FINAL DRAFT
SUMMARY FOR THE HARBOR TEAM MEETING
October 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 City Planning Department: Jaleesa Tate
Baltimore County Economic and Workforce Development: Rick Johnson
Baltimore County Environmental Protection Service: David Riter
Baltimore Port Alliance: Rupert Denney
Blue Water Baltimore: Bob Johnson
Chesapeake Bay Foundation: Doug Myers, Carmera Thomas
Cristal Corporation: Paul Morris
Dundalk Renaissance Corporation: Paul Rosenberger
EA Engineering: Peggy Derrick
EcoLogix Group: Steve Pattison
GEOmatx Survey and Mapping: Tom McElroy
Maryland Environmental Service (MES): Tim Carney, Christine Holmburg
Maryland Department of Transportation Maryland Port Administration (MPA): Chris Correale, Katrina Jones, John Vasina, Dave Bibo, Shawn Kiernan, Bertrand Djiki, Sergio Adantor
Tradepoint Atlantic: Pete Haid
University of Maryland Center for Environmental Science: Elizabeth Price
W.R. Grace: Mark Galloway

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.

2.0 Approval of Summary from Last Meeting **Team**
Mr. Pattison mentioned that there was a slight revision to the draft summary that was previously distributed; the Tradepoint Atlantic overview should have included language regarding stormwater management which was not initially reflected in the early draft. The Harbor Team (HT) approved the July 27th meeting summary as written.

3.0 Wildlife Habitat & DMCFs **Mr. Tim Carney, MES**
Mr. Carney stated that bi-monthly bird censuses are conducted by Maryland Environmental Service (MES) at the Masonville and Cox Creek Dredged Material Containment Facilities

(DMCFs) and Poplar Island. There are two local birders who conduct the bird censuses on Hart-Miller Island (HMI). The Maryland Department of Transportation Maryland Port Administration (MDOT MPA) offers birding opportunities at four sites: Cox Creek, HMI, Masonville, and Poplar Island. Birders are welcome at all sites, but access varies based on site operations and conditions. Guided bird tours are offered at all 4 sites, but frequency varies from site to site. On Poplar Island the outreach department is very active while HMI is not as active. Shorebirds are the big draw of the sites since there is a lack of shorebird viewing areas in Maryland. Shorebirds look very similar, but with practice, differences can be distinguished (i.e. bill length, movement types, etc.). There are about 40 different species in Maryland that are seen regularly, and a few species which are rarely seen.

Cox Creek is open to the public Monday through Friday from 7AM to 3:30PM. Birders are allowed to stand as far as the flagpole to scope, but they are not allowed to walk around the DMCF. The birders are allowed to walk to the Swan Creek Mitigated Wetlands which is 11 acres and surrounded by over 100 acres of forest conservation easement. Bird walks are offered quarterly and includes visits to the wetland. On bird walks, birders are also able to walk the entire DMCF, which they are not allowed to do during routine weekday hours. The DMCF cells see a lot of waterfowl in the winter and shorebirds from April through October. The wetlands attract Little Blue Herons, Marsh Wrens, Virginia Rails, American Tree Sparrows, and Nelson's Sparrows. A Sharp-tailed Sandpiper was found by a local birder in late August which was the first ever seen in Maryland. Approximately 220 birders came to see the bird in late August and early September. MDOT MPA and MES allowed later hours to accommodate the birders to view the Sharp-tailed Sandpiper. What occurred was the "Patagonia Picnic Table Effect" where an influx of birdwatchers following the discovery of a rare bird at a location results in the discovery of further rare birds at that location, with the end result being that the locality becomes well known for rare birds. In this case, a Yellow-headed Blackbird was found by birders observing the rare sandpiper; the Yellow-headed blackbird was the first recorded for the site and the sixth recorded for Anne Arundel County.

HMI has Monday birdwalks which are limited to six people. They walk the entire island and the walks last about seven hours. Due to demand for more accessible birding events birding bus tours are now offered twice a year, once in the spring and once in the fall; this does not replace the Monday birdwalks. HMI attracts more snowy owls than the other three placement sites, but the rarest bird seen on-site was the Snowy Plover in 2015 which was the first recorded for Maryland. MES conducted "Emergency Birding Bus Tours" to allow more people to see the bird.

Masonville is open to the public Monday through Friday from 7AM to 4PM and on Saturdays from 7AM to 1PM. Access Zones 1 & 2 are open to the public. Bird walks are offered occasionally in conjunction with Living Classrooms and Baltimore Bird Club. Access Zone 3 may be open in the future with a requirement of an MES liaison accompanying visitors. Many Orioles (Baltimore and Orchard) make a home at Masonville. A Common Tern colony was found offshore at Masonville on a barge and is one of three colonies in the Chesapeake Bay. The rarest bird found at Masonville was a Painted Bunting, which was the third record for Baltimore, and the first with public access.

Poplar offers bus tours; usually 1-2 a month between April and October, and tours are limited to 24 participants. Specialty breeding birds on Poplar include the American Oystercatcher, Black-necked Stilt, Willet, and Seaside Sparrow. Short-eared Owls and Black-crowned Night-Herons overwinter in the barges. The rarest bird seen at Poplar Island was a Sabine's Gull. It was the first recorded for Poplar Island, and second for Talbot County.

Www.ebird.org is a website used by birders to log their sightings, maintain their lists, share their lists with other users, and look at species range maps; the website also sends out alerts for birds that a user has not seen in a specified time frame. The alerts include what was sighted, a link to the record and a map of the location it was found. There are 1,800 birding "hotspots" in Maryland on eBird, and Cox Creek is currently #1 for total species in 2017. HMI is #3, Masonville is #18, and Poplar is #26. These rankings are a testament to the habitat preservation occurring at the sites. The numbers are based on a calendar year. Mr. Carney requested that the Harbor Team send him any information about sightings at tcarn@menv.com. Mr. Haid asked if sightings had to be confirmed with a picture. Mr. Carney replied that it is subjective and usually based on the experience of the birder. Mr. Bibo asked Mr. Carney to elaborate on a recent situation at Poplar Island involving one of the Common Tern colonies. Mr. Carney stated that one of the colonies was expected to return to a breeding area that needed to be used for sand stockpiling in spring 2017. The U.S. Fish & Wildlife Service placed Common Tern decoys at a nearby area which was equally as suitable for nesting, and placed streamers at the original nesting site to deter the birds from nesting there. The terns nested at the "new" area (where the decoys were placed) and MES Operations was able to conduct sand stockpiling in the original nesting area without disturbing the terns. Common Terns are listed as "State Endangered" so care must be taken to facilitate successful nesting. Mr. Denney asked how this type of news is getting out to the greater public. Mr. Carney stated that the MES Facebook made three posts regarding the bird sightings, and there was an article in the GreenPort newsletter. Ms. Jones stated this type of information has been in the GreenPort issue of the Port of Baltimore magazine, which comes out in the spring; the upcoming Port of Baltimore magazine has an article relating to photos taken at the sites as well. Mr. Rosenberger asked if there was a national network of birders. Mr. Carney stated that there are vast amounts of birding groups from all areas. Mr. Carney recommended the "MD Birding" Google groups as a more central platform to announce birdwalks and to input sightings results. eBird is more of a database for results rather than a mailing list. Mr. Carney stated that there is also an American Birding Association Rare Bird Alert Facebook page which is usually the cause of those who come from out of states to view the rare birds on-site.

Ft. Carroll Oyster Reef **Mr. Doug Myers & Carmera Thomas, CBF**

Mr. Myers gave a presentation with Carmera Thomas regarding the Ft. Carroll Oyster reef project. Mr. Myers stated that the shipping channel is extremely important for the oyster reef at Ft. Carroll because typically the salinity is not very high in this portion of the Chesapeake Bay, and is usually not the correct salinity regime for oysters. The channel raises the nearby salinity, allowing oysters to grow and survive. Various methods have been attempted over the past few years to restore the oysters to Ft. Carroll.

The Chesapeake Bay Foundation (CBF) and other groups collect oyster shells from local restaurants for use in the "Save our Shells" program; in the past the oyster shells would be

thrown away or used in chicken feed. Once the oyster shells are collected they sit for a year to assist in cleaning off any organisms, volunteers are then used to shake the shells to remove any debris. The clean shells are placed in cages and taken to Shady Side, MD where they conduct remote setting of spat which is retrieved from the larval hatchery at Horn Point in Cambridge, MD. The spat on shell is then loaded onto CBF's restoration vessel, the Patricia Campbell. The operation takes about two (2) weeks for the spat to set on the shell before it is released at the site. The site typically has to go through testing to determine if the area can bear the weight of the reef; it is then prepared using rock substrate to raise the bottom to allow the spat on shell to sit without the risk of being buried by sediment. Each shell has about 10-20 individual spat growing on them which is about the size of a pinhead. The Patricia Campbell is a unique vessel as it was made for the purpose of placing the oyster shell. The shell is loaded onto the vessel in a hopper, and then transported down a conveyer belt where it lands on a spreader (similar to a salt spreader). The shell can be placed very precisely using a GPS receiver and spuds.

Ms. Thomas stated that in order to engage citizens and to educate individuals publically, the CBF has enacted an oyster gardening program. Those with waterfront homes, waterfront access, or marinas, build cages and take bags of spat home to be placed on docks, tied to cleats. The oysters are taken care of for about nine months and then the participants will return their oysters to the CBF in the summer. The CBF will place them in a sanctuary or non-harvest reef, and the next season participants can return to care for new spat on shell in their cages. The Great Oyster Baltimore Partnership was started five years ago in Baltimore, which is through collaboration with the CBF and the Waterfront Partnership of Baltimore. It is a unique program because there are corporate sponsors who bring their employees out to grow oysters; there is also a student component, as well as volunteers from those around the city. Those who participate also help place oysters at the Ft. Carroll reef. The CBF's education vessel is used in the spring and fall to sample from the reef with students. CBF works with students from Digital Harbor High School and the Baltimore Lab School. The students have a semester-long project where they learn what a watershed is and why oysters are so important to the Chesapeake Bay. Cages are designated for their use in a marina to allow for 20 cages of spat on shell. The students come out each month and clean their cages and remove the algae and sediment. They sample them by measuring how the spat are growing, and how many spat are on each shell. The students take a trip out to Ft. Carroll to conduct a final count to estimate how many oysters are present, and then release them onto the reef.

Mr. Myers stated that it is difficult to see oysters on the bottom of the Baltimore Harbor. CBF uses an underwater videographer who helped develop a contraption called the clearwater box, which is a digital camera with counter floats to allow for neutral buoyancy. The box is sized to a half square meter which is compatible to the underwater sampling techniques which are used. The box is filled with 10 gallons of deionized water to create a clear space between the lens of the camera and the bottom of the Chesapeake Bay. The depth at Ft. Carroll is about 28 feet. For the larger restoration reefs, there is an open contract with the US Army Corps of Engineers and the University of Maryland's Paynter Lab to conduct the monitoring of the targeted tributaries and the videographer is contracted to take photos of those sites as well.

In addition to oysters, Ft. Carroll has worms, barnacles, anemones, and sponges growing and co-habitating. The spat on shell reef is on the east side of the fort and is only about a year old, and

the oyster garden reef is on the west side of the fort. This provides a number of different year classes. If the salinity is ever high enough, then there is a chance for reproduction.

Ms. Thomas made an announcement that the Snow Goose is a CBF education vessel that is operated within the Baltimore Harbor all the time, but for about a week the Skipjack, which is usually in Annapolis, is coming up to Baltimore Harbor to offer trips on Monday (10/30), Tuesday (10/31), Wednesday (11/1), and Friday (11/3). The harbor tour is available in the morning and the evening. The Skipjack can make pick-ups at the Downtown Sailing Center, Canton Waterfront Park, or the National Aquarium. Mr. Bibo asked if the oyster cages attached to the cleats in Baltimore Harbor were ever successful. Ms. Thomas replied yes, and stated that the cages have been placed on the cleats for the past five years, and the number of cages has increased; each year over 100,000 spat on shell is planted at Ft. Carroll. Since 2014 there have been 459,000 oysters planted at Ft. Carroll. The cages are protecting the spat on shell from wildlife (i.e. blue crabs, larger predators), and giving them a jump start on life. It is also a great engagement too because participants have to interact with the cages. Mr. Bibo asked if there was high enough salinity for oysters in the Harbor. Ms. Thomas replied that the salinity in the Baltimore Harbor can range between 3 and 14 parts per thousand (ppt); oysters need above 5 ppt to survive. Mr. Pattison asked how big the reef was at Ft. Carroll. Mr. Myers replied that the reef is a couple acres on the east and west sides of Ft. Carroll. The Maryland Department of Natural Resources also has a reef on the north side of Ft. Carroll. Mr. Denney asked, as a terminal operator, if baskets were hanging off their pier would credit be gained against the Total Maximum Daily Load (TMDL). Mr. Myers replied, probably not, unless the water being cleaned is able to be quantified. Mr. Myers added that the Ft. Carroll Oyster Reef project receives funding from MDOT MPA, Maryland Environmental Service (MES), the Abel Foundation, the Critical Areas Commission, and corporate sponsors.

4.0 MDOT MPA Harbor-Wide/Masonville Permit Mr. Dave Bibo, MDOT MPA

Mr. Bibo gave a presentation regarding the dredging of the Masonville unloading area and the Harborwide permit. The Harborwide permit was the solution for multiple terminals having individual permits within the harbor; the private sector was also initially included. Currently the Harborwide permit is for State facilities only. MDOT MPA has submitted a request to modify the Corps' Harborwide dredging permit which would authorize dredging near the Masonville DMCF and the collection of offshore borings for monitoring. The permit will have ten years of coverage and the comment period closes October 30, 2017. The current water depth of the Masonville unloading area is not sufficient for large unloading equipment. The dredging will allow multiple contractors to unload at the same time. There will be a 100- foot buffer zone from the channel toe in accordance with the Maryland Pilots Association. A 48-inch water main is another item to be mindful of while dredging. The material will be sampled before dredging occurs and tested for physical properties (i.e. grain size, moisture content, etc.), and chemical properties (i.e. metals, nutrients, etc.). Everything is accepted at the Masonville DMCF except for hazardous material.

Mr. Haid asked if the area would be hydraulically dredged. Mr. Bibo replied that a clamshell dredge would most likely be used, however that decision will be made by the dredging contractor. It was asked what would happen if testing showed the material to be above the chemical limits. Mr. Bibo replied that even if the numbers are above the chemical limits for the

constituents, the material is still accepted as long as it is not deemed hazardous material. MDOT MPA will be continuing exterior monitoring to ensure that no contamination is occurring in the surrounding environment of the DMCF. Mr. Kiernan mentioned that sediment testing occurs before dredging to ensure that is acceptable to be dredged.

5.0 Energy Transfer Port Update Mr. Bertrand Djiki, MDOT MPA

Mr. Djiki gave a brief update on the upcoming dredging projects. The projects are using Energy Transfer Port Federal Funding which is provided to Energy Transfer ports as part of the Water Resources Reform and Development Act (WRRDA) of 2014. The funds can be used for maintenance dredging near berths and the removal of material that impacts Federal navigation channels. MDOT MPA received funds for the 2016 and 2017 fiscal years and approximately $5.2 million will be used for the maintenance dredging near the Dundalk Marine Terminal. The dredging was designed to maximize the use of the funds received and will address the high shoaling areas. Dredging in these areas is already authorized and permitted. Dredging will be coordinated with the Pilots and MPA Operations to minimize the impacts to shipping traffic. The dredged material will be placed at the Masonville DMCF. The dredging contract was awarded in October 2017 and operations are expected to start in mid-to late November with an anticipated duration of 5-7 months.

Mr. Denney asked how the Port of Baltimore qualifies as an Energy Transfer Port. Ms. Correale replied that requirements are defined in the WRRDA of 2014 and funding is intended for ports which transfer energy cargo . The Port of Baltimore classifies as an energy port because of the coal which is exported. The designation is based on the 2012 Waterborne Commerce of the U.S. statistics. MDOT MPA expected to be disqualified as an Energy Transfer Port due to the downturn in coal, but a few years ago there was severe flooding in the coal mines in Australia which rebounded the coal exports from Baltimore. Other countries, such as China, seek US coal because it burns cleaner than the coal found in their lands. Another surge is occurring due to a reoccurrence in the Australian mine floods. Congress provides the funds on a programmatic basis; they are split up among all the Energy Transfer Ports in the country. Mr. Myers asked how much of the coal goes through Dundalk. Ms. Correale replied that the coal is exported from private terminals and not the Dundalk Marine Terminal. Information on quantities can be provided at a later date. Mr. Myers asked if the funding could be used at terminals in the port that were not exporting coal. Ms. Correale replied yes, as long as it improves access to the federal navigation channels. Mr. Denney stated that Tradepoint Atlantic terminals are loading coal for export by barge. Mr. Denney asked if the Cove Point Liquid Natural Gas (LNG) was incorporated in the statistics. Ms. Correale replied no because at that time it was not operational. When LNG begins shipping out, then it will be counted in the statistics for the Port of Baltimore.

6.0 Upcoming Meetings Mr. Steve Pattison

Mr. Pattison stated that the schedule for 2018 HT meetings will be sent out soon. The DMMP Annual Meeting will be held on November 3rd 2017.

7.0 Adjourn