baltimore County Department of Economic Development: Rick Johnson
Baltimore County Department of Environmental Protection & Sustainability: David Riter
Baltimore Port Alliance: Rupert Denney
Cristal USA: Paul Morris
Dundalk Renaissance Corporation: Paul Rosenberger
EcoLogix Group: Steve Pattison
Gahagan & Bryant Associates, Inc. (GBA): Brian Newbury
Geomatx Surveying and Mapping: Tom McElroy
Greater Dundalk Alliance: Russell S. Donnelly
Living Classrooms Foundation: Lorraine Warnick
Maryland Environmental Service (MES): Melissa Slatnick, Jeff Halka, Christine Holmburg
Maryland Department of Transportation Port Administration (MPA): Chris Correale, Kristen Fidler, Holly Miller, Katrina Jones, John Vasina, Sergio Adantor, Barbara McMahon, Dave Bibo, Alexandra Shull
Moffat & Nichol: Pete Kotulak
North Point Peninsula Community Coordinating Council: Fran Taylor
Patapsco Back River Tributary Team: Stuart Stainman
Phoenix Engineering: George Harman
United States Army Corps of Engineers (USACE): Graham McAllister
University of Maryland Center for Environmental Science: Elizabeth Price

Action Items:

1.) None.

Statements for the Record:

1.) None.

1.0 Welcome & Introductions

Mr. Steve Pattison

Mr. Pattison welcomed the attendees and everyone introduced themselves. Ms. Correale announced that the Maryland Department of Transportation's Port Administration (MPA's) Director Kathy Broadwater will retire at the end of January.

2.0 Approval of Summary from Last Meeting

Team

Mr. Pattison stated that a minor change was made to the October Harbor Team (HT) meeting summary in the "Welcome & Introductions" section regarding the tour that was provided to the

HT members before the meeting. The HT approved the October 21th meeting summary as written.

3.0 MPA Air Quality Initiatives

Ms. Barbara McMahon, MPA

Mr. Pattison stated that there was an action item from the previous meeting regarding the Environmental Protection Agency (EPA) announcement of a \$1 million grant awarded to the MPA for projects related to air quality improvements. A presentation was given by Ms. McMahon regarding this topic.

Ms. McMahon stated that the presentation would focus on inventories from 2012 and the Dray Truck Replacement Program. Using the EPA tool, Diesel Emission Quantifier, it is estimated that approximately 3,000 tons of pollutants have been eliminated due to the replacement of 160 dray trucks. The inventories logged activities (specifically diesel fueled equipment) associated with the movement of cargo and emission measurements are compared to past years. The inventory is used as a tool for planning and improvement. The MPA is working to reduce diesel emissions and the EPA grant is one of about ten funding opportunities received from the federal and state government to replace older polluting equipment. MPA's inventories take place within the fence line of the public terminals; private terminals and vessel emissions are not included. An emissions inventory for 2016 is under development.

Direct sources of diesel emissions come from cargo handling equipment (CHE) (i.e., gantry cranes, top loaders, fork lifts, etc.), roll-on/roll-off (RO/RO) cargo, car cargo, auto painting, and heavy trucks and rail (only measured from the time of entry to the time of exit). The RO/RO and automobile cargo are measured by cold starts, and how far they are driven. The region outside of MPA ports is not measured for emissions. Approximately 10,000,000 tons of cargo passed through the port in 2012. CHE is the largest source of emissions and handled approximately 8,000,000 tons of cargo. About 85% of the cargo is handled by trucks and 15% by rail. Mr. Donnelly asked which type of test technology was used to monitor emissions. Ms. McMahon replied that the inventory uses actual data, including types of equipment, model year, type of engines, hours of use, fuel type, to calculate the actual emissions. MPA does not directly monitor air quality. CHE accounts for 64% of the total emissions. The goal is to replace or repower much of the equipment. Currently MPA has funds to replace 26 pieces of CHE equipment. Start and stopping technology is being investigated for the locomotives as well as continual coordination with truckers.

MPA is working with dray truckers to reduce emissions; the trucks, which tend to be older, usually go in and out of the port's terminals 3-4 times a day. MPA provides an incentive to replace the older trucks with 2011 or newer models. The EPA Diesel Emission Quantifier model was used to calculate emission reductions for specific truck replacements. Additionally, the numbers of truck visits (transactions) are logged; there are between 1,400 and 1,600 trucks which visit the Seagirt Marine Terminal regularly. MPA has funds for 7-8 more trucks to be replaced. Regarding age distribution of trucks, 40% have an average model year of 2012 while approximately 60% have an average age of 2001, and 4% are much older. MPA incentivizes by paying for half of the cost of a new truck (up to \$30,000). To be qualified, the truckers must prove that they visit the terminals often and that they are able to get a loan for the other half of the cost. Truckers are required to scrap their old trucks and destroy its engine. Mr. Bibo asked if

Hawkins Point was included in the 2012 inventory and Ms. McMahon replied that it was not but it will be included the 2016 inventory.

In December 2015 the Maryland Department of the Environment (MDE), Maryland Department of Transportation (MDOT), and MPA entered into a voluntary agreement which entails working cooperatively to create programs and plans to reduce air emissions. The agreement has been effective in finding solutions and funding. Specifically, MDE has been helpful with obtaining funding from the federal government. Outreach to communities has also been included in the effort. Mr. Stainman asked if there was a vehicle emission inspection program in Maryland for heavy duty trucks, Ms. McMahon replied that she was unsure. Mr. Donnelly asked if there were verifiable credits for the efforts of their work. Ms. McMahon replied that MPA receives credits for the emission reductions which have been used on other MPA projects such as the Transportation Investments Generating Economic Recovery (TIGER) grant. Mr. Taylor asked if there was a truck fee to work the terminals. Mr. Denney replied no, but trucks need a TWIC card; satellite tagging is also required. The tagging is used to identify areas of truck idling so the port can identify congestion points and solve the issues. Mr. Denney stated that there are about 1,600 dray trucks which travel to MPA terminals 3-4 times a day and tend to stay within the beltway or the surrounding counties. Any improvement to trucks inside port boundaries will also have an air quality benefit outside of port boundaries to Baltimore and the surrounding counties. It would be helpful if private terminals were more active regarding air emission reduction initiatives. Ms. McMahon added that by reducing emissions there may also be a reduction of the deposition from the emissions into the water which is a connection to the HT.

Mr. Rosenberg asked if the initiative was a national program or one which MPA designed. Ms. McMahon replied that many similar programs exist in other states and ports with competitive grant funding options. Mr. Rosenberg asked how the information for the CHE is developed. Ms. McMahon replied that the information is received from the tenants who have been very cooperative. Mr. Denney asked if the science being used was from the EPA to which Ms. McMahon replied yes. Mr. Denney stated that there is a need for baseline data which can be independently verified. Mr. Rosenberg asked if inventories would be affected by a loss of the grants. Ms. McMahon stated that the inventory is funded by MPA. There is a concern regarding the grant money from the federal government for air emission reduction projects. Mr. Pattison stated that MPA meetings with MDE and MDOT have created a wish list for potential projects to implement which includes cleaner equipment related to dredging operations. The challenge is that MPA does not own the dredging equipment but would like to further engage the owners. There will be benefits to ship emissions over the next decade.

4.0 Baltimore County Shoreline Enhancements Mr. Dave Riter, Baltimore County

Mr. Pattison stated that in August 2014 the Baltimore County Department of Environmental Protection and Sustainability indicated to MPA that the county was investigating five shoreline enhancement projects which were also on the proposed Coke Point Community Enhancement Project list.

Mr. Riter updated the HT on Baltimore County Shoreline Enhancements. During the early stages of the Sparrows Point redevelopment discussions, the MPA had proposed the potential development of a Coke Point Dredged Material Containment Facility (DMCF). The HT

assembled a committee of stakeholders who created a list of community enhancements options in the event that the DMCF project proceeded. Around the same time the Maryland General Assembly passed a law requiring a fully funded stormwater remediation program. Baltimore County responded with a stormwater remediation fee to meet this requirement. Due to recent legislative decisions the stormwater remediation fee will be eliminated in Baltimore County on July 1, 2017. The shoreline enhancement projects being presented are fully funded using part of the stormwater remediation fee; future projects will obtain funding from grants and bonds. The Baltimore County's Watershed Restoration Program goals are in place to protect, restore and enhance the County's waterways. Projects are implemented which will reduce sediment, nutrients, and pollution to the waterways and as well as maintain compliance with the Total Daily Maximum Load (TMDL) requirements associated with the MS4 permit and the Chesapeake Bay Watershed Agreement.

Mr. Riter stated that the watershed restoration program components include stream restoration, shoreline restoration, and stormwater retrofits, conversions and Best Management Practices (BMP's). Regarding the development of living shorelines, a hybrid living shorelines approach is used by Baltimore County. Examples of hard engineering techniques would include the use of breakwaters and groins; soft engineering techniques would include options such as sand and vegetation. These methods are used to dissipate the energy and stabilize the shoreline. Benefits include improved water quality, and ecological uplift by improving the tidal habitat. These benefits are balanced by the use of the area, the laws and regulations, funding, public access, maintenance, and site constraints. There were eleven shoreline projects identified for restoration by Baltimore County. The locations were selected using watershed reports, a shoreline feasibility study, observations, and citizen records. The 39 enhancements recommended by the HT were reconciled with the shoreline enhancement list and five projects were identified: Stansbury Park, Watersedge Park, Back River at North Point State Park, Todd's Inheritance, and Fort Howard Park. Two other parks were also chosen that were not on the list: Inverness Park and Cox's Point Park. Stansbury Park has been completed using the stormwater remediation funds. The project involved the removal of *Phragmites* and debris, restoration of 317 Linear Feet (LF) of shoreline, and the establishment of 0.2 acres of marsh habitat via placement of groins and sand.

The other projects are in the permitting stage. Watersedge Park is expected to begin in 2017 and will also involve the removal of *Phragmites* and debris as well as restoration of 2,300 LF of shoreline which will include breakwaters, groins, and 2,600 cubic yards (cy) of sand. Additionally, the Watersedge Park shoreline enhancement will include 1.5 acres of marsh creation, buffer zone enhancement, and the pier will be rehabilitated. Fort Howard Park is a 93 acre park located on the Chesapeake Bay which has a 34 mile fetch from the northeast and a 20 mile fetch from the southeast. A fetch is an open distance the wind can travel across the water which creates waves from the friction, thus enhancing erosion factors. Shoreline enhancements at Fort Howard Park will include *Phragmites* and debris removal and 3,200 LF of shoreline will be restored using breakwaters and notched sill. There will be 20,000 cy of sand placed and the area will be vegetated to create seven acres of marsh habitat. Improvements at the Fort Howard Park will also include impervious surface removal, rehabilitation of the existing pier, and construction of a new pier. Mr. Riter stated that the Fort Howard Park Joint Permit Application went to public notice with the US Army Corps of Engineers (USACE) on January 17th. The

permit will also be reviewed the Board of Public Works on February 8th for the Maryland Tidal Wetlands License. Mr. Donnelly asked what would happen to the concrete and rip rap which is being removed. Mr. Riter replied that some of the rock would be reused but the concrete will be removed by barge or trucks. Regarding Inverness Park, the project will involve *Phragmites* removal and the enhancement of 1,300 LF of shoreline using notched stone sill and 4,000 cy of sand; one acre of marsh land will be created. Cox's Point Park will undergo invasive species and debris removal, and enhance 2,200 LF of shoreline using breakwaters. There will also be the creation of 1.7 acres of marsh habitat and a recreational timber pier will be constructed.

Mr. Halka asked how the boat wake was measured. Mr. Riter stated that a consultant used a Maryland Department of Natural Resources (DNR) study from the 1990's to determine the effects of wakes in close proximity to shorelines. Mr. Halka asked if there were speed restrictions to which it was replied no. Mr. Halka asked if DNR could be contacted regarding a speed limit and it was replied that it would be up to the community. Ms. McMahon asked for the cost estimates. Mr. Riter stated that Stansbury Park cost \$180,000 to construct. Mr. Riter also stated that he could not provide cost estimates for the other projects as they have not gone out to bid. Ms. McMahon asked if TMDL credits were received and it was replied yes. Mr. Donnelly asked if the buffers were strategically placed. Mr. Riter stated that the approach to design was a combination of hard and soft engineering. Ms. Warnick suggested signage explaining why the shoreline restoration was occurring and how it was paid for (i.e., stormwater fee). Mr. Riter replied that it has been done at Cox's Point, but there is an issue of vandalism and reaching the correct audience (i.e., child, high school student, adult).

Mr. Phipps asked if the projects were able to be applied to the impervious area credit for the MS4 permit and if so, asked for an estimate of percent towards the goal. Mr. Riter stated that the Department of Public Works deals more with impervious surface removal. The numbers were calculated for general information purposes rather than looking for specific areas to target based on the impervious surface. Mr. Phipps stated that shoreline restoration projects are one of the most cost effective activities regarding impervious area treatment credits. Mr. Riter stated that credits are received for nutrient and sediment reductions. Mr. Phipps asked where the sand is being sourced from. Mr. Riter replied that the sand will be from a quarry.

Mr. Stainman asked about planting trees along the shoreline. Mr. Riter stated that trees will be cut down as necessary but shrubs will be planted, the number of shrubs to be replanted is unknown; sweetgum trees are likely to be kept. Mr. Stainman asked about coordination with local community associations. Mr. Riter stated that typically presentations are not given to communities but Baltimore County has followed all permit procedures which included contacting adjacent property owners and advertising the project in local papers. Baltimore County is not opposed to accepting community association invitations to discuss the projects. Mr. Taylor will bring this information to the communities. Mr. Stainman asked about funding, specifically the amount collected through the stormwater fee and the amount of funding budgeted for 2018 when the stormwater fee is eliminated. Mr. Riter replied that the stormwater remediation fee brought in \$32 million per year for fiscal years 2015 and 2016. There was \$16 million budgeted and the Department of Public Works had the other share. The repeal will phase out the stormwater fee by 2017 and about \$8 million is banked for this year. Mr. Donnelly stated

that the rain tax was poorly promulgated but the work which the stormwater remediation fee was funding still needs to be completed. Mr. Denney suggested to Mr. Phipps that Anne Arundel County should keep innovative reuse in mind for future restoration projects.

5.0 IBR Workgroup Update

Ms. Kristen Fidler, MPA

Ms. Fidler stated that the Innovative Reuse (IR) team builds on feedback from the HT and other Dredged Material Management Program (DMMP) committees. MPA has made an infographic and video which shows the importance of the Port of Baltimore, what dredging is about, what dredged material is made of, and why Innovative Reuse is important, etc. MPA is using the slogan “Sediment to Solutions; Channeling Innovation”. The Port is also on social media sites (i.e. Twitter, Facebook, Instagram, YouTube) and Ms. Fidler encouraged the HT members to follow the Port on social media sites.

Regarding outreach and education, MPA has been working to build the public support. There have been meetings with elected officials and area organizations. The goal is to demystify the historic negative public perception of dredged material and MPA has the data to back up the claims. MPA is in need of a clear regulatory framework and have been making great strides with MDE largely built on the advice and guidance from the 2009 independent review of the sediment in the Baltimore Harbor report. Standards specific to dredged material and tiers will be used to categorize material based on the quality of the dredged material and end use. In four weeks the information will go public. The purpose is to provide prospective end users with clear and predictable steps for how to implement an innovative reuse project with dredged material. The focus is on MPA federal navigation channel material but the standards are applicable statewide. The guidance document for IR uses is considered a living document since not all possible uses can be anticipated. Currently there are priority end uses, but more can be added in the future. Current priority end uses include fill for brownfields redevelopment, construction and roadways, landfill daily cover, aquatic habitat restoration/creation, and manufactured topsoil. The document will include general guidance for required sampling of MPA dredged material and standards for end use product. Those standards will most likely not be used for only dredged material but for final use (possibly blended) product. The screening criteria are risk based; an EPA screening calculator will be used based on risk exposure (i.e., commercial, residential, etc.) factors. The tiered levels of criteria are based on project or material specific factors; the numbers are flexible.

The IR workgroup recommended an executive order or some other policy to call on State agencies to use dredged material where economically reasonable and in conformance with all public health and environmental standards. MPA is currently working with MDE, MDOT, and the Governor’s Office regarding the executive order; so far it is positive and encouraging. Regarding coordination with the State Highway Administration, test blends are currently being investigated; dredged material is being blended with quarry fines (washed and unwashed) to create structural fill and pond fines. Compaction tests are being conducted which will be followed by chemical testing to identify optimal blending ratios for each material. Topsoil is another option using bio solids or compost as additives to blend. The IR workgroup will be ready to distribute the draft Technical Screening Criteria and Guidance Document mid to late February for public review and comment. A public forum and information session will be held in April. The final draft is targeted to be submitted to MDE by June and approval is expected in

July. The HT will be notified when the document is available for review. Continued outreach, education and testing will occur. Mr. Donnelly asked what the base incorporation was to reduce liquid to be used in highway applications. Ms. Fidler replied quarry fines #10 is the substance being blended with the dredged material. Ms. Fidler stated that the fines are a quarry byproduct/waste of the quarry operations. Lime may also be used if necessary.

The HT viewed the informational video regarding the port and dredged material (<http://www.mpa.maryland.gov/greenport/publications.php>). Ms. Fidler stated that the Johnson, Mirmiran & Thompson (JMT) graphics department produced the video. Mr. Phipps asked about the supply chain for the dredged material. Ms. Fidler stated that has not been worked out, but possibly have the buyer retrieve the dredged material to be mixed as they see fit. Mr. Phipps suggested a Request for Proposal (RFP) for the best offer and hopefully a 3rd party to obtain the dredged material and mixing component to mix and sell. Ms. Fidler stated that was a very sound and reasonable idea. MPA is taking baby steps to make sure the public and MDE is comfortable with the idea.

6.0 Stakeholder Discussion at DDMP Annual Meeting Ms. Katrina Jones, MPA

Ms. Jones stated that the DMMP Annual meeting was well attended; MPA had encouraged stakeholders to bring guests. The stakeholders were asked to gauge how the port is doing regarding how information is being presented to the public. Attendees were split into nine tables and were asked “how do you describe dredged material”, “how would you describe the Port of Baltimore and its importance” and, “how would you engage with others to become involved with DMMP process” to three different audiences (a 5th grader, recent college graduate, and a neighbor). MPA received suggestions to further improve communication of MPA’s message. Social media improvements have been made over the past few years and the stakeholders have a good grasp on ideas. MPA was advised to make the projects tangible, a personal connection and a connection to the goods imported (i.e., clothes, housewares, cars). Discussing the economic impacts of the Port of Baltimore and how people can tailor their careers/studies to maritime related activities and jobs was suggested as well as making connections to college students as they are making their career choices. It was recommended that MPA expand its tours to beyond students and stakeholders. MPA asked stakeholders to continue to invite new stakeholders.

MPA conducted this exercise to explore why the Port is important to Marylanders and how to better communicate that message. Mr. Taylor stated that he brought the Vice President of his community organization to the annual meeting whose initial reaction was overwhelming but enjoyed the breakout groups; Mr. Taylor recommended continuing that practice.

Ms. Jones stated that MPA is planning for a public information meeting in the spring regarding the Cox Creek DMCF expansion project to bring the public up to speed. Most of the demolition is complete; the HT will be informed of when the meeting will take place and they were encouraged to bring guests. Also, from Harbor Team member Patricia Paul, Clean Bread and Cheese Creek will be hosting a shoreline cleanup at Bear Creek Park which will be held Saturday, April 22 (Earth Day) from 9 am to 2 pm; MPA will provide support and encourage student engagement.

7.0 Harbor Development Update Ms. Chris Correale, MPA

Cox Creek Expanded Project

Ms. Correale stated, regarding the Cox Creek Expanded demolition progress, that Building 201 is the only remaining building due to PCB's. Testing is ongoing as well as coordination with EPA Region III under the Toxic Substances and Control Act (TSCA). The design for the dike base will continue; construction is expected to begin in late 2017 or early 2018. The HT was reminded that the base dike is being built within the existing dike and it will be the foundation for the dike raising to 60 feet Mean Lower Low Water (MLLW).

Maintenance Dredging

Mr. McAllister stated that the USACE have awarded the upcoming channel dredging contract to Great Lakes who will mobilize next week. Approximately 76,000 cy of dredge material will be dredged from the Ferry Bar Channel and taken to the Confined Aquatic Disposal (CAD) cell at Masonville. Additionally, Craighill Angle, in the Chesapeake Bay, will be dredged and about 500,000 cy of material will be taken to Poplar Island. The Brewerton Angle inside the Baltimore Harbor will also be dredged and 400,000 cy will be placed in the Cox Creek DMCF.

Confined Aquatic Disposal (CAD)

Ms. Correale stated that the prefill survey to determine the bathymetry of the newly constructed CAD cell was conducted in early January.

Channel Widening Project

Ms. Correale stated that the channel widening project has slowed due to cultural resource issues associated with the Virginia channels.

8.0 Upcoming Meetings

Mr. Steve Pattison

Mr. Pattison stated that the next HT meeting will be held on Thursday April 27th. HT meeting dates for the remainder of 2017 are scheduled for July 27th and October 26th. The DMMP Annual Meeting will be held on November 2nd.

9.0 Adjourn