Memorandum

TO: Hart-Miller Island Citizens Oversight Committee

FROM: Rebecca Kreatschman – MES

DATE: May 11, 2018

SUBJECT: Next meeting – Tuesday, May 15, 2018

The next meeting of the Hart-Miller Island Citizens Oversight Committee (HMI COC) will be held **ON SITE** on Tuesday, May 15, 2018. **The boat pickup time will be 5:00 pm at the Maryland Environmental Service's (MES) land base at 2024A Riverview Rd in Essex, MD. Please arrive a few minutes early, as the boat will leave promptly at 5:00 pm.** The Maryland Department of Transportation Maryland Port Administration (MDOT MPA) will provide dinner. **Please call Ms. Margie Hamby at (410) 385-4419 if you <u>cannot</u> make this meeting.**

Attached for your review is a copy of the minutes from the April 24, 2018 meeting.

HART-MILLER ISLAND
CITIZENS OVERSIGHT COMMITTEE MEETING
6:30 PM
April 24, 2018

ATTENDEES:

Paul Brylske	Seventh District
Fran Taylor	NPPCCC
Karen Wynn	Sixth District
Dave Patro	GDCC
Dave Bibo	MDOT MPA
Chris Correale	MDOT MPA
Holly Miller	MDOT MPA
Kristen Fidler	MDOT MPA
Katrina Jones	MDOT MPA
Lincoln Tracy	MES
Amanda Peñafiel	MES
Rebecca Kreatschman	MES
Bruce Michael	DNR
Bob Iman	DNR
Brett Prochazka	DNR
Kevin Lawrence	Senator Johnny Ray Salling
Patrick McGough	BSA, Sea Scouts, BCSC, BRRC
David Riter	Baltimore County-EPS
Sam Weaver	BRRC

ACTION ITEMS

- **Mr. Brylske will invite members of the North Point State Park Friends Group and the Gunpowder Valley Conservancy to the May HMI COC meeting,**

1. OPENING REMARKS

Paul Brylske-Chairman

- Mr. Brylske asked the HMI COC members for approval of the meeting minutes from the January 16, 2018 HMI COC meeting. All members approved.

2. FRIENDS GROUP DISCUSSION

- Mr. Taylor, Mr. Iman and Mr. Brylske attended the meeting of the North Point Start Park Volunteers, Inc., a friends group of North Point State Park. Mr. Taylor stated that Mr. Brylske attended two previous meetings of the North Point State Park Volunteers. He explained how the members were skeptical when first introduced to the idea of a HMI friends group because they did not have all of the information about the purpose and expectations of a friends group for HMI. He also explained the concerns members of the North Point State Park Volunteers had about finances and reporting, if they were to allow the HMI friends group to work with them. The North Point State Park Volunteers was informed that the HMI friends groups had no intention of taking over the North Point State Park Volunteers and no intention of exceeding the $25,000 limit that the non-profit has before the reporting requirements change. Mr. Bibo asked for clarification of the $25,000 limit for non-profit groups. Mr. Taylor explained that the IRS and State of Maryland have a threshold amount with nonprofits. If the group stays below $25,000 then the reporting is much simpler than if they exceed that amount. Mr. Iman explained that the group is made up of volunteers and would prefer to keep the reporting and documenting at a minimum.
- Mr. Taylor stated when the time comes to form a friends group for HMI, it will operate under the umbrella of the North Point State Park Volunteers. In return, the North Point State Park Volunteers asked the HMI COC and future friends group to keep them in the loop about decisions made, as well as attend the North Point State Park Volunteers meetings. The members of the North Point State Park Volunteers could not attend the April HMI COC meeting. Mr. Brylske and Mr. Taylor recommended inviting the North Park Friends Group to the HMI COC meeting on May 15, 2018 to further discuss the HMI Friends Group. Many of the group members have not had the opportunity to tour HMI. Members who have been out to HMI were impressed with the work that was being done. Mr. Bibo proposed a separate meeting or tour to bring the North Point State Park Volunteers to HMI.
- Mr. Brylske informed the members that the North Point State Park Volunteers will have a meeting on Thursday, April 26, 2018 and asked for volunteers to attend the meeting on behalf of the HMI COC.
- Mr. Brylske thanked Mr. Taylor on behalf of the HMI COC for spearheading the friends group for HMI initiative.
- Mr. Brylske encouraged members to apply to be volunteers and assist with the North Point State Park Volunteers.
- Mr. Bibo asked if there was any follow up from the guests from the Gunpowder Valley Conservancy that attended the September HMI COC meeting. Mr. Brylske said he has been in touch with Peggy Perry and will reach out to them and invite those who are interested in the friends group to attend the May meeting. Mr. Lawrence asked about the grants that the Gunpowder Valley Conservancy had discussed at a previous meeting. Mr. Brylske explained that he was involved with one of the grants they discussed, but it was not able to be finished. He also explained that there are other grant opportunities and encouraged members to spread the word.

3. NORTH CELL UPDATE

Lincoln Tracy– MES

- MES Operations has limed the North Cell with quick lime to raise the pH. This technique of liming the perimeter trench has proven to be successful. Spillway 007 and 008 discharged consistently through the month of April. Ms. Peñafiel added that from January 2018 to present, approximately 96 million gallons of water have been discharged from the North Cell from Spillways 007 and 008.
- The North Cell pond elevation is currently at 38.5 feet, which equates to approximately 76 million gallons of water in the pond.
- MES Operations is still excavating the deep pool and will be able to complete the entire excavation mechanically.
- Mr. Brylske asked how the water quality was in the North Cell. Mr. Tracy explained that it is doing well, and has fish swimming in it, but the low pH is in the main pond is not within the permit limits of 6.0-9.0. Trench liming is being done in order to bring up the pH, allowing the water to be discharged. The current pH in the perimeter trenches is in the 7's while the pH in the pond is in the 3's.
- Mr. Tracy stated that once the pond is dried, agricultural lime can continue being applied to the sediments at a rate of 20 tons per acre. This process cannot begin until the sediments are completely dry, so the surface is stable enough for equipment. Mr. Brylske asked how many acres would be treated in the North Cell. Mr. Tracy answered it would be roughly 780 acres. Mr. Brylske asked if the lime persists in the sediments or does it dissipate over time. Mr. Tracy explained that samples of limed sediments show that the sediments are neutral after being limed. Ms. Miller added that the sediments will continue being limed to make sure they remain neutral. Mr. Michael explained that the layer of neutral sediment would act as a cap and allow vegetation to grow. Mr. Tracy added that once plants begin to grow in the sediments, they will improve the soil and create topsoil through decomposition of vegetation after multiple growing seasons.
- Mr. Patro asked if the HMI Operations were funded by the state or federal government. Mr. Tracy answered that the state government is paying for the project.
- Mr. Bibo asked Ms. Peñafiel to go over why the soil chemistry changes and for some soil chemistry basics. Ms. Peñafiel explained that because of the estuarine environment of the Chesapeake Bay, dredged material contains salts or sulfide minerals, that when exposed to oxygen and precipitation, create low pH conditions. University of Maryland Center for Environmental Science (UMCES) and Wye Research and Environmental Center (WREC) studied the sediments at HMI and determined that liming the sediments at a rate of 20 tons per acre will help prevent these low pH conditions in both the soil and overlying stormwater. Mr. Tracy explained that rainfall is also slowing dewatering of the North Cell. One inch of rain equates to 27 million gallons of water across the North Cell.
- Mr. Bibo explained that the problems that HMI has with soil chemistry are not unique to HMI, but will happen at other sites that accept dredged material from anaerobic estuarine locations. Ms. Correale also reminded the members that although Poplar appears to have fewer issues than HMI, it was designed in a way that these problems would be minimized. HMI is now being redesigned in order to counteract the issues. Mr. Tracy added that Poplar has the same upland issues as HMI.
- Ms. Fidler added that the sulfide or salts came in with the sediments placed at HMI from the Harbor and Bay water, which is naturally occurring. Mr. Tracy added that other sites that receive dredge material also have issues with salt. Ms. Miller explained that other areas like wetlands have sediments that are saline or estuarine and will experience the same issues when dried out and exposed to oxygen. Ms. Fidler explained that because the sediments on HMI are fine grained, the salts and metals more easily bind to these types sediments compared to sandy material. In sand, which is larger grained, these issues do not arise. Mr. Patro asked if sand could be added to the sediments. Ms. Correale explained

that covering the sediments with a material like sand would be very costly. Material that was dredged from the channels does not contain much sand, and no new dredged material would be added to this site. Ms. Correale added that there is a possibility of placing a cap over the sediments in the future, but no decision has been made. Mr. Tracy added that in the North Cell, one foot of material is about one million yards.

Amanda Peñafiel-MES

- Last year was Year One of the Vegetation Test Strips study. UMCES and WREC picked out several salt and pH tolerant species, which were planted and monitored last year.
- As a recap, Ms. Peñafiel explained that soil conditions vary and more soil data are needed to be evaluated to understand successes and failures with the plantings. Conditions in the top six inches of the soil are very important for germination of planted species. High salinity in the germination zone could be a factor that prohibited the seeds from germinating and establishing in the Vegetation Test Strips. With each rain event, the soil is being flushed of salts and helping salinity decrease in the sediments.
- High survival rates of woody vegetation are a good indication that salinity is not a problem deeper in the soil.
- Many of the planted grass species did not grow enough to develop identifying characteristics, like inflorescence, that make them distinguishable from one another. Limited growth of the grasses made accurate identification difficult, and many of the perennial species need 2-3 years to mature.
- By the end of the growing season, nothing had grown on the unlimed side. Only small patches or clumps of vegetation were noted on the limed side. Sudex, Foxtail Barely, Big Bluestem, Indiangrass, Creeping Red Fescue, Prairie Cordgrass, and Barnyard grass were the only species present on the limed side.
- For the Woody Vegetation:
    - Groundsel, Black Chokeberry and Persimmon had a high survival rate and would be species to consider for plantings in the future.
    - Atlantic White Cedar and Eastern Red Cedar also had an overall high survival rate and could be considered for future plantings. However due to observations of the cedars showing signs of stress, more monitoring would have to be done in order to see if they continue to survive after one growing season.
    - Northern Bayberry would grow better in limed, less acidic sediment conditions.
    - Highbush Blueberry would not be a good species to consider unless they are planted in areas that provide more shade and coverage.
- The Vegetation Working Group met on April 18, 2018, to discuss the upcoming monitoring year for the North Cell Vegetation Test Strips. Plans for the Year 2 monitoring include:
    - The unlimed test strips will not be replanted due to flooded, wet conditions. Monitoring of the woody vegetation will occur for survivability.
    - Planting on the limed side will only occur on one half of each 100-foot section of the strip. This will be done to see if there is any growth of the perennial species planted last year.
    - On the limed side, cold weather grass species were planted including rye, oat, creeping red fescue and barley on March 22, 2018.
    - The rest of the perennial grass species will be planted as soon as conditions dry out and tilling can be done. The woody vegetation on the limed side will continue to be monitored.
- Mr. Brylske asked to confirm that some plants in the Vegetation Test Strips are growing in the limed sediments. Ms. Peñafiel confirmed that the woody vegetation species were successful, on the limed and unlimed sides, but the seeded grasses was only successful on the limed side.

- Mr. Taylor asked if HMI is coordinating with Cox Creek after their success with growing grasses. HMI has had success with growing grasses in dredged material already. Ms. Miller assured the members that Cox Creek is coordinating with HMI. Ms. Fidler explained that Cox Creek and HMI are learning a lot from each other.
- Ms. Fidler added that some of the work at Cox Creek and using dredged material in an innovative way will become a pilot project at HMI to try and use dredged material as the topsoil on the sediments. Ms. Miller explained that a local landscape architect firm will be working at HMI to further a concept that was presented last year. The project consists of creating micro-berms out of dredged material that will form moisture gradients to plant various species of vegetation and create wetland and upland habitat areas. The project will start out on a 20-acre lot. The interns will further their project by creating a design in order to diversify habitats, improve water quality, reduce costs of development, and educate the public.
- Mr. Brylske asked if it would be easier to work at Cox Creek with these projects since it does not involve travel to HMI. Ms. Miller answered that the sediments are different at HMI and Cox Creek so HMI would need its own experiments and studies on the sediments. Ms. Peñafiel added that the agricultural lime is speeding up the natural process that would fix the issues with the sediments that would otherwise take many years, possibly decades.
- Ms. Miller added that MDOT MPA continues to coordinate with DNR on the North Cell Development to ensure we have consistent goals. DNR has contacted Ducks Unlimited to help find innovative solutions for the development of the North Cell. Ms. Miller added that they are a conservation and hunting group, but also have experience in developing habitat. Ms. Miller added that MDOT MPA and DNR would keep the group updated on the continued coordination.

4. SOUTH CELL UPDATE

Amanda Peñafiel – MES

- In the summer months, due to high evaporation rates, the South Cell water elevation usually drops and exposes mudflats along the edges of the pond. Because dredged material has naturally acid-sulfate sediments, when exposed, acidification occurs, and causes any overlaying and surrounding water to have low pH. In the past, the South Cell's pH has dropped in warmer months; however, it has recovered in the fall when the surface water elevation in the cell increases. This past year, water elevation stayed low for an extended period of time. Consequently, the mudflats were exposed for longer, causing the pH to remain low through the fall and winter months.
- Ms. Miller added that there was a small fish kill of approximately 50-75 fish in the South Cell. The low pH conditions combined with the abnormally cold conditions and thick ice over the winter contributed to the fish kill. Ms. Peñafiel added that MDE explained that ice can cause low dissolved oxygen (DO) due to the lack of sunlight penetration through the ice and reaching the plants, causing a lack of photosynthesis which leads to less oxygen in the water. When Ms. Peñafiel called MDE to report the fish kill, MDE explained that ice had been a contributing factor to other fish kills in the area. The fish species was not confirmed and MDE did not come out to do a necropsy. Ms. Kreatschman added that it appeared to be one species, but due to the ice and wildlife eating them, it was difficult to confirm.
- In mid-March, pH transects were conducted in order to test the pH in the entire South Cell. The transects showed low pH's throughout the pond, with most pH values in the high 4's.
- Ms. Peñafiel added the water elevation began to rise in the spring with all the rain and wet weather. The elevation reached a level where it needed to be discharged, but was not discharged, due to the pH being below permit limits. As a solution, approximately 40.3 million gallons of South Cell water was pumped into the North Cell. MES is currently adding quick lime to areas that are

accessible to the hydroseeder, and working on a longer-term solution to help the pH in the South Cell.

- MES completed the paperwork and permitting process for a controlled burn of *Phragmites* in 2018. This year, the North Cell will also be burned, in addition to the DNR marshes. Originally, DNR Forest Service had planned to burn in the spring; however, conditions and weather were not ideal. As a result, the burn will be postponed to the fall. Mr. Patro asked if the *Phragmites* could be sold. Mr. Iman explained that it is illegal to move it since it is invasive.

HMI South Cell Public Access:

- This year is the third year out of 5 years of the public access pilot program. A meeting was held on April 13, 2018 for MDOT MPA, DNR, and MES to discuss the 2018 season at HMI.
- DNR has been working on establishing contacts with community groups.
- DNR will be expanding light concessions and adding 4 kayaks and 2 paddle boards to the fleet. Mr. Taylor asked if the paddleboards and kayaks will be free. Mr. Prochazka replied they will be free but some form of collateral will have to be left with DNR staff.
- MES Operations completed construction on a connector ramp from the lower cross dike to the South Cell foot path on the eastern side of the South Cell. This will keep visitors out of the North Cell as well as create a less steep incline to walk/bike.
- The HMI DNR State Park will be open May 1, 2018 for day use and camping. Opening for the South Cell public access is Friday, May 25, 2018. Hours of South Cell operations will be extended this year to be Thursday-Monday 8am-6pm, which will be an improvement over the 11am-4pm operating times last season. DNR will be staffing two shifts on the island, an early and late shift, with the two overlapping during peak hours.
- A race event, which is being planned with Friends of Maryland State Parks and Charm City Run, has been downsized to a pilot race that will be held in the summer (instead of October). The event will be open to 50 people on Saturday, June 16, 2018. The goal is to do a small event this year, learn from it, and scale it up for next year with plenty of time for marketing. The event will be a great outreach opportunity to educate participants about HMI and the South Cell public access, the partnership with MDOT MPA, as well as dredged material and its use. The race event details include:
    - The race will be 5 miles long and begin at 9 AM.
    - MDOT MPA has agreed to assist DNR with transportation.
    - DNR has secured Rocky Point for parking, and will transport participants by van to HMI landbase, then by boat to the HMI pier, and finally by bus to the DNR facility on HMI. Shuttles will be between 10:30 AM to 12 PM.
    - Mr. Brylske asked when registration begins. Ms. Peñafiel replied she will let members know when it is announced.
    - Registration will cost roughly $50-$75 per person.
      There will be a ceremony for the top three men and women
    - Bowley's Quarters EMS will be on site for emergency situations.
    - Charm City Run will limit spectators to one per participant.
    - Participants will be able to use their own transportation to get to HMI.
- An article about the South Cell will be in the 2018 Waterfront Guide out in May.

5. <u>DNR UPDATES</u>

Brett Prochazka – DNR

- On Earth Day, the Maryland Conservation Corps participated in a cleanup in the South Cell.
- On May 11-13, 2018, Boy Scouts will be visiting
- Mr. Prochazka participated in a radio talk show interview on 105.7 for the show "It's a Water Life" hosted by John Boesche. The HMI South Cell public access was discussed as well as upcoming events and programs. DNR is invited back to give an update about HMI twice a month.
- A program with the Conservation Jobs Corps for inner city kids will take place this summer and allow the kids to work on projects at HMI. The program provides transportation, meals, and jobs where they learn skills they might not find elsewhere. Mr. Brylske asked how long DNR has been a part of this program. Mr. Iman replied about 10 years. This will be the first year the kids will be able to come to HMI. DNR plans to rotate the groups so that every kid will have the chance to experience HMI. Ms. Jones asked how kids could sign up for the program. Mr. Iman replied in Annapolis through Fred Banks who is the Chief of Conservation Corps. The program lasts for six weeks.
- DNR is also hosting the annual lifeguard competition at HMI this year. All lifeguards from Maryland State Parks are invited to participate in Olympic state competitions. The winner will take a trophy back to their State park. Participants will camp on HMI the night before to eliminate transportation issues the day of the competition. It will take place at the end of August. Ms. Correale asked how many people participate. Mr. Prochazka replied 60 people participated last year. Mr. McGough asked if the event would be open to lifeguards outside of the Maryland Park system. Mr. Iman explained that it would not, because the event is a chance for the lifeguards in the Maryland Parks to come together and build comradery as well as help with rehires for the following year.
- DNR is participating in a program called Park Quest and HMI will be included this season. A thousand families can sign up, receive a passport for free admission to the participating parks, and complete the quest at each park. HMI will have a pirate-themed quest called Treasure Island that involves a bike or hike around the South Cell, an activity with a naturalist and more once the plan has been finalized. The HMI quest will be a bonus quest since transportation will not be provided, limiting who can participate. The program will cost $10 to sign up. Mr. Brylske asked what families get if they complete the Park Quest. Mr. Prochazka answered that in the past, families have received free park admission for a year after completing all the quests. Ms. Peñafiel added that teams must include at least one adult and one child under the age of 16, for up to 10 people per team. Mr. Patro asked where passports will be sold. Mr. Prochazka answered it will be all online.
- Maryland Conservation Corps came out to clean up the beach of driftwood, de-winterize the building and get camp sites ready for the season.
- DNR hired personnel for the upcoming season, including one returner.
- DNR conducted training for boat handling, credit card usage, and chainsaw for staff.
- DNR completed the HMI 2017 end of year report and submitted to MES.
- DNR conducted maintenance around the DNR building, beach, and South Cell park including:
    - Removal of blind site markers;
    - Fire extinguishers and boat servicing.

6. FINAL REMARKS

Dave Bibo – MDOT MPA

- There are two vacancies on the HMI COC; one for the Baltimore County Watermen and one for the Sports Fishermen. MDOT MPA has recently hired a Legislative Manager, Jennifer Guthrie, who would be working to fill the vacancies on the HMI COC.
- The next meeting will be on May 15, 2018 onsite at HMI. All attendees must confirm their attendance to Margie Hamby at (410) 385-4419.

- Ms. Jones added that outreach had a good and busy season, with events in Baltimore City, Anne Arundel County, and other locations. Captain Trash Wheel is in place at Masonville. An Open House and Bio Blitz at Masonville scheduled for June 16, 2018.

Meeting adjourned-8:00pm