

Wetlands Outcome Sub-Chapter

Wetlands Outcome: Restore, create, enhance and protect wetlands to support people and living resources, including waterbirds and fish, and provide water quality, flood and erosion protection, recreation and other valuable benefits to people.

- By 2040, restore or create at least 3,000 acres and enhance 15,000 acres of tidal wetlands, focusing on habitats that support populations of waterbirds and represent healthy wetlands across the watershed.
- By 2040, restore or create at least 3,000 acres and enhance 15,000 acres of nontidal wetlands, focusing on habitats that support populations of waterbirds and represent healthy wetlands across the watershed.

Baseline and Current Condition

There is no current consistent Chesapeake Bay tidal and non-tidal watershed-wide wetland acreage and function tracking. There are various tracking approaches using data integrated from federal, state, and local conservation databases, and personal communication. A Bay-wide baseline will need to be established following the 2025 Bay Agreement adjustments, utilizing high-resolution remote sensing and data layer syntheses. The baseline will be used to assess progress towards the Wetlands Outcome.

- **Tidal Wetlands:** Baseline conditions indicate steady losses of coastal marshes due to sea level rise, wave erosion, shoreline hardening and development. Upland migration is heavily restricted by human infrastructure. The current trend shows a net decrease in functional marsh area, though restoration via living shorelines, sediment additions and flood mitigation projects has increased locally ([Chesapeake Bay Program, 2023](#)).
- **Non-Tidal Wetlands:** Baselines established from historical tracking show massive historic losses due to agricultural drainage and urban development. Current conditions show that while degradation of existing wetlands continues due to invasive species and altered hydrology, restoration gains on agricultural lands are slowing the rate of net loss, leading to a trend that remains the same or slightly decreasing ([Chesapeake Bay Program, 2023](#)).

Monitoring Progress and Indicators

Indicator: Wetland Status and Trends

Monitoring wetland aerial extent. Data is collected by multiple entities over various timelines using variable approaches.

Indicator: Wetland Restoration, Creation and Enhancement

Tracks annual additions in wetland acreage achieved through voluntary programs.

Indicator: Waterbird Population Estimates

The waterbird indicator will use population estimates from relevant biological seasons (i.e., breeding pairs, total wintering population, etc.) to assess population trends of focal species identified by stakeholders. This will incorporate a range of scientific and citizen science survey data yet to be determined, to assess historic and present populations.

Expected Changes Under the New 2025 Bay Agreement:

The previous 2014 Agreement focused heavily on gross historical acreage targets (e.g., restoring 85,000 acres and enhancing 150,000 acres). The 2025 Bay Agreement transitioned toward a **wetland tracking effort** focused on acreage with the intention to factor in changing environmental condition losses (like sea level rise) and prioritizes functional resilience and verified wetland performance, and explicitly incorporates living resources including waterbirds and fish.

Wetlands Outcome Situation Analysis

The following table identifies critical challenges impacting both tidal and non-tidal wetland restoration efforts across the watershed.

Challenges	Within CBP Sphere of Influence	Outside CBP Sphere of Influence
CBP and partner capacity to sustain long-term tracking and update inventories	X	
Workforce knowledge and technical capacity for restoration design	X	X
Property owners' willingness to adopt voluntary restoration practices	X	X
Inadequate, fragmented, or unaligned funding streams limit achievement of the Wetlands Goal	X	X
Accelerated tidal marsh loss due to erosion and drowning and erosion from sea level rise and changing environmental conditions		X

Manage for marsh migration potential including retrofits for hardened shorelines and infrastructure blocking upland marsh migration**	X	
Regulatory updates and shifting legal definitions of federally regulated waters (WOTUS)		X
Opportunities to address historic agricultural drainage networks and ongoing land conversion pressures	X	X

***Denotes challenges associated with Changing Environmental Conditions.*

Snapshot of Signatory Programs

New York:

- [New York State Open Space Conservation Plan – NYSDEC](#) The Open Space Conservation Plan (Plan) is a comprehensive statewide plan developed by NYSDEC and the Office of Parks, Recreation, and Historic Preservation (OPRHP) that describes current open space conservation goals, actions, tools, resources and programs administered by state and federal agencies and conservation nonprofits.
- [Water Quality Improvement Project \(WQIP\) Program - NYSDEC](#) (Wetland restoration, creation, and enhancement are eligible for funding, however none were awarded in FY25) – The WQIP program is a competitive, statewide reimbursement grant program that funds projects that directly improve water quality or habitat, promote flood risk reduction, restoration, and enhanced flood and climate resiliency, or protect a drinking water source.

West Virginia:

- Prioritizes non-tidal wetland restoration through agricultural conservation easements and stream restoration programs that enhance interior mountain wetlands.

Delaware:

- Combines tidal marsh protection along its coastal zones with voluntary non-tidal freshwater wetland restoration incentives for agricultural private landowners.

Pennsylvania:

- Directs substantial resources toward non-tidal wetland restoration in agricultural floodplains to optimize nutrient reduction and improve structural stream health.

District of Columbia:

- Maximizes opportunities to expand and enhance freshwater tidal wetlands within the Anacostia River and manages non-tidal wetlands via mapping and targeted restoration and conservation.

Maryland:

- Enforces comprehensive state regulatory protections for tidal and non-tidal wetlands. MD funds large-scale tidal living shorelines and non-tidal wetland restoration, creation and enhancement, primarily with partners on agricultural lands, with additional projects being done on State lands. Maryland's Roots for Resilience effort will restore and protect hundreds of acres of tidal wetlands on the lower eastern shore. To support coastal resiliency efforts, Maryland uses 25-30 year sea level projections in regulatory review.

Virginia:

- Accelerates coastal marsh resilience through mandatory living shoreline regulations while facilitating non-tidal wetland expansion.

Chesapeake Bay Commission:

- Works legislatively to secure state-level funding streams, coordinates regulatory and inter-state policy frameworks.

EPA / Federal Government:

- Provides technical guidance, map inventory updates, and foundational funding through the Clean Water Act, Sikes Act, and others, supporting both coastal projects and inland agricultural wetland projects. The DoW's Sentinel Landscape Partnership Program works with federal, state, and local partners to protect and restore wetlands and migratory corridors. The USGS provides scientific understanding, including the distribution, health, stressors, ecosystem services, management implementation guidance, and response to management of wetlands.

Management Approaches for Outcome 8: Wetlands

Management Approach 1.8.1: Seek Plan Implementation, Enhance Collaboration, Engagement, Funding and Information Transfer.

The WWG/ CBP has recently sponsored two plans: [Accelerating Non-Tidal Wetland Restoration Across the Bay](#) and [The Tidal Wetlands Strategic Plan](#). Both of these extensive plans provide recommendations on a breadth and depth of issues to address voluntary restoration. Additional resources address needs for collaboration, funding, outreach and engagement.

Management Approach 1.8.2: Improve Wetland Tracking, Mapping, Monitoring, and Functional Assessment Capacities

The Wetlands Workgroup will collaborate to address severe data gaps by investigating funding opportunities and options for updating outdated tidal and non-tidal wetland maps. This includes integrating satellite remote sensing and advanced remote data to accurately identify marsh priority migration corridors and interior headwater basins. Develop approaches for measuring tidal and non-tidal wetland health as it relates to wetland function and resilience through either remote sensing or field based data collection.

Management Approach 1.8.3: Scale Up Landowner Outreach and Technical Assistance

To overcome barriers to voluntary landowner participation, the workgroup will partner with outreach and technical experts like NGOS, academia and state entities to support and promote aligned outreach toolkits used by Bay Program Partners. Efforts will focus on demonstrating the wildlife, economic, recreational including wildlife viewing, and ecologic benefits and value of wetlands.

Management Approach 1.8.4: Build Restoration Workforce and Partnership Capacity

Addressing the regional shortage of qualified restoration professionals, this approach establishes localized training pipelines. The Wetlands Workgroup will identify training opportunities and encourage the training of contractors, regulators, and conservation planners in ecological engineering for tidal and non-tidal wetland creation and restoration.

Management Approach 1.8.5: Understand Responses of Living Resources

Supporting thriving populations of living resources, like waterbirds and fish, requires suitable habitat. The partnership will identify key environmental factors influencing these species, assess their capacity to respond to changing threats, and evaluate the impact of watershed restoration efforts. To track populations accurately over time, partners will integrate data across agencies. We will further support data to be collected in a manner that enables incorporation into relevant decision making processes.

Management Approach 1.8.6: Funding

The WWG will recommend new and increased funding to achieve the wetland outcomes. This is critical to be able to access and leverage increased federal funds, and other funding, that will be available.

Participating Partners

The following partners participated in the creation of this strategy and intend to collaborate on its implementation over the next six years:

- **Signatory Partners**
 - TBD, will need to be added after November by Signatory Partners
- **At-Large Members of the Wetlands Workgroup and Other Partners**
 - State of New York
 - State of West Virginia
 - State of Delaware
 - Commonwealth of Pennsylvania
 - District of Columbia
 - Chesapeake Bay Commission
 - EPA / Federal Agencies (USACE, USGS, NOAA, USFWS, DoW)
 - State of Maryland
 - Commonwealth of Virginia
 - The Nature Conservancy (TNC)
 - Chesapeake Bay Trust (CBT)
 - Ducks Unlimited
 - Center for Coastal Resources Management (VIMS)
 - Penn State University
 - University of Maryland Center for Environmental Science

Appendix 1. Signatory Statutory Authorities Driving Outcome Attainment

The law and regulation of signatory partners may support, justify or motivate their participation in the collaborative work of the Chesapeake Bay Program related to the attainment of specific Outcomes and Targets of the Watershed Agreement.

The following documentation identifies core statutory authorities that provide part of the impetus for the attainment of Chesapeake Bay Watershed Agreement Outcomes and their related Targets. While Chesapeake Bay Program partners acknowledge that the Chesapeake Bay Watershed Agreement is voluntary, subject to the availability of appropriated funds, and does not preempt, supersede or override any other law or regulation applicable to each signatory, they also acknowledge that the law or regulation of individual signatories can support each partner’s participation in outcome attainment. The table below is not an exhaustive list of all relevant laws and regulations. Rather, this appendix identifies the driving motivators that can bring about signatory partner engagement in efforts described in this Strategic Plan, associated Management Strategies, and Workplans. An exhaustive database of statutes and regulations affecting SAV in Chesapeake Bay is available at: <https://www.chesapeakebay.net/projects/sav-regulatory-review>

Goal 1: Thriving Habitats, Fisheries, and Wildlife

Outcome: Wetlands	
Signatory	Statutory Authority
New York	ARTICLE 24 Freshwater Wetlands Environmental Conservation (ENV) CHAPTER 43-B NY State Senate
West Virginia	<i>[Placeholder for Statutory Authority]</i>
Delaware	<i>[Placeholder for Statutory Authority]</i>

Pennsylvania	<i>[Placeholder for Statutory Authority]</i>
District of Columbia	DCMR Title 21, Chapters 25 and 26: Critical Areas- Wetlands and Streams
Chesapeake Bay Commission	<i>[Placeholder for Statutory Authority]</i>
EPA / Federal Government	<i>[Placeholder for Statutory Authority]</i>
Maryland	<i>[Placeholder for Statutory Authority]</i>
Virginia	<i>[Placeholder for Statutory Authority]</i>