

MARYLAND COASTAL BAYS PROGRAM

A YEAR IN REVIEW

AND
LOOKING
TOWARD
2024



Director's Reflection

Winter, while sometimes dull and grey, can be magnificent. A walk in the woods, or a paddle along a slow-moving creek can be the best tonic to shake the winter blues and enjoy nature in all of its brilliance. Winter is also a time for reflection. Things tend to slow down – after the holidays at least – and it's always worthwhile to take a step back to assess how successful you are in whatever endeavors you pursued over the last year.

2023 was a good year for us here at the Maryland Coastal Bays Program. We achieved a B- on our 2022 Report Card for the first time since 2017. We had many opportunities to work with our volunteers on restoration projects and monitoring programs, and we were able to provide exceptional nature experiences for both children and adults.

One of the most important things that we did this year was reinvigorate the Citizens Advisory Committee. This committee has been inactive for a number of years, and we felt it was well past time to get our stakeholders together and hear what they had to say. The input from the Citizens Advisory Committee is vital in guiding our mission. In 2024, we'll continue the development of our next Comprehensive Conservation and Management Plan (CCMP). This plan sets our course for the next 10 years, and understanding our community's priorities is essential to us. More recently, as a staff, we had time to reflect on our shared values and vision for healthy robust Coastal Bays. We came up with three words to describe our values and those words are "Impact", "Collaboration", and "Stewardship". As you read further in our Year in Review, I think you'll see how these words describe our work, our ethics, and our desire to achieve this vision along with you, our partners, and the community as a whole. Your help and support are crucial to our mission. We sincerely thank you for being there in 2023 and we look forward to your continued support and input in 2024. Have a joyful and peaceful holiday season.



Kevin Smith
Executive Director
Maryland Coastal Bays Program

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A huge thank you to the EPA, our partners, volunteers, and amazing board.
Our work is only possible because of you.

COASTAL BAYS BY THE NUMBERS

IMPACT

Through restoration, community science, and volunteerism, MCBP works to have measurable, positive impacts on the health of our watershed.

4,135 people reached through **85** education & outreach programs



1,200 people attended Bay Day



68,383 digitally reached through social media



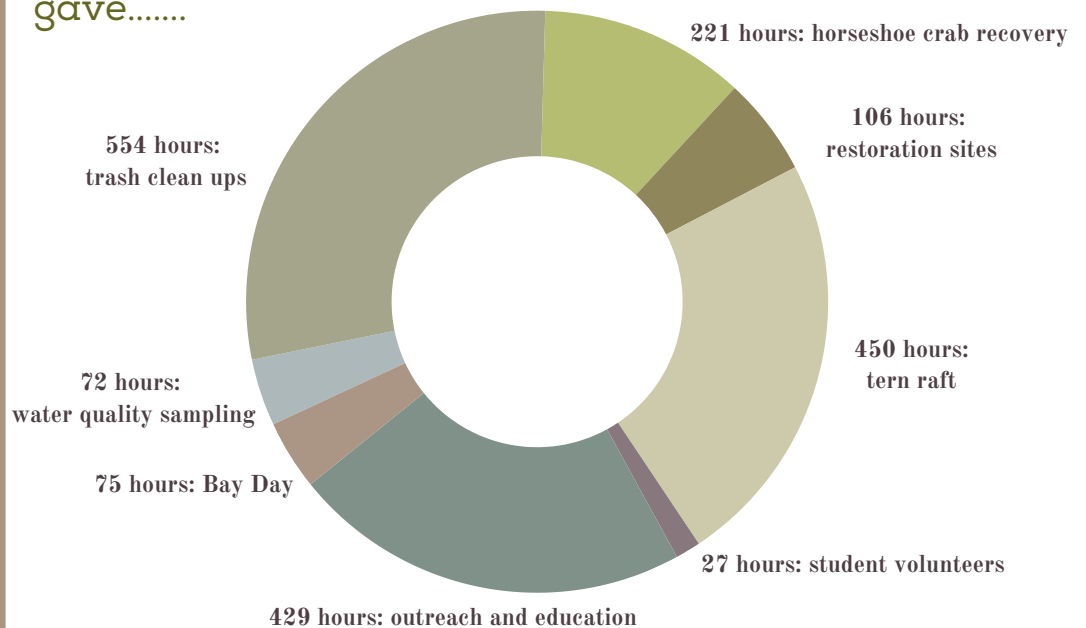
We would like to thank all

454

dedicated volunteers that gave.....

1,934

hours of service



THROUGH THE MARYLAND COASTAL BAYS GRANT PROGRAM

\$ 25,000

IN MINI GRANTS

AND

\$ 25,000

IN A RESEARCH GRANT

WAS AWARDED TO COMMUNITY ORGANIZATIONS

170

common tern chicks fledged



6,800

oysters planted



3,438

horseshoe crabs rescued



2,343

pounds of trash collected



COLLABORATION

MCBP consistently works towards developing partnerships and participating in efforts to better our environment. These projects serve as prime examples of how critical collaboration is between local, state, and federal organizations in addressing environmental concerns.

Marshes for Tomorrow

This year, MCBP was invited to assist in the implementation of a massive, multi-organizational project called Marshes for Tomorrow (MfT). MfT is a coalition of partners led by Audubon Mid-Atlantic and Lower Shore Land Trust (LSLT) with an ambitious goal of identifying, protecting, and restoring a minimum of 25,000 acres of tidal saltmarsh across Maryland's Eastern Shore counties. This project focuses on habitat that is critical to the saltmarsh sparrow, a marsh-obligate species that has experienced severe population decline due to sea level rise and habitat loss. Saltmarshes not only act as a buffer to our waterways and infrastructure, but they also provide critical habitat to hundreds of species. By protecting, conserving, and restoring 25,000 acres of saltmarsh in Maryland, we are giving the saltmarsh sparrow a fighting chance, and increasing the resiliency of our local communities and ecosystems against climate change. The MfT project would not be successful without the inclusion of our local communities and stakeholder groups.

We recognize the importance of our communities' local and historical knowledge of the saltmarshes and hope you will aid in our efforts by scanning the QR code and filling out our marsh-use survey or by attending one of our in-person community meetings. For more information regarding MfT, please email marshes4tomorrow@gmail.com.



Credit: Blackwater National Wildlife Refuge
Leonard Dagny

Marine Debris

The Maryland Coastal Bays Program is proud to be part of the Mid-Atlantic Regional Council on the Ocean (MARCO). This is a regional partnership recognized by the government that is led by lead coastal planners in all five mid-Atlantic coastal states. MARCO plays a unique role in the region; it is the only multi-jurisdictional, coordinating body to use the ocean, and waterways impacted by the Atlantic Ocean, such as our Coastal Bays, to holistically plan to address management and conservation issues with a collective voice. There are four priorities that the partnership has identified for shared action: climate change adaptation, marine habitats, renewable energy, and water quality. This year MARCO hosted their annual Marine Debris Summit in Ocean City and focused on identifying collaborative opportunities, discussing emerging science and findings, and highlighting solutions to debris prevention and reduction.



Tern Raft

The Tern Raft, a floating artificial breeding island for the Maryland State Endangered species, the Common Tern, wrapped up its third successful year in Chincoteague Bay, the southern most of the five Coastal Bays. The 2023 year produced 323 nesting pairs of terns, which was up from less than 30 in Worcester County in 2020. In the three years since the raft was initially deployed, it has restored over half of the historic breeding population from 20 years ago. We're looking forward to our fourth year in 2024 when some of the chicks will be of age to return from South America and begin breeding their own young. A big thanks goes out to Dave Brinker, the Coastal Waterbird Biologist from the Wildlife and Heritage Service of the MD Department of Natural Resources for initiating the project, and to Audubon Mid-Atlantic for its constant support in getting the word out. The Tern Raft has been featured in Maryland Public Television, Scripps News Organization, Audubon Magazine, the Chesapeake Bay Magazine, as well as local and regional news agencies.

Credit: Kim Abplanalp



STEWARDSHIP

As stewards of the watershed, MCBP values concerted, responsible management of our natural resources.

Sinepuxent Shoreline



View from the Verazzano Bridge looking south at the shoreline.

Situated along the landward side of Sinepuxent Bay just south of the Verazzano Bridge is a shoreline bordered by maritime forest that many locals and visitors alike have come to cherish for its unique habitat and uncompromised views of Assateague Island. The site is adjacent to the Assateague Island National Seashore's visitor center, hosts a quiet public trail that meanders through maturing wax myrtle (the infamous "Tunnel of Trees"), and separates the Sarbanes Center and Rackliffe House from the bay. This particular site, though, is vulnerable to rising water levels and shoreline loss during storms and other high wind

and wave energy events. The annual rate of erosion on site is upwards of 1.34 ft/year. A visual glance reveals a severely eroded bank and subsequent loss of critical vegetation, with large, downed trees that lie toppled along the narrow shoreline (see photo to the right).

The Maryland Coastal Bays Program, the National Park Service, Assateague State Park, Rum Pointe Seaside Golf Links, Underwood and Associates, and the Environmental Protection Agency are working together to address the area's adverse impacts. A regenerative resiliency design will be used that implements the strategic placement of vegetated headland structures to allow for the accretion of sand, long-term maintenance of habitat, and storm protection. In total, four headlands will be created along this stretch of shoreline. The lima bean shaped headlands, comprised of sand, cobblestone, and



Tree fallen into the bay along the maritime forest trail.



Erosion impacts at the shoreline.

boulder, serve to break up incoming wave energy, thereby reducing erosion and preserving important maritime habitat. The configuration of these headlands will be designed in such a way that allows the shoreline to naturally mature into a healthy tidal wetland. The project will restore approximately 1,800 linear feet of rapidly eroding shoreline on Sinepuxent Bay. At the completion of the project, shoreline and nearshore and upland maritime forest habitat will be enhanced for species, including diamondback terrapin, horseshoe crabs, and numerous shorebirds, that migrate and nest throughout the area for years to come.

STEWARDSHIP

As stewards of the watershed, MCBP values concerted, responsible management of our natural resources.

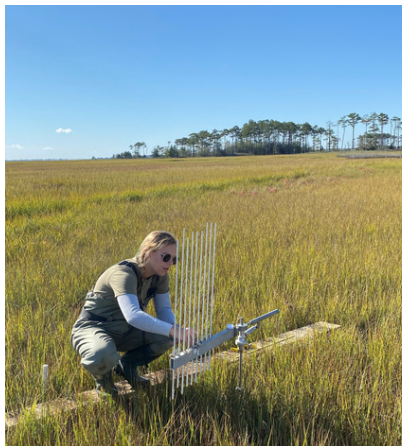
The Importance of Saltmarshes



Overlooking a marsh in Maryland's Coastal Bays.



Assessing bayside wetlands in Ocean City.



Measuring marsh elevation changes at Greys Creek.

One of the iconic images of coastal habitats is large expanses of saltmarsh. Here the conditions are harsh as saltwater from the ocean mixes with freshwater from stormflow, and flooding from high tides mixes with drying from low tides both on a daily and monthly cycle. Very few plants can tolerate such conditions, so the ones that can, such as saltmeadow hay and smooth cordgrass, dominate this environment. The thick matting of grasses provides shelter from wave action for a variety of organisms. Crustaceans such as blue crabs, fiddler crabs, mud crabs, and grass shrimp break down the annual crop of dead grasses. Saltmarshes are feeding grounds for small fishes such as killifish, mummichogs, bay anchovies, and silversides which are a food source that attracts larger fishes such as flounder and black sea bass, as well as sea birds such as terns, ibis, and herons. From a human perspective, we ascribe services to marshes. Tidal marshes are crucial to coastal resiliency; they act as a buffer to inland areas and reduce damage to infrastructure caused by storm surges and flooding events.

Marshes filter out excess nutrients found in stormwater runoff and help reduce shoreline erosion by trapping sediments in their vegetation. In spite of the importance of tidal marshes, we are seeing drastic declines in their extent due to sea level rise and development reducing areas for upland migration. Too much standing water on the interior of marshes has caused the grasses to die, leaving behind mud flats without beneficial vegetation to hold back sediment. This causes an increase in marsh fragmentation which reduces the habitat's stability. MCBP is hard at work partnering with state and federal agencies and non-profits to protect and restore marshes and improve resiliency. Wetland assessments conducted by MCBP help to understand the severity of degradation our marshes are facing and what wetlands are in greatest need of restoration. The MD Department of Natural Resources provides funding for design and implementation of marsh and shoreline restoration. The US Fish and Wildlife Service has been working with landowners to identify areas where marsh restoration techniques would be appropriate and assisting with implementation funding. And the Marshes for Tomorrow initiative is looking at innovative efforts to restore sinking saltmarshes and save the saltmarsh sparrow. Your support will help MCBP continue to provide a framework on which marsh restoration and protection can benefit the watershed.

LOOKING FORWARD TO AN IMPACTFUL 2024



Scan to support
2024 Coastal Bays
programming

www.mdcoastalbays.org
@mdcoastalbays
410-213-2297

Front cover photo of a harlequin duck at the Ocean City Inlet taken by Kim Abplanalp.
Back cover photo of an osprey in flight taken by Logan Hall.



The Maryland Coastal Bays Program works to enhance the ecological values and resiliency of the Coastal Bays, the watersheds, and their communities through conservation and public engagement.

