

# Memorandum

TO: Hart-Miller Island Citizens Oversight Committee

FROM: Rebecca Kreatschman – MES

DATE: March 11, 2019

SUBJECT: Next meeting – March 19, 2019

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The next meeting of the Hart-Miller Island Citizens Oversight Committee (HMI COC) will be held on Tuesday, March 19, 2019 at 6:30 pm at 2200 Broening Highway. **(Note: The snow date for this meeting is March 26, 2019.)** Please use the door on the side of the building and the conference room will be on the left. Parking is available adjacent to the building and also across the highway. The Maryland Department of Transportation Maryland Port Administration (MDOT MPA) will provide dinner at 6:00 pm. The agenda for the next meeting will be provided the week prior to the meeting date. **Please call Ms. Margie Hamby at (410) 385-4419 if you cannot make this meeting.**

Attached for your review is a copy of the summary from the January 15, 2019 meeting.

**HART-MILLER ISLAND  
CITIZENS OVERSIGHT COMMITTEE MEETING  
6:30 PM  
January 15, 2019**

**ATTENDEES:**

Francis Taylor	NPPCCC
Paul Brylske	Seventh District
Larry Lee	Essex-Middle River CC
Karen Wynn	Sixth District
Sam Weaver	BRRC
Dave Bibo	MDOT MPA
Holly Miller	MDOT MPA
Chris Correale	MDOT MPA
Kristen Keene	MDOT MPA
Kristen Fidler	MDOT MPA
Bruce Michael	DNR
Paul Shepherd	DNR
Amanda Peñafiel	MES
Lincoln Tracy	MES
Rebecca Kraitschman	MES
Tim Carney	MES
David Riter	Baltimore County EPS
Devin Crum	The Peake
Robert Carrigan	BRRC

## **ACTION ITEMS**

- Mr. Brylske will share final details for the HMI friends group interest meeting with the committee.
- Mr. Lee will invite Mr. Bendler from the Essex Civic Council to the HMI friends group interest meeting.

### 1. OPENING REMARKS

#### **Paul Brylske-Chairman**

- Mr. Brylske asked the HMI COC members for approval of the meeting minutes from the November 13, 2018 HMI COC meeting. All members approved.

### 2. FRIENDS GROUP DISCUSSION

- Mr. Brylske attended the North Point State Park Annual Holiday event in December on behalf of the HMI friends group and distributed HMI literature to attendees. Six people signed up with interest in the HMI friends group.
- Mr. Brylske asked the Committee who should be invited to the first meeting of the HMI friends group. Mr. Taylor suggested reaching out to recreation councils, Eagle Scout groups, senior centers, boys and girls clubs, Police Athletic Leagues (PALs), church groups, youth groups, sea scouts, Paul Rosenberger with the Dundalk Chamber of Commerce, and local community groups. Mr. Brylske added Peg Perry from Gunpowder Nature Conservancy, John Baily and Rick Hecker from the Maryland friends group, and Sparrows Point and Our Lady of Mount Carmel high schools. Mr. Michael suggested birding groups and the Audubon Society. Ms. Wynn suggested Bob Bendler from the Essex Civic Council. Mr. Lee offered to reach out to Mr. Bendler.
- Mr. Brylske asked what the Department of Natural Resources' (DNR) role will be within the HMI friends group. Mr. Michael explained that park managers would work with the group directly.
- Mr. Brylske suggested reaching out to the MDOT MPA to understand how their relationship with Masonville and the Living Classrooms Foundation works and if it could be used as a guide for the HMI friends group.
- The first meeting of the HMI friends group was scheduled for Thursday April 11, 2019 at 6:30 PM at Weaver's Marina which can accommodate up to 40 people.

### 3. NORTH CELL VEGETATION TEST STRIPS PRESENTATION

#### **Amanda Peñafiel– MES**

- The Vegetation Working Group came up with a plan to establish vegetation test strips in the North Cell in spring 2017 with the goal to evaluate the success of different grass species and woody vegetation based on their tolerance to low pH, soil moisture, and high soil salinity. The objective of the test strips is to determine what plant species could be used in future upland plantings of the North Cell.
- The Vegetation Working Group was formed in November 2016 to provide technical support and guidance to liming and vegetation plans for the North Cell. The Working Group comprises of individuals from the University of Maryland Center for Environmental Science (UMCES), WYE Research and Education Center (WREC), Maryland Environmental Service (MES) and MDOT MPA.
- Preliminary sediment sampling occurred in January 2017 at 9 locations around the North Cell in limed and unlimed areas. The samples were analyzed for soil pH, soil fertility, and salinity. Results

showed the sediments had no deficiencies in overall nutrient content that would limit plant growth. However, salinity of the sediments was high enough to cause problems for some vegetation species with a lower salt tolerance. Salts, including sulfate salts, in the soil would become an issue if conditions were hot and dry, leading the salts to move upward in the soil and become concentrated near the surface where germination occurs. The Vegetation Working Group analyzed the sediment sampling results and recommended which species to use in the test strips. Mr. Lee asked what the pH of the soil was. Ms. Peñafiel answered that both the unlimed and limed side had neutral pHs in deeper soil layers. The top layer in the unlimed had a lower pH and the limed sediments were higher, comparatively.

- In April 2017, 32 Vegetation Test Strips were established on the west side of the North Cell. This area was chosen because of accessibility, lack of invasive and volunteer species, and sloped elevation which provided different moisture regimes and prevented flooding. In addition, a portion of the area had been recently limed, allowing for test strips to be located in both limed and unlimed sediments. Both sections include 16 strips with each strip seeded with a different species of grass. Each strip is 5 feet wide by 300 feet long and split into three sections and decreased in elevation; 0-100 feet, 100-200 feet, and 200-300 feet.
- Sixteen different grass species were planted, including both perennial and annual species. Big Bluestem, Indiangrass, Switchgrass, Creeping red fescue, Alkaligrass, Prairie Cordgrass, Coastal Panicgrass, Sudex, Oats, Rye, Barley, Japanese Millet, Foxtail Barley, Barnyard grass, Smooth Panicgrass, and Western Wheatgrass were chosen. UMCES and WREC used previous vegetation studies and literature research to select these species. Both annual and perennial species were chosen to provide a variety of species. Annual species can be planted to provide vegetation cover as perennial species establish. In addition, the selected grass species are known to be pH and salt tolerant.
- Seven woody vegetation species were selected, which were also salt and pH tolerant. Northern Bayberry, Groundsel, Eastern Red Cedar, Persimmon, Highbush Blueberry, Black Chokeberry, and Atlantic White Cedar were chosen. The Vegetation Working Group also took into consideration species that were planted and survived in the South Cell. The woody vegetation was planted adjacent to the vegetation test strips. The woody vegetation was mulched in order to retain moisture.
- Year 1 monitoring results: Successful grass species in the limed test strips included Alkaligrass, Sudex, Foxtail Barely, Big Bluestem, Indiangrass, Prairie Cordgrass, and Barnyard grass. The Alkaligrass test strip was the only test strip to have a high success rate as the vegetation grew in abundance in all three sections. It was noted that the species growing within the Alkaligrass test strip could have been Creeping Red Fescue, but more monitoring would be needed to make an accurate identification. Many of the planted grass species did not grow enough to develop identifying characteristics, like inflorescence, that make them difficult to accurately identify. Many of the perennial species, like Alkaligrass and Creeping Red Fescue, need 2-3 years to mature. The seeded perennial and annual grass species had no success within the unlimed test strips. The woody vegetation species overall had a high survival rate in both limed and unlimed areas with an average rate of survival above 70% for all sections in the limed and unlimed areas.
- In preparation for Year 2, the Vegetation Working Group met in November 2017 and April 2018 to discuss Year 1 monitoring results, and a path forward. As part of adaptive management for the monitoring the following modifications were made for Year 2. Due to the continuous flooding of the unlimed strips, reseeding and monitoring of the unlimed test strips would be eliminated.

Flooding of the test strips was due to the high rainfall amount in 2018, causing higher water elevations within the North Cell. The 200-300 foot section, which was closest to the North Cell pond, flooded frequently. However, woody vegetation monitoring will continue. Only half of each test strip in each section would be reseeded in Year 2 in order to observe previous growth from Year 1 while monitoring new growth. Finally, sediment sampling was conducted by WREC. The primary objective of the sediment sampling was to provide soil chemistry and moisture information throughout the growing season in the vegetation test strip area to help understand observed plant survival and growth patterns. The samples were collected by WREC staff on a biweekly basis and analyzed for water content, chloride, sulfate, nitrate, ammonia and soil pH.

- Year 2 monitoring results: Successful species within the limed Test Strips included Foxtail Barley, Coastal Panicgrass, Smooth Panicgrass, Prairie Cordgrass, and Barnyard Grass. When comparing Year 1 and Year 2 results, Coastal and Smooth Panicgrasses were only successful in Year 2, whereas Foxtail Barely, Prairie Cordgrass and Barnyard grass grew in Year 1 and Year 2. Mr. Brylske asked why there were issues with seeds germinating. Ms. Peñafiel explained that MES is hoping that sediment samples and meeting with the Working Group will help explain that. Mr. Lee asked how success was measured. Ms. Peñafiel explained grass species were monitored for presence or no presence, and percent cover/survivability was not used because of sporadic growth. The woody vegetation species overall had a low survival rate in both limed and unlimed areas with an average rate of survival above 30% for all sections in the limed and unlimed areas. Groundsel and Eastern Red Cedar had high survivability in all three sections in the limed area. When comparing Year 1 results to Year 2 results for woody vegetation, Groundsel, Black Chokeberry, Eastern Red Cedar and Persimmon continued to show success within the limed sediments. Atlantic White Cedar, Northern Bayberry and Highbush Blueberry's survivability decreased significantly from Year 1 monitoring to Year 2. Overall, survival for woody vegetation was better within the limed sediments compared to the unlimed sediments from Year 1 to Year 2; however, this could also be attributed to the frequent flooding that occurred in the unlimed strips.
- Volunteer species were surveyed to see what was growing in and around the vegetation test strips. In Year 1, Purslane, Indiangrass (outside of the planted Indiangrass test strip), Orchard grass, Smartweed, Pokeweed, Thistle, Spike Rush, Fall Panicgrass, and Bermuda grass were identified. In Year 2, Lamb's Quarter, Dark Green Spurge, Common Sow Thistle, Prickly Sow Thistle, Pokeweed, Horseweed, Tree-of-heaven, Smartweed, and Quackgrass were identified.
- Conclusions:
  - For grass species, Foxtail Barley, Coastal Panicgrass, Smooth Panicgrass, Prairie Cordgrass, Barnyard Grass, and Creeping Red Fescue would be species to consider for future plantings. Black Chokeberry, Groundsel, Eastern Red Cedar, and Persimmon would be species to consider for woody vegetation. These species are being considered based off their presence and success from Year 1 to Year 2 of monitoring.
  - Conditions in the top 6 inches of the sediment play a crucial role in whether or not seeds are able to germinate. A factor that most likely played a role in establishment of seeded species in the test strips was the salinity. High salinity in the germination zone could have been a factor with failure of some of the seeded species to establish. High survival rates of woody vegetation are a good indication that salinity is not a problem deeper in the soil.
  - Frequent flooding within the test strips could have impacted survivability of grass species and hindered new growth, especially in the reseeded areas.
  - Aggressive *Phragmites* control is also recommended to decrease the spread of invasive species within the test strips.

- Native volunteer species, like Fall Panicgrass, would also be an option to consider in future plantings due to its success in the test strips and surrounding areas.
- Next Steps:
  - A meeting will be scheduled for early March 2019.
  - Finalized Sediment results will be included in the monitoring report. Once the report is finalized, it can be distributed to the COC members.
  - Finalized results will also be shared with the Design with Dredge team for future considerations for plantings in the pilot program.
  - Mr. Brylske asked about Year 3 plans. Ms. Peñafiel explained that the Working Group will decide what the next steps will be and will provide a recommendation to MDOT MPA.
- Mr. Bibo asked about salt presence and if it will be flushed out as the area floods. Ms. Peñafiel explained that each rain event will help flush out more salts. Mr. Brylske asked if future plans include liming. Mr. Tracy explained that the liming rate for the soil is 20 tons per acre. Mr. Lee asked about additional soil liming in areas previously limed. Mr. Tracy explained that the cell needs to be dried out before soil liming can resume. But it would not be done twice because it would take too much time and require much more lime. Mr. Lee asked if we stop liming, would progress be lost. Ms. Peñafiel and Mr. Tracy explained that once the soil is treated, further application is not anticipated. Ms. Peñafiel explained that the soil sampling results should back this up.

#### 4. BIRDING PRESENTATION

##### **Tim Carney– MES**

- Bird monitoring and birding opportunities are available at four of the dredge material placement sites operated by MES on behalf of MDOT MPA; Cox Creek Dredged Material Containment Facility (DMCF), Masonville DMCF and Cove, Poplar Island, and HMI DMCF. MES conducts a bi-monthly census at Cox Creek, Masonville, and Poplar Island while volunteers conduct a census at HMI.
- Shorebirds are one of the main attractions at the sites. Shorebirds utilize large open mudflats during migration, which Maryland lacks. Dredged material at the sites serves as open mudflats and attracts these birds. The shorebirds feed on invertebrates and small fish in the dredge cells.
- HMI Birding:
  - HMI provides extensive habitat for overwintering waterfowl and shorebirds in summer. There is also a large flock of Caspian Terns that spend each summer at HMI but does not breed onsite. The North Cell and west pit host breeding Ruddy Ducks, Pied-billed Grebes, and Common Gallinules; these three species are not known to breed anywhere else in the Baltimore area at this time. Snowy Owls are also observed more regularly at HMI compared to the other dredged material placement sites.
  - Routine surveys generated three Maryland records of birds never before observed in the state: Curlew Sandpiper (1985), Little Stint (1987), and Snowy Plover (2015). In 2015, MES agreed to host two “emergency” birding bus tours so that many local birders could get to see the Snowy Plover. In addition to the first state sighting records, HMI also provided many first county records for birds never observed in Baltimore County: Black-legged Kittiwake (1983), Baird’s Sandpiper (1983), Black-necked Stilt (1986), Sandwich Tern (1986), Red Phalarope (1988), Gull-billed Tern (1991), California Gull (1996), Cave Swallow (2004), and Tufted Duck (2016).
  - Bird surveys began at HMI in 1977 and were conducted by local birders. Visitors were welcome to join the weekday surveys beginning in 1996. Various field trips occurred from 1988 to the present. In 2017, MES began offering bi-annual birding bus tours, which are

- open to 20 participants per tour. MES also hosted two “Snowy Owl Bus Tours” in January 2018 after finding four Snowy Owls roosting on the island. Two Snowy Owls were still present during the bus tours and all participants were able to see both owls.
- Mr. Riter asked if scopes were available for birders to borrow for the tours. Mr. Carney explained that most birders would likely be open to lending out extra equipment given prior notice.
  - Cox Creek Birding:
    - MES hosts quarterly birdwalks at the site on behalf of MDOT MPA. Participants visit the wetlands and walk around the entire DMCF to see waterfowl and shorebirds up close. Cox Creek was previously open to birders on weekdays, but access was suspended due to increased construction activities related to the Cox Creek Expansion project.
    - Similar to HMI, the DMCF offers habitat for overwintering waterfowl and shorebirds in summer. The Swan Creek Wetlands host several species which are otherwise uncommon in the general area, such as Little Blue Heron, Virginia Rail Marsh Wren, American Tree Sparrow, and Nelson’s Sparrow.
    - On August 30, 2017, local birder Matt Hafner found Maryland’s first Sharp-tailed Sandpiper in the Cox Creek DMCF. Over 220 birders came to see this bird, including some from as far away as Connecticut and North Carolina.
  - Masonville Birding
    - Birders are welcome to visit two areas at Masonville to observe birds. Access Zone 1 and 2 are open to the public Monday-Friday 7:00 AM-4:00 PM and Saturday 7:00 AM-1:00PM. Birdwalks are offered at Masonville in conjunction with Living Classrooms and Baltimore Bird Club.
    - Masonville hosts a large amount of overwintering waterfowl and serves as a “migrant trap” in spring and fall, receiving lots of warblers and other transient birds. The Baltimore Oriole and Orchard Oriole are both common onsite during spring and summer. There is also a Common Tern colony breeding on an offshore barge, the only colony of its kind in Baltimore.
    - After weekday access was suspended at Cox Creek in Fall 2018, more birders began visiting Masonville which resulted in more birds being found. Baltimore City’s first records of Black Skimmer and LeConte’s Sparrow were found during the official censuses, and eight other species were added to the cumulative site list between August and December.
    - Mr. Brylske asked how Masonville compares to the rest of the city. Mr. Carney explained that the site attracts more birds since the habitat is curated for birds through the restoration process.
  - Poplar Island Birding:
    - Poplar Island Outreach staff conducts birding bus tours from April through October. The tours are held from 9:00 AM-1:00 PM and participants visit much of the accessible areas onsite.
    - The site hosts a large variety of overwintering waterfowl. In spring and summer, there is an active Heron/Ibis rookery and several Tern and Cormorant nesting colonies. Specialty breeding species include American Oystercatcher, Black-necked Stilt, Willet, and Seaside Sparrow; these species are not known to breed elsewhere in Talbot County. Short-eared Owl and Black-crowned Night-Heron overwinter onsite and are not known to overwinter elsewhere in the county at this time.
    - The rarest bird observed recently on Poplar Island was a Sabine’s Gull found in September 2017 during an official MES census. A birding tour was also onsite and MES facilitated access to the cell where the gull had been found.
  - eBird.org is a website where birders can log their bird sightings and view other birders sightings. There are also birding “hotspots” which aggregate data and display this data on each hotspot’s page.

Of more than 1,800 hotspots in Maryland, Cox Creek was the #1 hotspot in 2017 and 2018. As of the date of the meeting, HMI was the #3 Maryland hotspot of all time for total species observed (289) and Cox Creek was #6 (279). HMI was the #1 Baltimore County hotspot of all time for total species observed.

#### 5. NORTH CELL UPDATE

##### **Lincoln Tracy– MES**

- MES Operations continued efforts on liming the perimeter trenches for discharge. Spillways 007 and 008 have been opened intermittently for discharge since the last meeting. The North Cell elevation has increased by three tenths of a foot since the start of 2018. The current cell elevation is 39.6 feet which equates to 216 million gallons.
- Deep pool excavation is on hold until the area can be drained of water and left to dry. A pump is currently being used 7 days a week to speed up the process.
- Yearly rainfall total was 63.51 inches for 2018.

#### 6. DNR UPDATES

##### **Paul Shepherd – DNR**

- DNR will report updates at the March HMI COC meeting.
- Mr. Michael added that DNR is hiring a new Secretary that will be appointed soon.

#### 7. FINAL REMARKS

##### **Dave Bibo – MDOT MPA**

- The next HMI COC meeting will be March 19, 2019. The snow date for this meeting is March 26, 2019.
- Sam Weaver will represent the Baltimore County Sportsfishermen once the Governor's Appointment Office confirms his position.

Meeting adjourned-8:10pm