

UPDATE FOR THE HART-MILLER ISLAND  
CITIZENS OVERSIGHT COMMITTEE

October 2023

Action items from the July 18, 2023 meeting:

- MES will provide a draft 2022 annual environmental monitoring report to the HMI COC for review prior to the next meeting. The 2022 environmental monitoring information will be presented at the next meeting.
- MPA and MES will keep the HMI COC updated as the HMI Infrastructure Working Group progresses.

**HMI Friends Group and Outreach Tours:**

MES, MPA, and Department of Natural Resources (DNR) are working to provide support for birding tours, educational activities, and programming.

At the January 17, 2023 meeting, Mr. Joe Corcoran from the Baltimore Birding Club noted the popularity of the birding tours and the large demand for visits to HMI. Both he and Mr. Paul Brylske expressed the desire to add more birding tours to the list for 2023. Additionally, Mr. Brylske worked with Mr. Dave Bibo to secure visitation to HMI by the HMI Friends Group monthly from May through September. At the July 18, 2023 meeting, Mr. Brylske thanked Mr. James Cooper and MES staff for providing access to HMI as well as their flexibility in scheduling HMI tours for the Friends Group. Mr. Brylske also thanked Mr. Corcoran and Mr. Timothy Carney for their efforts with coordination for birding tours at HMI.

The Friends Group and the Baltimore Birders (facilitated by Baltimore Bird Club in conjunction with HMI Friends Group) visited HMI on May 8, 18, and 26, June 5, and 26, July 10, 27, and 28, August 14, 25, and 31, September 11, 21, 22, 28, and 30, October 12, November 7, and 30, 2023. Upcoming trips include December 14, 17, January 12, February 15, and March 21, 2024.

Other 2023 outreach tours included the National History Society, Girl Scout Troop 1500, Marshy Point Nature Center, Maryland Department of the Environment interns, the National Aquarium, Essex/Middle River Civic Council, and the BGE EcoTeam.

**Birding:**

On February 23, 2023, Melissa Boyle from DNR brought seven AmeriCorps members to HMI to install a Barn Owl box in the North Cell. The box is in the southwest corner of the North Cell, in an area that is open enough for Barn Owls to hunt, but distant from any areas of intense onsite operations. MES is hopeful that a pair will move into the box, as this would be HMI's first breeding pair and the first in Baltimore since roughly 1985.

On July 21, 2023, Clara Liddell (MES) and a group of 6 Maryland Conservation Corps members, some of whom are in the Maryland Master Naturalist program, installed a second Barn Owl box along the white berm trail in the South Cell.

MES continues to complete twice a month bird surveys at HMI. Recent notable sightings include 3 Roseate Spoonbills, 63 Ospreys, 17 species of warblers, 376 Northern Shoveler and 88 Great Egret. During the September 12 bird census, 107 species were counted. On the September 22 bird tour, 81 American Avocets were documented.

### **HMI Environmental:**

MES continues to conduct groundwater sampling twice a year in June and December. Monitoring of the exfiltration wells provides ongoing information on the groundwater quality at HMI and allows MES to observe if HMI has any effects on surrounding water quality through groundwater leaving the facility. To further emphasize the quality of HMI groundwater, results are compared to drinking water standards.

Groundwater trace metals results from June 2023 were below the State Water Quality Standards and, in most circumstances, below Environmental Protection Agency (EPA) drinking water standards. Dissolved Iron and Dissolved Manganese exceeded the EPA Maximum Contaminant Level (MCL) for drinking water at all wells in June. Iron and Manganese are secondary standards. EPA has Secondary Drinking Water Standards, that are not mandatory, however have set Secondary MCLs, to assist public water systems in managing drinking water for aesthetic considerations such as taste, color, and odor. Dissolved Arsenic exceeded the EPA MCL in June at Well 6A and Well 12A for drinking water sourced by groundwater but was still below Maximum Concentration (MC) for groundwater protection. Groundwater monitoring will resume in December 2023.

Invasive control for the 2023 season began in May. On July 26, 2023, the South Cell along the orange and white trails were treated for mile-a-minute. The upper and lower operation yards were treated on August 8, 2023, for vegetation growing along the fence line, equipment, etc. The South Cell along the blue and white trails were treated on August 15, 2023, for mile-a-minute. On August 29, 2023, mile-a-minute was targeted on the white and red trails. On September 12, 2023, various locations in the South Cell along the white trail as well as the bottom stairways of the North Cell spillways were treated for mile-a-minute, *Phragmites australis*, Japanese honeysuckle, pokeweed, and multiflora rose. Invasive control will continue through October 2023. On September 27, 2023, an aerial spray was completed by Helicopter Applicators Inc.; 500 acres in the North and South Cells were treated for *Phragmites australis*.

A new 2024 burn agreement with DNR Forest Service and 2024 burn permit with Baltimore County are being drafted by MES. MES will coordinate with DNR to schedule a burn in fall 2023, or potentially burn between January and March of 2024.

Monthly sampling for algae took place from June to October in 2023 to monitor for possible Harmful Algal Blooms (HABs). GreenWater Laboratories in Palatka, FL are used for toxin analyses and algae counts for HAB samples. Along with a sample taken for algae analysis, other

samples are collected for nutrient and ammonium concentrations. Field data is also collected including dissolved oxygen, dissolved oxygen percentage, conductivity, salinity, pH, and temperature.

Algae sampling was completed on June 6, 2023 at Spillway 003, Spillway 009, and the South Cell Holding Pond. Samples were analyzed for potential HABs. Results showed no potentially toxigenic (PTOX) cyanobacteria present at Spillway 003. PTOX cyanobacteria were observed at Spillway 009 and the South Cell Holding Pond. The South Cell Holding Pond sample underwent further toxin testing and results were non-detect.

Algae samples were collected from Spillway 003, the South Cell Holding Pond, and Spillway 009 on July 17, 2023. No PTOX cyanobacteria were observed at Spillway 003. PTOX cyanobacteria were observed at Spillway 009 and the South Cell Holding Pond. GreenWater labs recommended further toxin testing for the Spillway 009 sample. Results of the additional toxin testing from Spillway 009 were non-detect.

Algae samples were collected from Spillway 003, the South Cell Holding Pond, and Spillway 009 on August 09, 2023. Due to recent high pH readings, a green coloring of the water, and a strong odor from the area, an algae sample was also collected from Spillway 008. No PTOX cyanobacteria were observed at Spillway 003 or the South Cell Holding Pond. PTOX cyanobacteria were observed at Spillway 008 and Spillway 009. Both the Spillway 008 and Spillway 009 samples were recommended for further toxin testing by GreenWater labs. Results of the additional toxin testing from Spillway 008 and Spillway 009 were non-detect.

Algae samples were collected from Spillway 003, the South Cell Holding Pond, Spillway 008, and Spillway 009 on September 5, 2023. No PTOX cyanobacteria were observed at Spillway 003. PTOX cyanobacteria were observed at the South Cell Holding Pond, however it was not recommended for further analysis by GreenWater labs. PTOX cyanobacteria were observed at Spillway 008 and Spillway 009 and both samples were recommended for further toxin testing. Microcystins/Nodularins were detected at 6.65 ng/mL at Spillway 008. Microcystins/Nodularins were detected at 1.06 ng/mL at Spillway 009. These concentration levels are lower than the World Health Organization (WHO) provisional guidance threshold for recreational water of 24 ng/mL. These concentrations are also below the current 'Draft EPA Recommended Value for Recreational Criteria and Swimming Advisory', which is currently 8 ng/mL total Microcystins.

Algae samples were collected from Spillway 003, the South Cell Holding Pond, Spillway 008, and Spillway 009 on October 3, 2023. No PTOX cyanobacteria were observed at Spillway 003 or the South Cell Holding Pond. PTOX cyanobacteria were observed at Spillway 008 and Spillway 009 and both samples were recommended for further toxin testing by GreenWater labs. Microcystins/Nodularins were detected at 1.15 ng/mL at Spillway 008. Microcystins/Nodularins were detected at 0.32 ng/mL at Spillway 009. These concentration levels are lower than the WHO provisional guidance threshold for recreational water of 24 ng/mL. These concentrations are also below the current 'Draft EPA Recommended Value for Recreational Criteria and Swimming Advisory', which is currently 8 ng/mL total Microcystins.

Algae samples were collected from Spillway 008 and Spillway 009 on October 23, 2023 to monitor PTOX levels before a potential November discharge. PTOX cyanobacteria were observed at Spillway 008 and Spillway 009 and both samples were recommended for further toxin testing by GreenWater labs. Microcystins/Nodularins were detected at 1.23 ng/mL at Spillway 008. This concentration level is lower than the WHO provisional guidance threshold for recreational water of 24 ng/mL. This concentration is also below the current 'Draft EPA Recommended Value for Recreational Criteria and Swimming Advisory', which is currently 8 ng/mL total Microcystins. No additional toxins were observed at Spillway 009.

Algae sampling results and data from 2023 will be entered into the 2023 algae spreadsheet and summarized in the corresponding annual HMI Operations Report.

Exterior Submerged Aquatic Vegetation (SAV) monitoring was completed along the western shoreline of HMI on June 7, 2023, and September 7, 2023. On June 7, 2023, four types of SAV species were observed including wild celery (*Vallisneria americana*), widgeon grass (*Ruppia maritima*), coontail (*Ceratophyllum demersum*), and Eurasian watermilfoil (*Myriophyllum spicatum*). On September 7, 2023, wild celery (*Vallisneria americana*) was observed.

### **HMI IGA and Infrastructure Working Group:**

MES, MPA, and DNR established a new HMI Intergovernmental Agreement (IGA) in February 2021, which outlines the roles and responsibilities for each agency in the partnership for the entire site through December 2025. As part of the HMI IGA, an HMI Infrastructure Working Group was formed to study, evaluate, and develop an asset management plan.

The first meeting was held onsite at HMI on June 13, 2022, with representatives from MPA, DNR, and MES in attendance. An HMI inventory list and map was drafted, which includes the South Cell holding pond and various items in the operations building compound and was provided to the group. The group visited and discussed each of the items on the inventory list.

The second HMI Infrastructure meeting was held onsite at HMI on June 1, 2023. Due to recent changes in leadership at DNR, MPA and MES briefed the new staff. MPA and MES introduced new DNR management staff to the HMI team, updated DNR management on the progress to date, and continued discussions and coordination of the HMI IGA and Infrastructure Working Group. DNR will be in contact with MPA and MES regarding the assets DNR would like to keep onsite. MPA and MES will keep the HMI COC updated as the HMI Infrastructure Working Group progresses. MPA and MES will schedule the next HMI Infrastructure Working Group meeting with DNR once geotechnical analysis results are received.

### **HMI Operations:**

The HMI operations team have continued working on pond, roadway, and building maintenance.

Spillways 007, 008, and 009 remained closed throughout July, August, September, and October. No discharge was needed due to low water elevation. Spillway 003 remained closed throughout the third quarter. The elevation in the North Cell is currently 37.8 feet. The current target elevation

is 38.5 feet, where it will be held to allow for ongoing North Cell development material testing and investigations.

### **HMI Land Base Pier and 265 Personnel Pier:**

After performing an inspection, it was determined that the Land Base pier will need to be replaced. Design plans and specifications for repairing and replacing the Land Base pier have been finalized. Each piling of the land base pier will be replaced in the same footprint. MES will coordinate a temporary departure location while the pier is under maintenance.

The Station 265 personnel pier located on HMI was last repaired in the late 1990s. Inspections conducted by Straughan showed the pier does not need to be fully replaced but repairs to the timber faceboard/wave screen, ladders, timber railings and pilings are needed. The floating pier will be relocated in deeper water to protect SAV habitat.

The dates for the HMI Pier Project Advertisement are as follows: Advertise Date- September 5, 2023, Pre-Bid Meeting- September 12, 2023 at 10 AM, Site Visit- September 14, 2023, Question Due- September 20, 2023 at 1 PM, Bid Due Date- October 3, 2023 at 1 PM. Only one bid was received, and the price was three times greater than the Engineer's estimate. The bid was also found to have multiple calculation errors and will not be considered for award. MES will reevaluate the procurement package and advertise the work at a later date.

Dredging of the Station 265 personnel pier is also planned to allow for easier boat access. The permit application for the dredge work was submitted to MDE on March 31, 2023. As part of the permitting process, adjacent landowner notification letters and plans were sent to Baltimore County and DNR.

MDE posted the HMI project on public notice on August 15, 2023. No public comments were received. DNR provided comments on time of year restrictions (May-October). MDE reports that the permit will be on the Board of Public Works November 19 agenda.

### **North Cell Habitat Development:**

MPA continues to investigate options to fund North Cell Habitat Development. MPA is exploring potential funding sources such as grants, as well as the use of a Request for Information (RFI), to identify a private partner that would invest in the development of the North Cell for potential mitigation credits. The RFI has been drafted and is under review. MPA will inform the HMI COC when the RFI is published.

GBA was subcontracted to conduct valued engineering on the chosen Option D Design Plan. The effort is being completed to investigate ways to reduce the cost of the project while still meeting the goals outlined through discussions between MPA and DNR.

GBA was also subcontracted to provide recommendations for the purchase and use of an MES-operated dredge, recommendations of alternative construction methods, conduct dredged material sampling within the NC to perform geotechnical analysis of the material for use in construction planning and consolidation monitoring estimates, and aerial photography.

GBA and their subcontractor, SaLUT, have completed Geotech sampling. Sampling occurred from March 27, 2023 to May 17, 2023. Twenty (20) samples were collected within the North Cell pond and nine (9) samples along the cross dike, the upland test plot area, and around Station 135. Information from the Geotech sampling will be utilized to assist in identifying areas where MES Operations staff can begin habitat development activities from the North Cell design plan, including mechanical dredging, while other funding mechanisms are investigated.

GBA has begun investigating alternative designs and is incorporating the Geotech sampling results to help finalize the designs. Any alternative designs will meet goals and objectives established for North Cell Habitat Development set forth by the HMI IGA.

GBA submitted a draft Dredge Equipment Review Memo in September evaluating options to purchase, use and maintain a dredge for the NC pond development. Three dredges were presented and recommended in the memo. This task is ongoing, and updates will be provided as information is available.

### **DNR Report:**

The October 21, 2023 HMI 5-Miler race was cancelled due to high winds that compromised the ability to safely transport participants to the Island. HMI State Park welcomed an estimated total of 43,706 visitors from May 1, 2023 to October 1, 2023. Seasonal staff completed their last day on October 16, 2023. Eagle Scouts from the Eastern Shore are working on campsite maintenance in October. The Gunpowder Conservation Corp members will assist Robin Reed in November to cut overhanging tree branches and debris from the blue trail, white trail, and observation trail. Winterization of the HMI DNR buildings will take place during the first two weeks of November. DNR will pull Ranger boats by the end of November and store them at North Point State Park so that mechanical work and routine maintenance can be performed. Work on the HMI DNR building roof replacement and deck board replacement is due to begin January or February 2024, weather permitting. If poor conditions are present, the work may not begin until March or April. The Friends of Hart-Miller Island group will continue to meet throughout the winter months to plan for spring and summer 2024 activities at HMI. Ms. Reed will be attending Ranger School from January 21, 2023 to February 16, 2024 to become a fully certified Maryland Park Ranger. She will be stationed at North Point State Park until the end of March and will transport with MES to work at HMI State Park once a month during the winter. Ms. Reed and staff will return to HMI State Park operations in April 2024.

### **COC:**

The next meeting of the HMI COC will be held in person on Tuesday, March 19, 2024, at 6:30pm. This meeting will be held in the Conference Room at 2200 Broening Highway, Baltimore 21224.