

Virginia Wetland Action Plan for Chesapeake Bay

Five major themes emerged when developing this plan of action to move closer to the wetlands outcome listed in the 2014 Chesapeake Bay Watershed Agreement: 1) Wetland Tracking; 2) Strategic Planning; 3) Capacity Building; 4) Outreach (landowner/community engagement); and 5) Sustainable Funding. This Plan highlights several current actions and suggests new ideas to advance efforts within each theme.

Wetland Tracking

Based on data shared at the August 2022 wetlands outcome attainability workshop, Virginia has currently documented 3,666 acres of wetland restoration, 367 acres of wetland creation, 522 acres of wetland enhancement, and 385,029 acres of “other restoration.” This represents approximately 4% progress towards the Bay wide wetland restoration goal of 85,000 acres and less than 1% of the Bay-wide wetland enhancement goal of 150,000 acres, both of which are to be achieved by 2025. While still acknowledging the overall lack of progress towards this goal, these wetland estimates appear low. To improve accountability for the wetlands outcome, Virginia advocates for the creation of an effective reporting and accounting system for voluntary wetland restoration and enhancement activities and supports ongoing Chesapeake Bay Program (CBP) efforts to create the Habitat Outcome and Attainment Tracking System. To accurately account for wetland restoration successes, the activities that count towards the wetlands outcome need to be thoroughly defined and reported. Because wetlands are often considered a co benefit and not the primary driver for restoration projects, some gains are not being realized. Many best management practices (BMPs) like living shorelines, stream restoration projects, wet ponds, and riparian buffer projects ultimately do create, restore, and/or enhance wetlands. These successes need to be evaluated and reported even when they are considered a co benefit, and more emphasis should be placed on wetland restoration as a primary driver for project selection and implementation.

Virginia also sees value in a coordinated effort to determine how large-scale historic impacts are distributed throughout the Chesapeake Bay watershed. This could lead to jurisdiction specific restoration and enhancement targets for both tidal and non-tidal wetlands. The identification of historically impacted wetland areas is necessary to implement restoration and enhancement if creation projects (i.e., wetlands created in uplands) are not counted toward the wetlands outcome.

Strategic Planning

For Virginia to effectively plan and implement more wetland projects within the Chesapeake Bay watershed, a diverse partnership involving all current wetland practitioners in the state needs to be established. This partnership should include members from the many state, federal, and non governmental organizations (NGOs) working to plan and implement voluntary wetland projects throughout Virginia. Although a few partnerships like this already exist, none are primarily focused on furthering the wetlands outcome. The Virginia Department of Wildlife Resources (DWR) has recently been identified as the lead agency for this state-wide initiative, given its current and past efforts to create, restore, protect, and enhance wetlands across the Commonwealth. DWR will seek clarity on the scope of its roles and responsibilities and will continue to increase coordination between wetland practitioners and the CBP to work more pointedly towards the wetlands outcome.

Virginia’s wetland planning efforts will focus on building capacity, expanding outreach, and generating tools to determine high priority restoration areas. This will ensure the state is prepared to identify and implement wetland restoration and enhancement opportunities as funding arises. Restoration planning is currently guided by the Virginia Coastal Resilience Master Plan, the Virginia Phase III Watershed Implementation Plan, the State Lands Watershed Implementation Plan, the Virginia State Wetlands

Program Plan, and many other decision-making support tools such as WetCAT (Wetland Condition Assessment Tool), the Natural Heritage Data Explorer/ConserveVirginia, the Wetlands Catalog, Adapt VA, Coastal GEMS (Geospatial and Educational Mapping System), the Eastern Shore Coastal Resilience tool, the Saltmarsh Sparrow and Black Duck support tools, and the Elizabeth River Environmental Justice Tool.

Planning efforts will acknowledge the consequences of climate change, including the disproportionate impacts on disadvantaged populations in both urban and rural areas. The effects of climate change, like sea-level rise and increases in extreme weather frequency and intensity, will continue to contribute to additional wetland losses and weaken our natural infrastructure. The southern portion of the Chesapeake Bay is experiencing substantial land subsidence in addition to global sea-level rise which has caused areas in Virginia to have the highest rates of observed relative sea level rise along the Atlantic Coast. Because these coastal areas are densely populated and developed, natural processes, like marsh migration, will be in conflict with many existing human uses and activities. This puts Virginia's coastal wetland habitats at an increased risk of experiencing widespread flooding and loss. The state will explore opportunities to work with the Virginia Department of Emergency Management and the Federal Emergency Management Agency to target wetland restoration in areas of frequent flooding in association with retreat efforts.

Virginia's Wildlife Action Plan has identified 883 Species of Greatest Conservation Need (SGCN), more than 80% of which rely on aquatic ecosystems for habitat. Some of the highest priority conservation actions that can be taken to address threats to these species is the protection, restoration, and enhancement of wetlands in priority areas, many of which occur in the Chesapeake Bay watershed. Three SGCN species, Saltmarsh Sparrow, Black Rail, and American Black Duck, are also flagship species for the Atlantic Coast Joint Venture (ACJV). Where practical, tidal wetland restoration efforts should seek to enhance habitat for these species, as they occupy a range of coastal marsh habitats that are highly threatened by sea-level rise and urbanization. Efforts aimed at enhancing habitat for these species would also benefit a host of other marsh-dependent fish and wildlife species.

Virginia's strategic plans should promote increasing wetland restoration on both private and public lands. Given that the outcomes state the vast majority of these activities should occur on agricultural lands, planning efforts should emphasize increasing implementation on private lands. Local staff from the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), U.S. Fish and Wildlife Service (USFWS), DWR, Virginia Institute of Marine Science (VIMS), and private lands biologists (employed through a diverse collaborative) provide critical technical assistance on private land projects. Virginia will continue to pursue projects on state-owned lands as they present some of the most efficient opportunities to implement voluntary activities. The state will also continue to work with state and federally recognized Native American tribes to help them reacquire and restore ancestral lands. Increased engagement with federal agencies could lead to restoration opportunities located on National Wildlife Refuges, National Forests, National Parks Service lands, and Department of Defense facilities.

Capacity Building

Virginia can leverage capacity by building on existing diverse partnerships working to advance restoration efforts across the state, including the York River Roundtable Habitat Restoration Steering Committee, the Rappahannock Wetlands Team, the James River Living Shoreline Collaborative, and the Virginia Eastern Shore Conservation Alliance. Wetland practitioners in Virginia will also work with other multi-state groups like the ACJV, the Delmarva Restoration Conservation Network, and the Atlantic Flyway Council. Partnerships like these can identify projects and expedite planning and implementation as they take advantage of the synergistic capabilities of the different organizations. They can ensure expertise is

available to identify high quality sites, develop effective restoration designs, secure funding resources, and oversee project implementation.

Although many government and NGO employees in the state work with wetlands, Virginia recognizes a strong need for agencies and organizations to create more positions focused on advancing voluntary wetland projects. This includes positions that provide outreach, financial incentive program support, and technical assistance for both private and public landowners. Previous efforts in other states (i.e., Delaware and Maryland) show most landowners willing to participate require assistance from planning through implementation. Additional staff capacity is needed to reach willing landowners and support them through the wetland project process. In addition, permit and funding application preparation is time consuming, demanding, and costly, causing many private landowners to get overwhelmed or simply lose interest. Virginia supports efforts to streamline permitting, grant, and other financial incentive program applications for voluntary restoration efforts. Low barrier applications for projects that demonstrate a clear ecological benefit would alleviate some capacity concerns and result in more implementation.

Virginia is currently limited by the lack of native plant nurseries and seed producers available to supply large-scale restoration projects. To address this shortage, a large-scale effort proposed on Virginia's Middle Peninsula is working to acquire additional permits to sustainably harvest wetland grasses from intact wetlands. Native plant nursery capacity must scale-up to supply ongoing and future restoration projects. The Plant Virginia Natives Initiative and the Virginia Pollinator-Smart Solar Program both have goals to kick-start a robust native plant and seed industry. In addition, Virginia recognizes a need to develop a strong cohort of experienced contractors who are available to design, build, and maintain (i.e., treat invasive species) projects to effectively work towards the wetlands outcome.

Outreach (landowner/community engagement)

Landowner interest may be the most critical component to increasing the scale of wetland project implementation across the watershed. Virginia will continue to communicate the myriad of benefits that wetlands provide to both people and wildlife, and seeks to develop a method to share wetlands information directly to the organizations actively engaging with local landowners. Virginia also plans to identify several demonstration sites representing the different types of restoration and enhancement activities. These sites can help educate both professionals and the public, highlight successes, and improve landowner engagement. Outreach efforts should target grant funding focal areas, like the NOAA designated Middle Peninsula Habitat Focus Area. Target outreach areas could be further identified and refined using conservation decision-making support tools.

Active coordination with planning district commissions (PDCs) and soil and water conservation districts (SWCDs), particularly those in rural coastal Virginia where large acreage of agricultural lands remain, is needed to promote effective landowner outreach efforts. These organizations have staff that frequently work with farmers and agricultural landowners. They need to be knowledgeable of the existing opportunities and should be able to direct a landowner with wetland project interests to the technical expertise they need. Depending on the type of project, this could include local NRCS, USFWS, DWR, VIMS, NGO and private lands biologist staff. Private lands biologists are employed through collaborative efforts with federal, state, and non-governmental natural resource management agencies to engage with land owners and producers, and facilitate wildlife habitat implementation and improvement practices through planning and incentive programs. They are a great initial contact for landowners interested in implementing wetland restoration. Another resource for shoreline landowners and communities is Virginia's Shoreline Erosion Advisory Service (SEAS), a program of the Virginia Department of Conservation

and Recreation (DCR). DCR-SEAS provides technical assistance on tidal shoreline management alternatives (including living shorelines) to private property owners and public land management agencies.

Sustainable Funding

Similar to most Bay states, the limited number of voluntary wetland projects completed in Virginia have been funded through landowner incentive programs and competitive federal grant programs. The NRCS oversees several cost-share and financial incentive programs for private landowners, though few NRCS wetland projects have been implemented in Virginia. This may be in part because until recently these programs could only fund a portion of most wetland restoration projects and left the landowner to pay the rest. In July 2022, the USDA, in partnership with DCR, announced expanded funding through the Conservation Reserve Enhancement Program, allowing farmers in Virginia to implement wetland restoration at no cost. Private land wetland projects can also be funded through the Wetland Reserve Easements component of the USDA Agricultural Conservation Easement Program. The Virginia Conservation Assistance Program and Virginia Agricultural BMP Cost-Share Program are state managed funds administered locally through SWCDs, and are available to support living shorelines and other BMPs that have the potential to restore and enhance wetlands.

Public land projects have been largely funded through competitive federal grant programs administered by the USFWS, the National Fish and Wildlife Foundation (NFWF), and the National Oceanic and Atmospheric Administration (NOAA). The IJA has expanded funding for many existing programs and has opened new opportunities, like the America the Beautiful Challenge administered by NFWF and three NOAA-administered grants – Coastal Zone Management grants, Transformational Habitat Restoration and Coastal Resilience Grants, and Coastal Habitat Restoration and Resilience Grants for Underserved Communities. Funding from these sources can support land acquisition and habitat restoration planning, design, and implementation. Several of these sources offer funding for capacity building activities and demonstration projects, particularly for disadvantaged and under resourced communities. Virginia will work to increase the amount of wetland projects pursued within the Chesapeake Bay watershed during this period of expanded federal funding.

Although promising, it is important to note that this temporary boost in funding is ultimately not enough to sustain the efforts needed to meet the wetlands outcome. For most of these grant opportunities, wetland proposals are competing with, and being outcompeted by, other priority conservation needs across the watershed and country. The North American Wetlands Conservation Act and the National Coastal Wetlands Conservation Grants administered by USFWS are the only long-standing funding sources available for voluntary wetland restoration projects and have supported many previous efforts in Virginia. All of these competitive grant opportunities require or strongly prefer projects that offer match dollars, which is a major limit factor in Virginia. Currently, match dollars are being provided by a mix of NGO contributions, state funds, and smaller non-federal grant opportunities. Although there are a few state administered restoration funding opportunities, only the Virginia Waterfowl Stamp Grant is dedicated to supporting voluntary wetland restoration activities through cooperative waterfowl habitat improvement projects. It is clear that Virginia should work to establish a dedicated funding source to support voluntary wetland restoration and enhancement projects. Maryland has a very successful program, the Chesapeake and Atlantic Coastal Bays Trust Fund, which can serve as a model for a Virginia program. Dedicated state-sponsored funding programs ensure that wetland projects have the funds they need to be planned and implemented.