

SUMMARY OF THE COX CREEK
CITIZENS OVERSIGHT COMMITTEE MEETING
April 12, 2023 - 5:30 PM
Cox Creek Operations and Maintenance Complex
1000 Kembo Road, Curtis Bay, MD 21226
Hybrid Meeting

Attendees:

Anne Arundel County Bird Club: Allen Young, Suzanne Young
Cox Creek Citizens Oversight Committee (COC) Facilitator: Angie Ashley
Greater Pasadena Council: Nancy Schrum
Marine Trade Association of Maryland: Mike Bonicker
Maryland Port Administration (MPA): Bertrand Djiki, Katrina Jones, Joseph Ross, Darren Swift
Maryland Environmental Service (MES): Mackenzie Miller, Robert Natarian, Claire Spears
Pasadena Sportfishing Group: Robert Schmidt
Resident of Legislative District 31 & Chairman of the Cox Creek COC: Gary Gakenheimer
Restore Rock Creek: John Paul Jendrek
Scenic Rivers Land Trust (SRLT): Sarah Knebel, Evan McGee
Stoney Beach Community Member: John Garofolo

Action Items:

1. Mr. Garofolo will provide MPA with potential dates to coordinate a meeting with the Stoney Beach community. (complete)
2. MPA will coordinate with Ms. Schrum to attend a future Greater Pasadena Council meeting. (in progress)
3. Ms. Ashley will provide the Committee with information on the formation of the Friends of Hart-Miller Island to serve as a model for Cox Creek.
4. MPA will provide Mr. Garofolo with the local noise ordinance and expected decibels related to the Confined Aquatic Disposal (CAD) project.
5. Ms. Ashley will provide Mr. Schmidt with information regarding the Reels on Wheels fishing trailer. (complete)

1.0 Welcome & Introductions

Gary Gakenheimer

Ms. Ashley convened the hybrid meeting and Mr. Gakenheimer led the Committee in approving the November 30, 2022, Cox Creek COC meeting summary. The meeting summary was approved as written.

2.0 Cox Creek Expansion

Bertrand Djiki, MPA

Construction

Mr. Djiki provided an update on the Cox Creek Dredged Material Containment Facility (DMCF) expansion project construction. The Cox Creek expansion and dike raising activities began in 2021 and continue to advance. As the expansion progresses, the site receives inflow and utilizes interim pumping solutions for effective water management. Long term discharge solutions are under development for the site. In 2022, Cox Creek DMCF received 596,110 cubic yards (cy) of dredged material inflow from the Fort McHenry Channel. In 2023, a projected 330,00 cy of material is anticipated to be received from the dredging operations at Brewerton Angle. Cox Creek has two spillways that were completed in 2005, which have been decommissioned due to the expansion construction and will not be recommissioned for use in the future. Abandoning the traditional

spillway system means implementing an alternate, innovative design for long-term discharge and water management. A new innovative floating weir discharge system is being designed as a cost-effective, mobile, long-term alternative solution for water management.

Upland demolition at the Cox Creek DMCF began in November 2015. Industrial buildings were demolished, and approximately 124,000 tons of material was recycled. After demolition, remediation took place, which resulted in 100% of asphalt recycled, 88% of steel recycled, and 77% of concrete recycled. Remediation investigation and planning took place from 2014 to 2016 and the Remedial Action Plan was approved by the Environmental Protection Agency (EPA) in 2017. Remediation activities took place from 2017 to 2019, which included upland soil remediation and removal of 82,000 tons of polychlorinated biphenyls (PCB) waste from a formerly used industrial compound. Remediation of Building 101 and Building 201 took place from 2018 to 2022.

The dike expansion includes raising the current dike elevation to +60' mean lower low water (MLLW) and expansion of the DMCF into the upland portion of the property. The initial height of the dike was +36' MLLW with a capacity of 6.2 million cubic yards (mcy). Expansion began with base dike widening in August 2016 and was completed in 2020. Work is currently underway to fully raise the dike to +60' MLLW. The +60' MLLW project began construction in August 2021 and is estimated to be complete by January 2024. The raising of the waterside dike elevation to +60' MLLW was completed in October 2022. The total material excavated and placed to date is approximately 1.1 million compacted cubic yards (CCY). Installation of the slurry wall is complete, and the focus has now shifted to raising the upland dike elevation to +60' MLLW to provide a cumulative capacity of approximately 14.8 million cubic yards (mcy) of dredged material.

Mitigation

Mr. Djiki stated that the Cox Creek DMCF +60' MLLW expansion impacted 1.16 acres of nontidal wetlands. MPA identified the Genesee Valley Outdoor Learning Center as the location to mitigate this impact. The 100% design was submitted to regulators in June 2022, and requested revisions were resubmitted in December 2022. The Maryland Department of the Environment (MDE) waterways permit was received in September 2022. Additionally, the Forest Conservation Plan was submitted to the Maryland Department of Natural Resources (DNR) in August 2022 and the resulting comments require ongoing coordination. There is also ongoing communication between MPA and the U.S. Army Corps of Engineers (USACE) to respond to and resolve outstanding comments on the Conservation Easement. Once the Conservation Easement is drafted, it will be sent to the Board of Public Works (BPW) for approval and signature. The target date for BPW submittal is the second quarter of 2023. The mitigation project timeline depends on when feedback from the regulators is received and final permits are issued; however, the goal is to begin construction in 2023.

3.0 Swan Creek Nature Trail

Joseph Ross, MPA

Mr. Ross provided an update on the Swan Creek Nature Trail project. The project is in the design phase and reached 60% design in January 2023. To reach the 60% design milestone, additional tree surveys were conducted in Fall 2022 to determine potential impacts related to boardwalk realignments and to account for adjustments to the trail design.

The trail is approximately a two-mile loop that contains three boardwalks, one bridge, and four outdoor classroom spaces. The trail will have a natural surface, and the use of dredged material is being considered on portions of the trail that may require fill, promoting innovative use of dredged material. The trail entrance will be located near the parking lot across from the Cox Creek Operations

and Maintenance building. It will be open for public use during the facility's operating hours and MPA will test additional evening and weekend hours to refine official operating hours as the trail opens to the public. The project team is working to align permitted and prohibited uses of the Swan Creek Nature Trail. Additionally, MPA and MES educators have been coordinating with the design team to make selections related to the outdoor classrooms, including the themes and setup.

Mr. Ross presented the draft signage related to the historic shore shacks once in the area. Ms. Ashley added that the idea of including signage on historic shore shacks along with other amenities of the trail was recommended by Ms. Rebecca Kolberg of the North County Land Trust, who has since passed. Ms. Kolberg recommended that the legacy of those who used to inhabit the area before its current use be represented somehow. Fortunately, a staff member at MES, Mr. Lincoln Tracy, had access to photos of a shore shack that his family owned on the property and provided the design team with those photos to be used on the sign. Being able to bring one of Ms. Kolberg's recommendations to fruition provides an excellent tribute to her legacy.

Mr. Ross reminded attendees that the MPA was awarded grants under the FY22 and FY23 Recreational Trails Program (RTP). The RTP grant matches federal funds with local funds to implement these trail projects. Under the FY22 RTP grant, the Swan Creek Nature Trail was awarded \$83,000 for use in the construction of a portion of the trail that does not include amenities of the trail. Under the FY23 RTP grant, the Swan Creek Nature Trail was awarded \$95,825 for construction of an additional portion of the trail and signage throughout the entirety of the trail. On November 2, 2022, the project team met with SHA at the site of the trail to kick off the FY23 RTP grant and begin coordination. MPA and SHA are coordinating the memorandum of understanding (MOU) associated with the FY23 RTP grant. Coordination is also ongoing associated with the required NEPA process.

The project milestones are as follows:

- 90% design achieved in June 2023
- 100% design achieved in August 2023
- Construction to begin in December of 2023.
- Trail completion and open to the public by 2025.

Ms. Knebel asked where the dredged material will be used in terms of construction of the trail. Mr. Ross stated that the dredged material will be used as fill in areas where cut and fill is needed for grading, such as areas where the slope of the landscape is too steep to have a safe walking trail that is ADA accessible. Ms. Ashley added that the dredged material will be screened and tested according to the specifications outlined in the MDE Innovative Reuse and Beneficial Use (IRBU) guidance document.

Ms. Schrum asked about the accessibility of the trail once complete. Mr. Ross stated that since the construction at Cox Creek DMCF is ongoing and that the site gate must be unlocked by staff, the trail hours will coincide with the Cox Creek DMCF hours of operation. Ms. Jones added that there is consideration around extending trail hours beyond site hours, with a test period to evaluate demand. As previously discussed with the Committee, based on feedback, there will be a one-year pilot to gauge interest in extended hours for the trail at one night per week and one Saturday per month to increase trail accessibility. Mr. Garofolo asked about partnering with outside organizations to allow for coverage at the site so that trail can be open more frequently. Ms. Jones stated that as the trail is opened and the team can identify the use of the trail, then alternatives can be developed to meet the needs of the public. Interest was voiced in creating a partnership for Cox Creek like the Friends of

Hart-Miller Island. Ms. Young expressed her excitement for the project but hopes there will be a way to access the area without the necessity of oversight personnel given that the best birding occurs at dawn. Mr. Gakenheimer asked if the trail could be accessed from the utility area parallel to the site. Mr. Ross stated that the area is not fenced in, and Mr. Swift added that anyone could park outside the locked gate and access the trail from the utility area if the site was closed. Mr. Ross added that the matter will be discussed with the project team and an update will be provided to the Committee at the next meeting. Mr. Natarian stated that the train tracks in that area are no longer in use, but BGE does visit frequently to manage the utility poles.

Mr. Garofolo suggested that pollinator gardens, rain gardens, and erosion control plantings be placed around the Swan Creek Nature Trail as demonstrations of methods to reduce runoff and erosion. Ms. Ashley stated that there have been meetings and site tours with partners of the Port of Baltimore regarding installing sample gardens. Although there is not yet funding, the concept of including demonstrations of erosion and sediment control methods has been discussed.

4.0 Innovative Reuse and Beneficial Use

Darren Swift, MPA

Mr. Swift stated that seven contracts have been awarded under the Research and Development Request for Proposals. The Belden-Eco Products (Belden) and Northgate Environmental Management (Northgate) projects have been completed. The Belden project examined combining dredged sediment with other materials, such as Maryland-sourced fly ash, into various mixtures to develop ceramic bricks and permeable pavers. This project was successful and resulted in a final mix of a 100% dredged material product. It was also determined that the bricks containing dredged material could be heated at lower temperatures during their creation, reducing associated exhaust. The bricks were compared to MDE IRBU Guidance Document criteria and other Maryland standards, and it was determined that the bricks could be used in any capacity. The Northgate project was intended to develop concrete barriers and modular shoreline protection structures using dredged material. The traditional concrete products underwent testing for properties, strength, and leachability. The mixes that were experimented with were not able to meet strength requirements and support the original project plan. On the other hand, the shoreline protection structures had successful trials; however, the final product included only 5% dredged material. The shoreline structures were also compared to MDE IRBU Guidance Document criteria and other Maryland standards, and it was determined that they, too could be used in any capacity.

The FasTrak Express (FasTrak), Harford Industrial Materials, Inc. (HIM), and Suscon Products (Suscon) projects are all wrapping up and will present at the joint Innovative Reuse Committee (IRC) and Citizens Advisory Committee (CAC) meeting on May 23, 2023. The FasTrak project intended to collaborate with local partners to combine dewatered dredged material with mushroom compost and develop a preferred formulation to grow sod. The project achieved positive growth rates and has promising results to present at the joint IRC/CAC meeting in May. HIM aimed to combine dredged material with other materials into various mix designs and produce lightweight aggregate for uses such as structural concrete along with various fill applications. The project successfully created a lightweight aggregate product from the silts and clays in the dredged material. This project is particularly promising as this area does not have a local source of lightweight aggregate. This potential local source also leads to reduced costs associated with transportation. The Suscon project aimed to combine dredged material with other materials into various concrete mix designs to develop general use concrete products such as retainer walls and low-compression strength blocks. This project was also a success.

The ongoing CSI Environmental, LLC project aims to study and demonstrate the feasibility of using

dredged material from the Cox Creek DMCF to develop upland and shoreline berms using geotextile tubes (geotubes) at the BGE Spring Gardens facility. The project was initially supposed to take place at the Masonville DMCF; however, due to increased construction and lack of water, the project was moved to Cox Creek DMCF. The geotubes are currently located on the cross dike at the Cox Creek DMCF. The geotubes have a filling nozzle at the top, which allows the dredge material and water mixture to be pumped into the tubes. A polymer is introduced to the mixture before entering the geotubes to separate the solids from the water and allow the water to run out of the tube, leaving behind only the dredged material. A computerized computation determines the amount of polymer that is introduced to ensure efficiency. During the preliminary stages of the project, the water being removed from the geotubes was collected in frac tanks, held for 48 hours, and tested for traces of the polymer. The test results indicated that there was less than one part per billion of polymer remaining in the water. Therefore, MDE was extremely comfortable with the water being released back into the Cox Creek DMCF. Once the tubes are filled and dried to the desired moisture content, the tubes will be moved by truck to their final location at the BGE Spring Gardens facility to be used as flood protection in low lying areas and will be vegetated with various plants.

The University of Maryland is working to complete a lab-based project to study the development of vegetated earth berms utilizing Cox Creek dredged material for highway embankment projects. This project has just begun and is undergoing preliminary testing to categorize the various products that will be mixed. An eighth solicitation has been received and is currently under review to determine if the project should be included under the Research and Development Request for Proposal.

Mr. Garofolo inquired about vegetating the geotubes once they have reached the BGE Spring Gardens facility. Mr. Swift stated that, once on the site, small holes will be cut in the geotubes to allow planting to occur. CSI Environmental plans to work with external groups to determine the most suitable vegetation that can be planted in the material. Mr. Djiki stated that the purpose of the geotubes is to hold the material together so that when flood events occur the dredged material does not erode into the water. As the geotubes begin to deteriorate, the roots of the vegetation planting will act as the glue holding the dredged material together. Mr. Garofolo expressed concern about introducing plastic into the environment that will eventually deteriorate. Mr. Swift recognized the concern and noted it as something to consider.

Regarding IRBU opportunities, a request was received to provide material to a site on Race Street in Baltimore City. A portion of contaminated ground will be excavated along the shoreline, and the dredged material will then act as fill to replace the removed contaminated areas. The project is currently processing through the MDE permitting phase and will require about 500 cy of material. The current project schedule is set for August or September 2023. A second request was recently received from the Stoney Beach community to restore the living shoreline utilizing about 1,200 cy of sandy material. Material from Hawkins Point DMCF is of interest for this project, specifically sandy material from the Anne Arundel County inflow event, which was used to develop a ramp for offloading onsite. The material will undergo additional testing and characterization, which will be provided to the parties leading the project to start the permitting process with MDE. A second phase of the Stoney Beach project could include upland restoration of the beach area.

On December 22, 2022, MPA officially acquired the approximately 140-acre property adjacent to Cox Creek. This property provides an extraordinary opportunity to further long-term capacity recovery efforts at Cox Creek through large-scale IRBU of dredged material. Due to the site's long industrial history of manufacturing titanium dioxide, the entire property is under an Administrative Consent Order with MDE and will undergo phased remediation but will be put into productive use

for innovative reuse operations as portions of remediation are completed. About 120 acres of the 140-acre property is developable for innovative reuse.

In conclusion, Mr. Swift highlighted a recently passed senate bill (S.B.), SB 782, which explicitly calls out dredged material as one of the materials that the Maryland Green Purchasing Committee (MGPC) is required to establish specifications for purchasing. This is significant because legislators are beginning to recognize the value of dredged material and its use.

5.0 Harbor Development Update

Katrina Jones, MPA

Ms. Jones read attendees a letter that was presented to Ms. Rebecca Kolberg's family at the memorial service, which included appreciation for her contributions to outreach efforts and DMMP committees.

Ms. Jones stated that the Masonville DMCF has ongoing base dike widening activities that began in January 2022 and is expected to be completed by mid to late April 2023. The base dike widening is about 98% complete. The wider, more stable dike will support the vertical increase of the DMCF dike elevation, first to +30' MLLW and eventually to +42' MLLW by 2029, with projected total capacity of 10.4 mcy. Dike raising to +30' MLLW is anticipated to begin in the summer of 2023. Consistent with its promise to restore access to the waterfront for the communities surrounding the Masonville DMCF, MPA, and other partners have secured \$1.5 million in funding from the Federal Highways Administration (FHA) Federal Lands Access Program (FLAP) and U.S. Fish and Wildlife Service (USFWS) to design and construct a shared use path connecting Masonville Cove to the Gwynns Falls Trail, proposed Bay Brooke Connector, and adjacent communities, improving and increasing safe access to the site. A memorandum of agreement (MOA) between partners was executed in 2022, and the design and NEPA phase of the project is underway. Once complete, the Masonville Cove Connector will link over 20 miles of walking and biking trails connecting dozens of neighborhoods, a regional hospital, and wellness facilities. Some tentative milestones for this project include completing 30% design by the summer of 2023, 100% design by the summer of 2024, and completing construction by summer of 2025.

Ms. Jones provided a confined aquatic disposal (CAD) update. CAD has been presented to the Joint Evaluation Committee for feedback on the project and permitting strategies. Outreach efforts related to CAD are underway. Meetings will be scheduled with the Chesapeake Bay Foundation, Anne Arundel County, state and federal resource agencies, and local community groups. A robust dialogue about CAD occurred at the November 2022 CC COC meeting, and therefore information was shared regarding what can be expected during construction of a CAD cell. The proposed location for the next CAD site is approximately one mile from the shore of Cox Creek DMCF and is anticipated to have low visibility from the shoreline with temporary impacts. To ensure boaters are aware of the activities, including location and vessel movements during construction, a local notice to mariners will be published by the U.S. Coast Guard (USCG). Vessels will be lit per USCG visibility regulations for safety reasons. Noise will be within local noise ordinance limits. Extensive noise monitoring over several years was conducted during Poplar Island construction activities, which used similar equipment as what is anticipated to be used for the CAD construction near Cox Creek DMCF. There were no exceedances during those construction activities. For this type of project, there will be two phases of operations, including dredging and filling operations. Dredging will utilize 1-2 dredges to create the CAD cell. This will look visually similar to the annual maintenance dredging of the federal navigation channels. It is anticipated to occur over a 3-6-month period. The filling phase will use 2-5 scows daily to place dredged material into the CAD cell. Operations will be 24/7 over a 1-2-month timeframe. Mr. Garofolo stated that the Stoney Beach community would be accepting of this project if the noise is limited. Mr. Ross reiterated that the noise created from construction activities

will not exceed local noise ordinances; however, the specific decibels will need to be investigated. Mr. Garofolo stated that the Stoney Beach community will be increasingly concerned about the noise generated by the project.

Ms. Jones stated the construction of the Mid-Chesapeake Bay Island Ecosystem Restoration (Mid-Bay) project officially began with Phase 1 of Barren Island construction on March 10, 2023. This phase of the project will construct the breakwaters and sills to help protect the existing island. To keep stakeholders informed of the project's progress a meeting will be held with Dorchester County watermen to provide updates on construction and fishing impacts as well as details about future phases of the project. The project will also be presented at the DNR fisheries advisory commission meetings on April 18 and 20, 2023 to provide general project information and construction updates.

Ms. Jones presented bird census updates for attendees. Each month, Tim Carney with MES conducts a bird census at each MPA project site. In March, a few birds of note were observed. A tufted duck is a Eurasian vagrant that has only been observed in Anne Arundel County twice prior to this year. A local birder observed it at Fort Armistead Park on March 19 and observed again just north of the Cox Creek DMCF on March 22. An adult bald eagle was observed at Masonville Cove perched on the rim of a nest, looking down at an unidentified object inside. Eaglets were unable to be observed, but the nest is under continuous monitoring. Additionally, thirteen Great Blue Herons, including several nests, were identified in the heronry in the Swan Creek Wetland. Four Virginia Rails and one Sora were also observed in the wetlands along with a few uncommon species such as a Blue-Winged Teal, a Northern Harrier, American Pipit, and a Palm Warbler.

6.0 Roundtable Remarks & Open Discussion

Members

Mr. Schmidt announced that the Pasadena Sportfishing Group fishing derbies will be held on July 1 and September 16 at Fort Smallwood Park. This mini fishing tournament is for children between the ages of 5 and 15. There is a \$5 registration fee, however, participants will get the registration fee returned to them when they arrive at the event. Participants can also donate their \$5 registration fee back to the Pasadena Sportfishing Group at the event. Fishing poles and bait is provided, and all other fishing gear is the responsibility of the participants. Lunch is provided and awards are given for certain criteria.

7.0 Upcoming Meetings and Adjournment

Angie Ashley

Ms. Jones announced that the Cox Creek Open House will be held on Saturday, October 21, 2023. Ms. Ashley stated that the next CC COC meetings will be held on July 12 and October 11. The meeting was adjourned.