





EPA Wetlands Capacity Building in the Chesapeake Bay Watershed

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The Chesapeake Bay Trust shares a bold vision for a restored and protected Chesapeake Bay watershed and other natural resources in our area—from the Coastal Bays to the Chesapeake to the Youghiogheny River. We uniquely empower local community-based groups on the ground with the resources they need to take on a meaningful and measurable role in restoring these systems. Healthy natural resources benefit everyone. We know that everyone can make an impact and hundreds of thousands of individuals have come together to improve forests, streams, rivers, bays, wildlife, and more in their own communities.

Objectives of Wetlands Capacity Building Grant

- (1) <u>Strategic Planning</u>: facilitate dialog across practitioners and communities to establish consistent coastal marsh restoration priorities, techniques, and coastal marsh restoration siting criteria by creating a Wetlands Strategic Plan.
- (2) <u>Developing Capacity</u>: determine aspects of coastal wetlands that can/should be monitored/evaluated on all projects, a protocol for monitoring to answer the question "Was this project successful," and a protocol for monitoring.
- (3) <u>Landowner Community Engagement</u>: determine the best ways in which landowners and those who influence landowners get information. Audience types will be supported with this work: (a) Private individual landowners of all socio-economic levels, and (b) Coastal communities who will be disproportionately affected by sea level rise.
- (4) <u>Sustainable Programs:</u> ensuring ongoing financial support for all of our practices is a challenge, and tidal/coastal wetlands is no exception.
- (5) <u>Tidal Wetlands Design</u>-work with the National Oceanic and Atmospheric Administration (NOAA) and other partners to design a tidal wetland restoration project and submit an application to a NOAA funding opportunity in 2023
- (6) Infrastructure investment for the Green Streets, Green Jobs, Green Towns Grant
 Program

Objective 5 - Tidal Wetlands Design

Goals of Objective 5:

- Provide funding to plan and design tidal wetlands at an identified project supported by the project partners
- 2. Submit application to the 2023 NOAA Transformational Habitat Restoration and Coastal Resilience Grant for a tidal restoration project in the Chesapeake Bay Watershed

Chesapeake Bay Trust Progress:

- Completed 13 listening sessions with over 40 individuals with various groups/orgs
- Collected potential tidal restoration sites
- One potential tidal restoration project rose to the top with a strong project proponent
 - -Proposed Project: Pocomoke Sound Climate Adaption Initiative Project
 - -Project Proponent: The Nature Conservancy

Proposed Project: Pocomoke Sound Climate Adaption Initiative [Pocomoke Sound/Saxis Wildlife Management Area (WMA)]



Figure 1. The proposed Pocomoke Sound Climate Adaptation initiative would span from the Crisfield peninsula, including the state-owned lands of Janes and Cedar islands, up to Pocomoke City, and down to the Saxis peninsula. This area contains thousands of acres of publicly owned marshes (critical for juvenile fish habitat) and marsh migration corridors. It also encapsulates three climate justice communities: Crisfield, MD, Pocomoke City, MD, and Saxis, VA.

Proposed Project:

Funds from the EPA Chesapeake Bay Program (CBP) are proposed to be used for planning and designing this large-scale, multi-year project led by The Nature Conservancy

Project Landowner:

The Pocomoke Sound Climate Adaption initiative aims to unite climate adaptation efforts across the region, spanning several landowners, including state (MDNR, VADWR), county (Accomack, Somerset, Worcester), and municipalities/rural towns (Crisfield, Pocomoke, Saxis, Sanford) and private landowners.

Objective 5 -Tidal Wetlands Design

The full extent of restoration opportunities will be developed collaboratively with partner organizations, and community groups. It is anticipated that at a minimum this initiative will result in a few hundred acres of restoration, including uplands, salt and freshwater, seagrass, and oysters, as well as land protection and conservation activities.

Project Features:

Restoration projects will be developed collaboratively with partner organizations and community groups. The project team will explore restoration opportunities, such as:

- SAV and blue crab nursery habitat restoration
- Oyster reef and fisheries habitat restoration
- High and low marsh restoration, marsh migration, saltmarsh sparrow habitat restoration, and invasive species removal
- Shallow water habitat restoration and fisheries habitat restoration
- · Riparian buffer planting
- Living shorelines
- Protection of marsh corridors through land acquisition and Coastal Resilience Easements
- Marsh adaptation for climate resiliency

Restoration Techniques:

Depending on the selection of restoration activities, the following techniques could be deployed:

- Beneficials use of dredged material and/or thin-layer placement to restore and elevate marshes
- Marsh sills, breakwaters, other structures to allow natural sand accretion to build up the tidal marsh
- Hydrological changes and plantings to create tidal wetlands
- Agricultural conversion to support marsh migration
- SAV planting to restore SAV and fish habitat
- Substrate planting to restore oyster reefs and fish habitat
- · Tree plantings to create riparian buffers as well as fresh water, forested wetlands

Expected Ecological Uplifts/Outputs:

- Blue crab nursery habitat
- Fisheries habitat
- · Saltmarsh sparrow habitat

Objective 5 -Tidal Wetlands Design

Timescale: 5 Years

Design Funds: : Will cover design costs and community outreach and engagement

Objective 5 - Tidal Wetlands Design – Previous Work at Pocomoke Sound Climate Adaption Initiative Project

- -Marsh restoration modeling (NOAA Effects of Sea Level Rise award).
- -Community-engaged flood adaptation planning with Crisfield (NOAA Adaptation Sciences award).
- -Blue carbon and resilience crediting feasibility assessment to evaluate the potential opportunities for generating blue carbon and/or resilience
- -Assisting Town of Saxis secure funding through Virginia's Community Flood Preparedness Fund (CFPF) to create and Adaptation and Resilience Plan that uses the blueprint and community engagement that is being created for the Village of Oyster on Virginia's seaside in partnership with Northampton County.
- -Building oyster reefs and enhancing saltmarsh habitat to strengthen coastal resilience on Virginia's seaside of the Eastern Shore adjacent to the Town of Wachapreague (NFWF award).
- -Land acquisition, in partnership with VDWR of over 8,500 acres in Accomack County in 2021 and 2022 that include marsh retreat space in the Pocomoke Sound watershed and ample opportunities for increased public access to nature.
- -Pocomoke River Restoration Partnership that has restored >3,000 acres of floodplain, making it the largest such restoration in Maryland's history and model for large-scale wetland restoration in the Bay.