



iMPAct IN TALBOT COUNTY

The mission of the Maryland Port Administration (MPA) is to stimulate the flow of waterborne commerce through the State of Maryland in a manner that provides benefit to the citizens of the State. In Talbot County, MPA provides economic, environmental, and community benefits.

Economic Impact

STATEWIDE ACTIVITY

Cargo activity creates **\$647 million** of state and local taxes.

44% of the taxes generated go directly to county and local governments.

The Port of Baltimore generates **more than 20,300 direct jobs.**

TALBOT COUNTY ACTIVITY

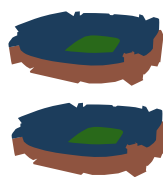
\$219 million investment through 2037 in the Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island (Poplar Island), an internationally recognized island restoration initiative showcasing the beneficial use of dredged material.

MPA directly and indirectly employs 36 people in Talbot County with scientists and engineers from nine additional organizations including: National Oceanic and Atmospheric Administration, University of Maryland Center for Environmental Science, U.S. Fish & Wildlife Service, U.S. Geological Survey, and Smithsonian Institute.

DREDGED MATERIAL DOING GOOD



Some of the largest cargo ships today require **50-foot deep navigation channels**. Without them, these vessels would not be able to do business in Baltimore.



Dredging generates millions of cubic yards of sediment, enough to fill M&T Bank Stadium to the brim twice each year. Dredged material from the Maryland Chesapeake Bay Approach Channels is primarily used to rebuild eroded islands in the Bay.

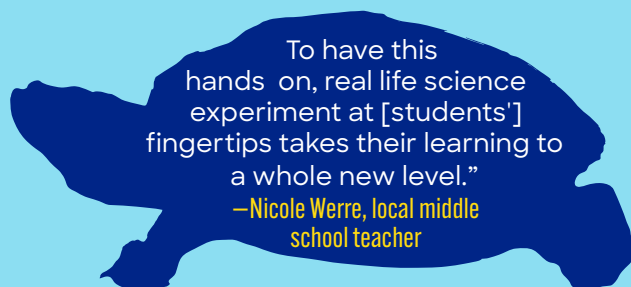
Community Impacts

MPA supports families and communities in Talbot County through its educational and recreational community programs. By creating these opportunities for youth and their families to participate in outdoor programs and activities, MPA continues to build an appreciation for what Maryland, and these Chesapeake Bay counties offer.

TERRAPIN EDUCATION RESEARCH PARTNERSHIP (TERP) PROGRAM IN TALBOT COUNTY

MPA's environmental team works with local schools to raise diamondback hatchlings from Poplar Island. Students are able to nurture the hatchlings in their classroom until they're ready to head back to Poplar Island and live on their own.

- **More than 79,000 Maryland students** have participated in this program.
- **22,000 terrapin hatchlings** born on site.
- **Approximately 3,650 terrapins** have been head-started by Maryland students since 2005.
- **Over 1,000 classrooms** have released head start turtles on Poplar Island field trips.
 - **27%** of these schools are Title One, representing disadvantaged communities.
 - **33%** of schools are Maryland Certified Green Schools based on their curriculum.



To have this hands on, real life science experiment at [students'] fingertips takes their learning to a whole new level."
—Nicole Werre, local middle school teacher

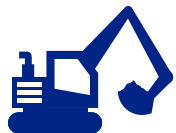


Environmental Impact

MPA funds environmental programs throughout the county to the benefit of ecosystems, neighborhoods, and residents.

POPLAR ISLAND

Poplar Island's restoration has transformed what were badly eroded island remnants into a thriving ecosystem. Today, the island is an international model for ecosystem restoration using dredged material. It is also a popular stopover site for migratory birds along the Mid-Atlantic flyway and provides a home to a wide variety of other wildlife.



- Poplar Island began receiving dredged material in 2001.
- The facility has recently expanded to extend its lifespan and continue providing 2 million cubic yards (mcy) of placement capacity annually.
- After 35 years of accepting 2-3 mcy each year of dredged material, in the mid-2030s Poplar Island will no longer be the primary placement site for material dredged from the Maryland Chesapeake Bay Approach Channels. It will continue to receive smaller inflows its final years of placement while the Mid-Bay Project will take over as the primary placement site for this material.

POPLAR ISLAND HIGHLIGHTS

260+ species of birds identified at Poplar Island, and **up to 47 bird species** are likely breeding onsite

1,715 acres of internationally acclaimed beneficially used dredged material will restore wildlife habitat and a popular stopover for migratory birds

10+ million fish thrive in the surrounding waters

Marshes at Poplar Island are showing **resilience to sea-level rise** supporting scientific recommendations to use nature-based and climate-resilient solutions

2,574 visitors and **127** tours hosted in a single year

ADVANCING SCIENCE

Poplar Island hosts an array of scientists and engineers who have conducted, published, and presented pioneering research about best practices and the positive impacts of beneficial use of dredged material. Poplar Island research has led to 51 conference presentations, 37 scholarly articles, 10 academic research projects, and 5 technical reports. Research topics have included:

- Wetland restoration best practices
- Long-term resilience in the face of sea-level rise
- Growing oysters, natural water filters, on stone reefs
- How rebuilt marshes affect native fish
- The rate of carbon sequestration in restored wetlands



The MPA's Office of Navigation, Innovation, and Stewardship plays a crucial role in ensuring safe navigation for vessels by managing the sediment dredged from the Port's channels to maintain their depth and width. Dredged material is placed in containment facilities, is used to rebuild eroded land, and the Port is now exploring innovative new ways to commercialize this material.