

Chesapeake Bay Management Board

March 19, 2025

Re: Wetland Outcome Recommendations

Dear Chesapeake Bay Management Board,

Thank you for the opportunity to provide our recommendations on the updated Wetland Outcome under the Habitat Goal Implementation Team. Our suggestions are based on decades of active engagement in wetland restoration, conservation, and science in the Chesapeake Bay.

Our collective experience, combined with insights from peers and colleagues during the recent Wetland Workgroup meeting, forms a strong foundation for our recommendations. We aim for science-based goals that are measurable, capable of achieving systems-level change, and inclusive of diverse stakeholders across the Chesapeake Bay.

Per the 2019 Wetland Status and Trends Report (USFWS, 2019), an estimated 116.4M acres of wetlands accounting for less than 6% of land area occurred within the conterminous U.S; freshwater wetlands accounted for 95% of them. Regrettably, wetland loss increased by more than 50% since the 2008 study; 221K acres of wetlands were lost, primarily to uplands through drainage and fill. Wetland loss disproportionately affected vegetated wetlands, resulting in the loss of 670K acres of these wetlands; and salt marsh experienced the largest net percent reduction of any wetland category (2% or -70K acres, and freshwater forested wetlands experienced the largest loss by area (-426K acres). There was a net gain in non-vegetated wetlands of 488K acres, and a related increase in pond area of over 7%. ***The Chesapeake Bay was identified as an area of high wetland loss.***

The Chesapeake Bay watershed has lost over 1.5 million acres of tidal and nontidal wetlands to development and agricultural practices. To offset some of these losses, the 2014 Chesapeake Bay Agreement identified a wetlands outcome of 85,000 acres of created or restored tidal and nontidal wetlands in the watershed by 2025 (Chesapeake Bay Program, 2014). In addition to the 85,000 acres of created and restored wetlands the outcome targets, another 150,000 acres of wetlands would be enhanced by 2025. The wetlands outcome was largely developed from commitments identified in the Watershed Implementation Plans developed by the Bay Program partners (Restoring the Wetlands of the Chesapeake Bay Watershed, Post-Workshop Action Plan, 2023).

The 2014 Bay Agreement for wetlands assumes that development and agriculture are the stressors on non-tidal wetlands and could be offset by the “no net loss” policy and permit

mitigation. The wetland baseline is assumed to be static and the rate at which the outcome is achieved depends on the rate at which funding is available for voluntary restoration. The reality is that the “no net loss” strategy is not achieving this goal and coupled with the severe effects of climate change, the Chesapeake Bay watershed continues to lose wetlands acreage faster than the current voluntary restoration efforts can restore them (Restoring the Wetlands of the Chesapeake Bay Watershed, Post-Workshop Action Plan, 2023). The loss of these wetlands alters river flows and soil moisture conditions throughout our watersheds, resulting in greater vulnerability to drought and flood events, reduced protection from water quality concerns, and threatened fish habitat throughout the Bay’s river corridor system. The Chesapeake Bay watershed, Chesapeake Bay Program data and methods estimate a net loss of about 60,000 acres from 1985 to 2020 in total wetland acres, both natural and restored (Mason et al. 2024).

Focusing on the wetland acres restored or created has missed the big picture of simultaneous large-scale wetland loss. Given the value of wetlands to people (the highest provisioning of ecosystem services of any ecosystem in the region (Costanza et al. 1997) and to meeting the vision of a healthy Chesapeake, a new approach to the CBP Wetlands Outcome is needed, one that prioritizes conservation and restoration.

Our vision is to protect, restore and enhance wetland ecosystems in the Chesapeake Bay watershed to improve water quality, provide habitat for wildlife, and increase resilience to extreme weather events for people and nature. Please see attached table that provides a framework linking actions to systems-level outcomes.

Proposed Logic Model for the Wetland Workgroup

- **Long Term Outcome:** Update
 - 10% increase in nontidal wetlands by 2050
 - Offset tidal wetland loss to maintain current tidal wetland acreage by 2025
- **Two-Year Outcome:** Add
 - Each jurisdiction implements one large-scale (to be defined by jurisdictions) or equivalent area of several smaller conservation, enhancement, or restoration projects/ year.

Please don't hesitate to reach out if we can provide additional information.

Sincerely,



Amy Jacobs

Chesapeake Bay Director

Inputs	Outputs	Wetland Outcome	Systems Level Outcome
Increase landowners engaged in wetland conservation, restoration, and enhancement	Priority wetlands are restored and conserved	10% increase in nontidal wetlands by 2025	Black Duck and other indicator species (salt marsh sparrow?) of interest populations increase
Ensure policies/ programs support increased conservation and restoration	Understand barriers to landowner participation in wetland restoration and conservation to increase voluntary wetland restoration		Fish productivity and diversity in tidal waters increases
Ensure conservation practitioner capacity is adequate to increase delivery of conservation and restoration	State-based Wetland Action Teams effectively advance wetland conservation		Stream ecological and biological uplift improves
Update mapping and modelling of wetland status, trends, and values by jurisdiction including risk assessment to identify vulnerability to loss, resiliency to	A baseline of existing, representative wetlands is established, projected loss/gain from climate change	Offset tidal wetland loss to maintain current tidal wetland acreage by 2025	Connected ecosystems, including marsh migration and riverine corridors, improve system-level health and climate resilience

<p>climate change, and ecosystem services provided.</p>	<p>accounted for, and vulnerable wetlands identified.</p>		
<p>Update monitoring of priority species, associated habitats, and conservation uplift.</p>	<p>Location and population of black ducks, key fish species, and other indicator species of interest (salt marsh sparrow?) dependent on wetlands in the Chesapeake Bay watershed</p>	<p>Each jurisdiction implements one large-scale (to be defined by jurisdictions) or equivalent area of several smaller conservation, enhancement, or restoration projects/ year that establish a network of demonstration/monitoring sites testing the efficacy of conservation impact & approaches.</p>	<p>Nature-based solutions provide ecosystem benefits to local communities by reducing flood risks, enhancing fisheries, improving water quality, increasing climate resilience, sequestering carbon, supporting biodiversity, and offering recreational and economic opportunities and growth.</p>
<p>Dedicate and increase funding to support wetland conservation, enhancement, restoration, and maintenance.</p>	<p>Coordination leverages capacity and progress (CJV, Audubon, DU, Delmarva partnership, CBP workgroups, state wetland action teams)</p>		