



Annual Review 2021

GROWING A SUSTAINABLE PORT

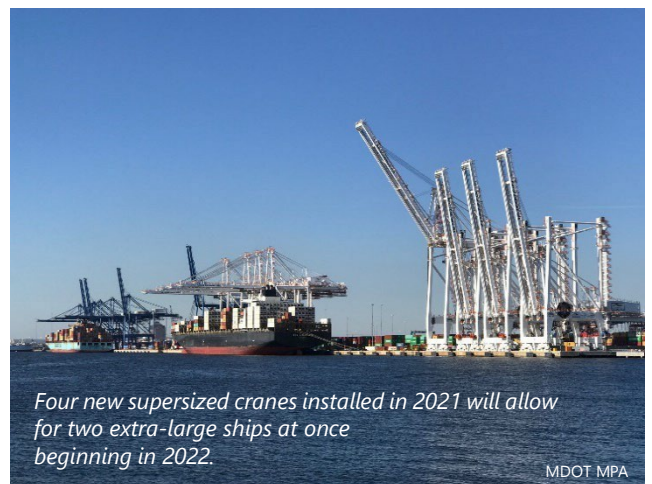
"While most people think of the Port of Baltimore in terms of the cargo it handles and its role as one of Maryland's top economic generators, we cannot lose sight of the important role it plays in making our environment better. The environmental programs and initiatives at the Port are making a real difference and will help to create a cleaner Maryland for years to come." - Maryland Governor Larry Hogan

As the world faced continuing challenges from the COVID-19 pandemic and unprecedented global supply chain congestion in 2021, the men and women who work at the Helen Delich Bentley Port of Baltimore (POB) kept cargo moving and positioned the Port as a beacon for commerce, environmental sustainability, and worker safety. The Port and its partners also kept health and safety paramount, administering vaccination shots to more than 2,500 crew members during their visits to Baltimore. While setting records and marking achievements, the Port's commitment to improving the environment remained. Significant investments were made in infrastructure improvements that continue to benefit both commerce and the environment.

Baltimore is one of only a few East Coast ports capable of handling some of the world's largest vessels. A newly deepened second 50-foot berth at the Seagirt Marine Terminal, along with Ports America Chesapeake's (PAC) four new supersized container cranes will allow two of these massive ships to be serviced simultaneously. PAC is adding 15 hybrid-electric gantry cranes, new truck gates, and improved weigh-in-motion truck scales that will help reduce air emissions. Ground was broken on the "game-changing" project to reconstruct Baltimore's 126-year-old Howard Street Tunnel, which will allow double-stacked containers on trains entering and leaving the Port. Over 30 years, this project will generate thousands of jobs and significantly increase container business while reducing fuel consumption by about 137 million gallons and saving 1.2 billion truck miles.

In February, a record was set for the most ever container moves from a single vessel call. The Maersk Edinburgh's call at Seagirt Marine Terminal resulted in 6,000 container moves, surpassing the previous record of 5,536 moves from the same vessel set in August 2020. A new container service was added to serve the Port of Baltimore in 2021 by Mediterranean Shipping Company (MSC).

The Port generates about 15,300 direct jobs, with nearly 140,000 jobs overall linked to Port activities. The Port is responsible for nearly \$3.3 billion in personal wages and salary, \$2.6 billion in business revenues, and \$395 million in state and local tax revenues. The Port ranks first among the nation's ports for volumes of autos and light trucks, roll on/roll off heavy farm and construction machinery, and imported gypsum. It ranks 11th among major U.S. ports for foreign cargo handled and 9th for total foreign cargo value. In 2021, general cargo handled by the Port of Baltimore totaled 43.5 million tons worth a record \$61.3 billion.



ECO Port 2021, published by the Maryland Department of Transportation Maryland Port Administration (MDOT MPA), describes the projects and programs that took place in 2021 to support a thriving economy, environmental stewardship, and community partnerships. We thank the many private sector businesses, government leaders, communities, and individual citizens who have helped make these achievements a reality. www.mpa.maryland.gov www.mpa.maryland.gov/greenport

Climate Change

The POB's innovative plans to address the impacts of a changing climate were highlighted at the 2021 United Nations Climate Change Conference, also known as COP26. As one of the few ports to have an active resiliency strategy, the POB's presentation to an international audience sparked a productive exchange on resiliency, adaptation, and energy efficiency.

Diesel & Greenhouse Gas Reduction

The Maryland Energy Administration (MEA) joined MDOT MPA, MDOT, and the Maryland Department of the Environment, in signing a renewed Interagency Voluntary Agreement that strengthens the agencies' commitment to look for innovative ways to reduce diesel and greenhouse gas emissions, increase energy efficiency, and enhance ties with historically disadvantaged communities.

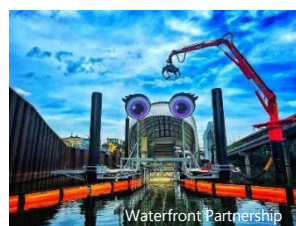
Already the Port's dray truck and clean diesel replacement programs have removed more than 5,100 tons of air emissions. Since 2008, 275 trucks have been replaced, and 118 pieces of diesel cargo-handling equipment such as forklifts, tugs, top loaders, and locomotives have been retrofitted or replaced. Following a robust "Dollars for Drays" social media and outreach campaign, the Port met its special goal to replace 20 older dray trucks by Earth Day—the most successful quarter in this effort to date—leading to a reduction of more than 6.6 tons of nitrogen oxides.

In 2021, the Port completed a microgrid feasibility study funded through MEA's Resilient Maryland grant program. The results of the study will aid Port planners in the development of long-term strategies for reducing emissions and enhancing resiliency through sustainable energy production.

MDOT MPA's electrical maintenance department installed new LED lighting inside four sheds at the Dundalk Marine Terminal. The new lighting will result in an energy cost savings of more than \$70,000 per year and is expected to remove 559 equivalent tons of carbon dioxide (CO₂). This is equal to the emissions from the electricity used by 70 homes during the course of one year or the greenhouse gas emissions from 93 passenger cars per year.

Water Quality

At Gwynns Falls, MDOT MPA partnered with the Waterfront Partnership and other stakeholders on Baltimore's fourth and largest trash wheel, Gwynnda the Good Wheel of the West, which joined Baltimore's three other MDOT MPA-supported trash wheels—Mr. Trash Wheel, Professor Trash Wheel, and Captain Trash Wheel.



Wildlife

From birding "hotspots" to rare urban coyote sightings, wildlife thrives on the lands and the waterways that are home to the Port and its partners. Nesting bald eagles



were recorded at the Cox Creek Dredged Material Containment Facility, Hart-Miller Island, The Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island (Poplar Island), and for the third year in a row at Masonville Cove in Baltimore City. Nearly 250 bird species, including several "firsts" and many rarities, were also identified during official censuses at these sites. Rare sightings in Maryland were recorded of the Nelson's sparrow at Masonville Cove and the snowy owl at Poplar Island.

At the 8th annual BioBlitz at Masonville Cove, a total of 137 species were found by 88 participants during 279 recorded observations. Also at Masonville, hundreds of wild indigo plants were grown for the benefit of frosted elfin—small, brown butterflies that are considered critically imperiled in Maryland.

Despite school building closures and setbacks caused by the pandemic, the partnership program that gives terrapins a "head start" in classrooms before their release on Poplar Island was able to release eight terrapins. More than 100 classes participated in virtual programming.

Dredged Material Management

As 2021 marked the 20th anniversary of Maryland's Dredged Material Management Act (DMMA), the Port and its partners celebrated the expansion of Poplar Island. Eroded to just 10 acres, the island was restored using dredged material to its original 1,150-acre footprint. An expansion completed in 2021 provides 575 additional acres, including four new wetland cells and one large upland cell.

Partners moved forward on the next big coastal restoration project, the Mid-Chesapeake Bay Island Ecosystem Restoration. Dredged material will be used to rebuild James and Barren islands, create new habitat, and protect shoreline. Beginning in 2022, Barren Island will have 72 acres restored, and James 2,072 acres beginning in 2024. A public meeting in Dorchester County shared information about the project that will take dredged material for 30 years.

Along the Middle Branch waterfront, dredged material will help turn Ridgley's Cove into a recreational area with walking trails.

The Maryland Board of Public Works approved six contracts to study reusing clean dredged sediment for various products, such as bricks, concrete barriers, shoreline protection structures, berms, and sod.

COMMUNITY

Lending a Hand

In June, 20 members of the Baltimore Port Alliance (BPA) joined members of the South Baltimore Community Land Trust (SBCLT) to clear debris from a vandalized lot used by the community for education and recreation. Thanks to the hard work of volunteers, the lot is being prepared as the future site for the construction of urgently needed, permanently affordable homes.



Donations of Materials

The POB and its partners have established many ways to give used materials a second life, keeping them out of landfills while benefitting the community. From dunnage, cargo packing material from ocean-going vessels, to wharf logs, placed on the edge of vessel berths to serve as curb stops that wear out over time, a variety of materials are used to support port operations.



The Greater Baybrook Alliance (GBA) had been searching for material to serve as bollards to prevent illegal dumping at Farring Baybrook Park in Curtis Bay. Although worn-out wharf logs no longer had value to the Port, they were state property, and appropriate protocols needed to be followed in order to donate the surplus material. After receiving the necessary approvals, MDOT MPA oversaw the donation to the BPA for future use by community associations. A match was made, and BPA member C. Steinweg generously supplied the labor to cut the wharf logs to size and bundle them on pallets. Maryland Environmental Service (MES) arranged for transportation.

SBCLT youth leaders teamed up with the BPA to find creative ways to reuse wood dunnage donated by C. Steinweg Group and steel blocking and bracing frames by BWC Terminals. The dunnage found new life in projects such as benches, neighborhood art, and in a recycling station built by students from Benjamin Franklin High School at Masonville Cove.

The BPA Environmental Committee solved a storage problem at the Masonville Cove Environmental Education Campus (MCEEC) by coordinating a container donation courtesy of Ports America Chesapeake. The container will allow for storage of gear that is used to support environmental education programs conducted at the campus. BalTerm provided transportation of the container.

Providing Opportunities

University of Maryland Global Campus (UMGC) environmental management graduate students had an opportunity to see practical applications for their field of study through a semester-long capstone project with MDOT MPA. Two other collegiate partnerships were formed with Morgan State University at Masonville Cove and with Harbor City Chapter of The Links, Incorporated's WildSTEM program and Coppin State University.

In the spring, the BPA hosted a Virtual Hiring & Career Expo. This event marked the second annual BPA hiring expo and brought together 29 employers and more than 275 registered job-seekers.

AWARDS

- After first reeling in the "Most Innovative Stormwater Permit Implementation" category award, MDOT MPA went on to the next round and won the prestigious grand prize Best Urban BMP in the Bay Award from the Chesapeake Stormwater Network.
- Two partnership projects, installation of a living shoreline and Baltimore's trash wheels, received prestigious MDOT Environmental Excellence Awards, an annual recognition of notable achievements in environmental compliance and sustainable practices across MDOT.

NEW ECOMINUTE

A new EcoMinute video features air quality projects with Port community partners (available on MDOT MPA's website and YouTube Channel)



OUTREACH

Maryland Port Administration 2021

Engaging with Stakeholders

The POB is committed to being a responsible neighbor and building partnerships with stakeholders. Throughout 2021, while ensuring the utmost safety during the global pandemic, MDOT MPA outreach team members and partners hosted special events such as the National Urban Wildlife Conservation Celebration; Latino Conservation Day; and the 8th Annual BioBlitz, all at Masonville Cove; an open house and day of fun including birding tours at the Swan Creek Wetlands at the Cox Creek Dredged Material Containment Facility; and meeting Marylanders and sharing information about the Port at the state fair.

A new partnership with the Maryland Geocaching Society brings many first-time visitors to Masonville Cove to geocache—a Covid-safe activity. Masonville was selected as one of only ten sites statewide to be included in the Cache Across Maryland (CAM) 2021 challenge with over 200 finds. Over the summer, volunteers participated in a Cache in, Trash Out event at Masonville Cove. Within two hours, 20 participants collected approximately 329.5 pounds of trash.

Virtual programming also supported outreach efforts. With help from MES, POB created the Environmental Education E-Learning Portal, portofbaltimoreeducation.org, to provide virtual programs, lessons, activities, field trip information, green leader assistance, and information about the terrapin program, restoration sites, and educators.

For more information, visit the MDOT MPA website at mpa.maryland.gov, where you can sign up for free subscriptions to the ECO Port Newsletter and the Port of Baltimore Magazine. Follow the Port on social media.



MDOT MPA



Courtesy Photo



MES

Top to bottom: National Urban Wildlife Conservation Celebration at Masonville Cove, Maryland State Fair, Cox Creek Open House

Congratulations to former MDOT MPA Deputy Director of Harbor Development Frank Hamons. In recognition of his legacy of environmental achievements, the Great Room at the Masonville Environmental Education Center was named in his honor.

IN THE SPOTLIGHT

The Port of Baltimore received national and international attention as it successfully navigated the shipping challenges of 2021. VIP visitors included several visits by the Governor, as well as the Mayor of Baltimore, members of Congress, leadership of the U.S. Army Corps of Engineers, the U.S. Fish & Wildlife Service, the U.S. Customs and Border Protection, the U.S. Transportation Secretary, and the President of the United States.



Maryland Department of Transportation
Maryland Port Administration

The World Trade Center
401 East Pratt Street, Baltimore MD 21202
1-800-638-7519 / www.marylandports.com