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U.S. Fish & Wildlife Service

Chesapeake WILD

A network in action for wildlife conservation and environmental equity

Asylum Township
Nicholas A. Tonelli

Chesapeake Bay Program

Blue crab is both an asset to the Chesapeake Bay's valuable seafood industry and an indicator of the watershed's health.

Foreword: A jump start for the future of the Chesapeake Bay Watershed

Well-thought out and ready to roll, Chesapeake WILD is one of the sure-fire strategies for sustaining an enormous and enormously important 41-million acre landscape surrounding the largest estuary in the nation.

Draped across six states and the District of Columbia, the Chesapeake Bay watershed is part urban, part rural, and home to 18 million people who are collectively so devoted to its forests, farms, rivers, and wetlands, they have embraced bold initiatives to curtail pollution, improve water quality, and revive natural resources that fish, wildlife, and people depend upon. But keeping this vast watershed healthy in the face of vast threats like climate change requires conserving, restoring, and connecting the key pieces — a network that reflects shared priorities for ensuring future generations thrive.

That's where Chesapeake WILD comes in, a new federal program with the ability to make grants that can nourish and accelerate — but never usurp or displace – the exciting local and regional efforts already under way. This is a landscape on the move, as sea-level rise encroaches on salt marshes that buffer communities from storms, and provide nurseries to species like blue crab. There's already a new nimble kind of conservation thinking to stay ahead of events, such as shoring up the populations of species that with support will never become endangered. Chesapeake Bay watershed foresters, for example, can protect wood thrushes, and farmers can protect pollinators like monarch butterflies — and in so doing will also be protecting five different species of bumblebees.

Even more unexpected, at least to traditional thinkers, is a commitment to shine a spotlight on freshwater mussels, such as the brook floater and the tidewater mucket. These not-so-humble creatures are now seen as "underwater pollinators" — they keep the water clean and provide essential nutrients to the tiny animals that fish eat. And since the mussels can live to be 100, thinking about their needs will extend Chesapeake Bay watershed conservation work well into the 22nd century.

Tony Hiss, author,
"Rescuing the Planet: Protecting Half the Land to Heal the Earth"

Introduction

On October 30, 2020, the *America's Conservation Enhancement Act* (the Act) became law (Public Law No: 116-188). In Title 1, section 111, Congress required the U.S. Fish and Wildlife Service (USFWS) to establish a nonregulatory program to be known as the "Chesapeake Watershed Investments for Landscape Defense program," or Chesapeake WILD, for the following purposes:

- Coordination among federal, state, local, and regional entities to establish a shared vision for sustaining natural resources and human communities throughout the Chesapeake Bay and its watershed
- Engagement of diverse agencies and organizations to build capacity and generate funding that address shared restoration and conservation priorities
- Collaboration to administer a grant program and implement projects to conserve, steward, and enhance fish and wildlife habitats and related conservation values

These collaborative efforts will emphasize diversity, equity, inclusion, and justice (DEIJ, or JEDI) practices and policies, as well as accessibility, to support a safe, diverse, equitable, and inclusive environment that fosters new and impactful partnerships.

Chesapeake WILD will focus on five pillars:

1. **Fish and Wildlife Habitats:** Conserve, restore, enhance, and sustain a resilient network of fish and wildlife habitats and connecting corridors, with an emphasis on at-risk and federally listed species and habitats
2. **Climate Change:** Advance climate-change adaptation and land-use planning by increasing science capacity to support improved strategic planning, conservation design, monitoring, and applied science activities necessary to ensure resilience of natural ecosystems and habitats
3. **Community Partnership:** Increase capacity and support for coordinated restoration and conservation activities in the Chesapeake Bay watershed, particularly in historically and systemically under-resourced communities, through outreach, education, and civic engagement
4. **Public Access:** Enhance recreational opportunities and public access, with a strong emphasis on equitable access to nature and all associated benefits, consistent with the ecological needs of fish and wildlife habitats
5. **Water Quality:** Improve and sustain water quality, upgrade water-management capability, and reduce flood damage to support fish and wildlife, habitats of fish and wildlife, and drinking water for people

Chesapeake Bay Watershed

Stretching from Cooperstown, New York, to Norfolk, Virginia, the Chesapeake Bay watershed supports a network of natural resources and communities that people and wildlife depend upon: streams, small creeks, and large rivers; forests, grasslands, and wetlands; agricultural lands, small towns, suburbs, and cities.

The Chesapeake Bay is the largest estuary in the U.S. and supports roughly 3,600 species of plants and animals, including 348 species of finfish, 173 species of shellfish, and 2,700 species of plants. Nearly one million waterfowl winter on and near the bay — approximately one-third of the Atlantic Coast's migratory population. The birds stop to feed and rest during their annual migration along the Atlantic Flyway.

The ecological health of the watershed is also crucial to the health, well-being, and economic vitality of more than 18 million people who live and work in the region, many employed in industries tied directly to the watershed, like outdoor recreation, farming, and fishing. The bay produces about 500 million pounds of seafood each year, supporting jobs in both commercial and recreational fishing and bolstering the regional economy. In 2017, the commercial seafood industry in Maryland and Virginia contributed $3.2 billion in sales and provided 30,000 jobs (NOAA, Fisheries Economics). Hunting, sport fishing, and target shooting contribute an estimated $3.3 billion in economic value to the Chesapeake Bay region each year through sales of gear, licenses, clothing, gas, and more. Investing in projects that enhance the resiliency of fish and wildlife habitats helps ensure that these industries, jobs, and ways of life are sustainable in the long term (Southwick Associates, America's Sporting Heritage)

"Chesapeake WILD is an exciting new program that will protect and restore fish and wildlife habitat throughout the bay watershed. From tidal wetlands for ducks and geese to pristine mountain streams for brook trout, this program will conserve the resources that make our region a better place to live for wildlife and people."

– Peter J. Marx
Federal Affairs Contractor
Choose Clean Water Coalition

Chesapeake Bay Program

Baltimore, Maryland, home to 600,000 people and the deepest port in the Chesapeake Bay, is a major seaport key to the region's economy.

Program Partnership

Chesapeake WILD and the Chesapeake Conservation Partnership

The Chesapeake WILD program seeks to restore and conserve a network of natural areas, corridors, and waterways on public and private lands to support thriving populations of native wildlife, migratory birds, fish, and plants, and to contribute to the social health and economic vitality of the communities in the Chesapeake Bay watershed.

The first step in creating the program is bringing together watershed partners invested in conservation to develop a structure and model for joint operations. We are taking this step in cooperation with the Chesapeake Conservation Partnership (CCP), a well-established network that will inform our process for developing shared priorities and strategies for the Chesapeake WILD program.

Because of its unique structure and governance, and the diverse cross-section of partners and stakeholders it represents, the CCP is an ideal forum for convening and engaging the agencies and organizations USFWS has been directed to consult in developing the Chesapeake WILD program.

The Chesapeake Bay Program and the Evolution of the Chesapeake Conservation Partnership

The Environmental Protection Agency's (EPA) Chesapeake Bay Program (Bay Program) is a unique regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983. In 2009, building on the early efforts of the Chesapeake Bay Program, Executive Order 13508 Chesapeake Bay Protection and Restoration called for greater federal leadership in the Chesapeake Bay effort. The resulting "Strategy for Protecting and Restoring the Chesapeake Bay Watershed" (2010) was later aligned with the Chesapeake Bay Program partnership's goals and outcomes through the 2014 Chesapeake Bay Watershed Agreement, which calls for protecting an additional two million acres and adding 300 public access sites by 2025.

The CCP initially emerged to lead efforts to achieve goals for land conservation and public access and has since broadened its focus to include additional conservation and restoration priorities and to prioritize diversity, equity, inclusion, and justice (DEIJ) considerations. The CCP now represents a coalition that includes the USFWS, Chesapeake Bay Program, other federal agencies, natural resource agencies from the six watershed states, and the District of Columbia, and more than 50 organizations and agencies engaged in land conservation, habitat restoration, outdoor recreation access, and related work.

Project Spotlight

Healthy Streams Farm Stewardship Program: Chesapeake Logperch Initiative

Partners: Alliance for the Chesapeake Bay, U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, Pennsylvania Game Commission, and Maryland Department of Natural Resources

Location: Lower Susquehanna River Basin of Pennsylvania and Maryland

The need: The Chesapeake logperch is an at-risk species that could avoid the need for federal protection under the Endangered Species Act if partners take the right actions in the right places, while there's still time.

- Partners are accelerating the establishment of riparian forest buffers in priority watersheds for Chesapeake logperch by working with producers to address specific conservation needs of their farming operations
- Using conservation vouchers that support agricultural best management practices, the program incentivizes a conservation approach that offers multiple ecological benefits and a cost-effective way to reduce nutrient and sediment runoff into waterways
- The partners focus on opportunities to leverage funds incentivizing conservation of fish and wildlife on farms, including restoring wetlands, planting upland trees, planting pollinator habitat, and improving fish passage while upgrading stream crossings for farm equipment and livestock
- This project will lead to the installation of at least 160 acres of new riparian forest buffer along more than 18 miles of Chesapeake logperch habitat streams in the Lower Susquehanna

Kayt Jonsson/USFWS

By establishing riparian forest buffers on farmlands in priority watersheds, agricultural producers are helping to reduce runoff in waterways that provide habitat for the Chesapeake logperch, an at-risk species.

Science to Support Collaboration

The CCP worked with experts from across the region for more than two years, incorporating science and decision-support tools from Nature's Network, Landscope Chesapeake, and several other sources, to create the Chesapeake Conservation Atlas (Atlas). It maps existing resources related to long-term conservation goals for farms, forests, habitat, heritage, and human health.

The Atlas provides an excellent starting point to identify and develop shared biological, ecological, and societal outcomes that reflect current and potential restored and conserved conditions of the natural lands, waters, and resources as called for in the Act. It reflects partners' priorities identified through a conservation-design process that integrated information, maps, and tools to refine goals and measurable objectives. It will serve as a foundation to further refine and periodically refresh the conservation design process and key products that arise from it, with a focus on elements needed to fulfill the provisions of Chesapeake WILD, supporting a science-based, watershed-wide operations plan to guide future decisions and investments.

Strategic Habitat Conservation (SHC), an approach used by USFWS, as well as many states and partners, informed USFWS input to the Atlas. SHC is a science-based adaptive management framework that guides decisions about where and how to expend resources to achieve key conservation outcomes in identified priority areas or regions of biological importance, in this case the Chesapeake Bay watershed.

The USFWS has already applied SHC successfully at locations within the Chesapeake Bay watershed, consistent with priorities reflected in the Atlas. On the Delmarva Peninsula, the USFWS leads the Delmarva Restoration and Conservation Network, a group of partners working to restore and conserve Delmarva's landscapes. A similar partnership led by the USFWS, the Upper Susquehanna Conservation Alliance, operates on the Upper Susquehanna River in New York.

The Chesapeake WILD program, through engagement with the CCP and an enhanced conservation-design process, will apply SHC principles and provide a forum for organizations to collaborate and prioritize science needs and conservation activities, and align them within a watershed-wide strategy and operations plan to guide conservation and restoration efforts. The enhanced conservation design process, and the science-based products that result from it, will inform partners about where and how to align various conservation actions, including ecological restoration, habitat management, and landowner and community engagement, to achieve shared goals and objectives.

The program's operations plan will provide a mechanism grounded in science to guide collective conservation action at the scale of the entire watershed, but also locally and at intermediate scales, such as those exemplified by the Delmarva and Upper Susquehanna partner networks. In this way, Chesapeake WILD will support a growing network of organic, voluntary conservation partnerships guided by the Atlas and associated spatial plans that identify important places for conservation and restoration across the watershed.

Each organization and partnership — and the growing conservation partnership network they are part of — will therefore have access to shared science and mutually conceived strategies and operational priorities to align efforts, leverage resources, and guide collaboration. The organizations, partnerships, and network will achieve greater outcomes working together than organizations working individually. The result will be measurable gains for fish and wildlife conservation, clean water, access to outdoor recreation, and other natural and economic benefits for people in the watershed, now and in the future.

Chesapeake Bay Program

The Chesapeake Bay watershed provides important stopover and wintering habitat for populations of migratory waterfowl, including tundra swan

"The Chesapeake Bay watershed is one of the most critical ecosystems for migratory birds in North America. Ducks Unlimited is committed to working with its partners, both public and private, to ensure this truly unique estuary continues to provide for the millions of fish and wildlife species that depend on it for their survival, and the millions of Americans who call the Chesapeake Bay watershed their home. Chesapeake WILD provides just the kind of voluntary partnership framework needed to organize partners to focus on mutual conservation priorities, and then provide funding to get the most important work done."

– Dan Wrinn
National Director of Government Affairs
Ducks Unlimited, Inc.

Program Framework

The program framework is organized around five themes, or pillars, that are drawn from the Act and will guide Chesapeake WILD work. The intent of the program is to bring together various stakeholders to create a forum for sharing experience and expertise to address all of these pillars — building capacity, developing networks, and creating greater efficiency and focus watershed-wide.

Each pillar is tied to goals that support the purpose and intent of the Act. The goals listed for each pillar are intentionally broad to represent the collective aspirations of our partners and stakeholders and reflect priority needs and opportunities they helped identify.

Likewise, the priorities for conservation action and design identified for each set of goals are broad. They are not comprehensive, but represent a range of concepts, work activities, and categories of projects that align with and/or complement the efforts of the CCP, the Bay Program, and numerous partner organizations eager to support Chesapeake WILD. Implicit within the priorities for all the pillars is the importance of communicating the results and accomplishments of the program to stakeholders, including Congress.

Each pillar has stand-alone value to the Chesapeake WILD program; however, there is overlap among and across them. Therefore, a priority that focuses on one pillar (e.g., Conserving and restoring fish and wildlife habitat, with an emphasis on at-risk and federally listed species and habitats) may also benefit water quality, improve resiliency to flooding, and increase recreational opportunities. The program will encourage projects that address more than one pillar and prioritize those that address several.

The framework does not supersede any mandates or authorities that partners may have to manage resources in the watershed. Instead, it provides structure for identifying opportunities to align effort and leverage resources among various organizations. Partners may affiliate with or support one or more of the pillars identified in the framework. Future versions of the framework will undoubtedly clarify, focus, and otherwise improve upon the current goals and priorities as the program grows, evolves, and develops a more strategic focus. In addition, if/when funding becomes available for the grant program envisioned by the Act, the eligibility criteria developed by the partnership will target funding to the most strategic priorities.

USFWS

In northern Virginia, partners are championing iconic grassland birds, like the eastern meadowlark, as symbols of conservation success.

Project Spotlight

Piedmont Grassland Bird Initiative

Partners: Smithsonian's Virginia Working Landscapes program, Piedmont Environmental Council, American Farmland Trust

Location: Northern Virginia Piedmont and Shenandoah Valley regions

The need: In northern Virginia, grassland birds have adapted to using hayfields and pasturelands as surrogate habitat. That can be an ecological trap, but it can also be an opportunity for conservation through the implementation of specific farm-management practices.

- The Piedmont Grassland Bird Initiative (PGBI) launched in 2020 to help stem the decline of grassland birds, improve the resiliency of working landscapes, and support livelihoods that depend upon those land
- The PGBI will support knowledge-sharing through peer-to-peer trainings, hands-on workshops for landowners held on exemplar farms, and tracking acreage converted to conservation use. It will also incentivize conservation through payments for implementing bird-friendly best management practices and increased technical assistance for producers
- This initiative helped the American Bird Conservancy launch the creation of a new bird conservation priority area — the Northern Virginia Piedmont and Shenandoah Valley BirdScape — to champion locally iconic grassland birds, including the northern bobwhite and eastern meadowlark, as symbols of conservation success
- Ongoing research helps inform and shape PGBI's conservation goals, which include assessing impacts of habitat management on grassland bird communities, testing various methods to restore and manage native warm season grasses, identifying habitat associations of flagship bird species on a mixture of public and private lands, and social science research with landowners and citizen scientists to understand what motivates conservation behaviors on private lands

Pillar 1, Fish and Wildlife Habitats: Conserve, restore, enhance, and sustain a resilient network of fish and wildlife habitats and connecting corridors, with an emphasis on at-risk and federally listed species and habitats

The Chesapeake Bay watershed is rich with diverse habitats that support an array of fish and wildlife, ranging from densely forested headwater streams in the upper watershed to the estuary of the Chesapeake Bay. The Chesapeake WILD program will work to conserve and restore ecological function to the important habitats that fish and wildlife depend on, with an emphasis on at-risk and federally listed species and their habitats. Conservation and restoration of these habitats will create ecological, recreational, and commercial benefits.

Goals:

- Restore and sustain fish and wildlife populations through conservation and restoration of associated habitats and connecting corridors
- Prioritize at-risk and federally listed species and habitat restoration

Priorities for Conservation Action and Design:

- Identify, conserve, and restore important fish and wildlife habitat hubs and corridors
- Remove barriers and constrictions in streams that impede fish passage
- Restore instream habitat and stream banks in degraded areas
- Inventory, monitor, protect, and restore native freshwater mussel species throughout the watershed, with an emphasis on at-risk and federally listed species
- Inventory, monitor, protect, and restore native pollinator species throughout the watershed, with an emphasis on at-risk and federal listed species
- Address relevant priorities of the Chesapeake Bay Program Goal Implementation Teams
- Conserve, restore, and increase the resiliency of headwater forested areas, contiguous forest areas, grasslands, riparian buffers, non-tidal wetlands, tidal marshes, and submerged aquatic vegetation
- Increase resiliency of shorelines to erosion and sea-level rise
- Preclude the introduction or expansion of invasive species, control existing invasive species infestations, and promote native ecological communities
- Remediate contaminated areas and habitats
- Develop data-driven blueprints to guide strategic conservation action and investments
- Synthesize State Wildlife Action Plans and prioritize corridors for wildlife movements
- Strengthen and accelerate private landowner participation in conservation programs
- Enhance wildlife values and community benefits in non-traditional areas

Ryan Cooper/Trout Unlimited

Preserving resilient strongholds of eastern brook trout in the watershed helps support a sustainable recreation economy.

Project Spotlight

West Virginia's Potomac Headwaters Home Rivers Initiative

Partners: Trout Unlimited, USDA Farm Service Agency, U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, West Virginia Division of Natural Resources, and West Virginia Conservation Agency

Location: Upper North Fork South Branch Potomac River, West Virginia

The need: High elevations and productive karst geology in the area provide some of the best opportunities for preserving resilient strongholds of brook trout and supporting a sustainable recreation economy with a destination fishery.

- In the Potomac headwaters, Trout Unlimited and partners are working to improve in-stream aquatic habitat, watershed hydrology, and flood resiliency; remove barriers to aquatic organism passage; and improve water quality working with communities and landowners
- To date, partners have leveraged $3.2 million to restore 400 acres of riparian habitat, install 12 miles of agricultural exclusion fencing, stabilize 3.5 miles of eroding stream banks using natural stream channel design, restore 20 miles of in-stream habitat across both public and private lands, and engage 2,000 local residents and volunteers in conservation stewardship activities
- This watershed-scale restoration initiative works seamlessly between public and private lands, from the top of the watershed downstream, building and expanding hubs of conservation to achieve meaningful ecological improvement and bolster local economies

Pillar 2, Climate Change: Advance climate-change adaptation and land-use planning by increasing science capacity to support improved strategic planning, conservation design, monitoring, and applied science activities necessary to ensure resilience of natural ecosystems and habitats

Beyond conserving natural resources and systems, projects should focus on increasing resiliency to changing climate conditions. Greater coordination can increase scientific capacity, reduce duplication of efforts, and identify gaps. Improving monitoring and identifying new priority monitoring programs will help measure project-related outcomes that conserve and restore our natural resources.

Goals:

- Ensure important areas and habitats threatened by climate change and development are conserved and restored
- Increase coordination among partners to develop science resources to guide project planning, prioritize investments, and undertake shared efforts that anticipate landscape change and address mutual priorities
- Provide technical assistance for project development, implementation, and assessment
- Address Chesapeake Bay Watershed Agreement outcomes, Chesapeake Executive Council directives, and Bay Program Climate Resiliency Workgroup priorities

Priorities for Conservation Action and Design:

- Identify and use existing resources (individuals, committees, organizations, etc.) for technical expertise among programs and organizations in the partnership
- Address land conservation objectives identified by the Bay Program Climate Resiliency Workgroup
- Require actions and investments to demonstrate climate resiliency benefits
- Prioritize actions and investments based on climate vulnerability and equity assessments
- Establish science-based decision support tools to determine priority areas for conservation and restoration projects based on anticipated landscape conditions
- Establish consistent data management, analysis, and sharing capabilities among program partners
- Prioritize investments to instill an ethic of climate stewardship in all sectors
- Identify, protect, and restore important natural habitats that are negatively impacted by climate change and land use, with an emphasis on habitats that are important to at-risk species
- Support and improve metrics and monitoring capabilities to assess impacts and improvements to natural resources based on climate and landscape change considerations
- Develop methods to engage all members of the scientific community (academia, government, environmental/conservation nongovernmental organizations, community scientists)

Project Spotlight

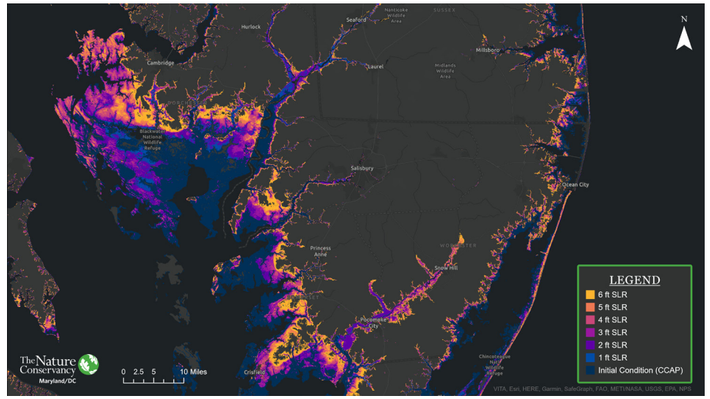
Coastal Resilience Land Prioritization Effort

Partners: The Nature Conservancy Maryland/DC Chapter Resilient Coasts Program, U.S. Navy, U.S. Fish and Wildlife Service, Eastern Shore Land Conservancy, The Conservation Fund, and Ducks Unlimited

Location: Eastern Shore, Maryland

The need: Salt marshes on the Eastern Shore provide essential habitat to at-risk birds, such as saltmarsh and seaside sparrows, clapper rail, and eastern black rail.

- The Nature Conservancy's (TNC) Resilient Coasts Program conducted a scientific and spatial analysis to identify resilient marsh complexes with the highest likelihood of persisting in the face of sea-level rise on Maryland's Eastern Shore
- Based on the analysis, TNC has prioritized 20,000 ± acres of marsh habitat and migration zones for protection of critical marsh in Dorchester County
- In 2020, TNC partnered with the U.S. Navy to secure $3 million through the Department of Defense's Readiness and Environmental Protection Integration (REPI) Challenge to permanently protect 4,000 ± acres in TNC's priority area and the Navy's Atlantic Test Ranges
- In February 2021, TNC partnered with the U.S. Fish and Wildlife Service, the Eastern Shore Land Conservancy, The Conservation Fund, and Ducks Unlimited to submit a North American Wetland Conservation Act (NAWCA) proposal to protect salt marsh habitats, migration zones, and adaptation areas in TNC's priority area
- TNC will be working with regional partners and landowners to develop conservation tools and techniques designed to enhance coastal resilience by enabling marsh migration and adaptation



TNC

Areas along Maryland's Eastern Shore projected to be inundated in various sea-level rise scenarios.

Pillar 3, Community Partnership: Increase capacity and support for coordinated restoration and conservation activities in the Chesapeake Bay watershed, particularly in historically and systemically under-resourced communities, through outreach, education, and civic engagement

Building a connected conservation constituency in the Chesapeake Bay requires engaging with ever-growing, ever-changing populations to ensure that all who live in the watershed have a stake in conservation. The Chesapeake Bay watershed is home to diverse communities with rich variation in culture, demographics, and perspectives. Despite this diversity, federal, state, and non-profit environmental organizations have not adequately considered DEIJ and accessibility in the work to restore the bay and its watershed, leading to racial and economic disparities in who benefits from and participates in conservation and restoration programs.

Since 2014, partners in the watershed have sought to increase the diversity of people providing input and making decisions related to watershed conservation and restoration. Efforts are ongoing to incorporate DEIJ into restoration and conservation programs throughout the watershed. Applying a DEIJ lens to all conservation and restoration activities and decisions will enable all people in the watershed to share in the many benefits the bay and watershed provide (Chesapeake Bay Program, Diversity Outcome Management Strategy 2015-2025, v.3).

Goals:

- Establish/embrace a community-centered model to deliver conservation value in and near where people live
- Customize approaches to address conservation issues as they affect the interests of local communities, based on a mutually informed understanding of the needs of individual communities regarding fish, wildlife, and people

Priorities for Conservation Action and Design:

- Act on relevant priorities of the Bay Program's Fostering Chesapeake Stewardship Goal Implementation Team that support coordinated restoration and conservation activities
- Act on relevant priorities of the Bay Program's Diversity Workgroup that support coordinated restoration and conservation activities
- Consider Traditional Ecological Knowledge (TEK) in all decisions
- Engage diverse individuals and communities to foster an environmental ethic and nurture interest in environmental careers, focusing on youth and higher education
- Build on the success of existing and complementary outreach, education, stewardship, and community engagement programs (e.g. Chesapeake Bay Program, Chesapeake Bay Gateways Network, state programs)
- Emphasize experiential learning and stewardship by involving communities in planning and implementing restoration and by investing in resources and services to expand access (e.g., translation services to expand participation and engagement)
- Invest in organizations that focus on community organizing, capacity building, and sustainable operations in historically and systematically under-resourced communities, where community needs and conservation/restoration priorities intersect
- Build on successful youth stewardship, leadership, and career-development programs and create new ones to target unmet needs, especially in DEIJ communities
- Establish a network of regional partnerships with directed outreach and marketing for conservation education, stewardship, and community engagement programs
- Catalyze/support community building and community organizing networks (communities, homeowner associations, private landowners, community steward organizations, etc.)
- Evaluate the effectiveness of projects that increase residents' stewardship of natural resources
- Build and enhance partner capacity to provide technical assistance and deliver conservation/restoration outcomes

"Too many times, we have seen disappointments in these types of programs. However, this is a new chapter in America. I have worked with many of those involved in Chesapeake WILD, and we can count on them to make sure environmental justice occupies a prominent place among the program's components. These partnerships will promote equitable collaboration with and access for our black and brown communities, through the USFWS Urban Wildlife Conservation Partnerships and sites like the Masonville Cove Environmental Education campus in Baltimore, a place that warms my heart."

– Mamie Parker, Ph.D.
Biologist, Conservationist, Executive Coach, and Facilitator
Former U.S. Fish and Wildlife Service Northeast Regional Director

Chesapeake Bay Program

Masonville Cove in Baltimore was one of the first Urban Wildlife Refuge Partnerships established in the nation, and reflects years of work by local partners to support restoration and community engagement at the cove.

Pillar 4, Public Access: Enhance recreational opportunities and public access with a strong emphasis on equitable access to nature and all associated benefits, consistent with the ecological needs of fish and wildlife habitat

Time spent in nature is vital to human health and well-being. However, in highly developed urban environments, opportunities to connect with nature are often limited. Too often, the ability to access parks, refuges, and other green space in urban communities is constrained by transportation options and/or physical or financial challenges. We must reduce these barriers to the greatest extent possible to make the conservation and restoration of the Chesapeake Bay watershed relevant to urban and historically and systemically under-resourced communities.

Because of its location in a densely populated part of the country, the Chesapeake Bay watershed should offer easy access to outdoor recreational opportunities to millions of people. The watershed can provide high-quality recreational experiences, including boating, hunting, fishing, hiking, biking, wildlife viewing, birding, and scenic touring, which provide meaningful benefits to human health and well-being, and significant revenue to the basin. However, physical access to the Chesapeake Bay and its tributaries is limited, with real consequences for quality of life, local economies, and long-term conservation. Increasing public access to local waterways for fishing, swimming, boating, and other activities fosters a shared sense of responsibility and increased stewardship that supports watershed restoration goals (Chesapeake Bay Program, Chesapeake Progress Engaged Communities, 2021).

Goals:

- Maintain and improve recreational opportunities that are compatible with the conservation of natural resources
- Increase public awareness of the recreational, educational, and economic contributions made by the Chesapeake Bay and its ecosystems
- Increase the sense of stewardship of natural resources by residents and visitors
- Build a broader conservation base in diverse communities by ensuring that green space and environmental education are easily accessible to all people living and working in Chesapeake Bay watershed communities, regardless of transportation, physical, or financial limitations

Priorities for Conservation Action and Design:

- Promote the economic, quality of life, and health (physical, mental, emotional) benefits that a healthy Chesapeake Bay watershed provides for all individuals
- Provide the public with information on public access points and recreation opportunities in the watershed
- Ensure availability of parks, green spaces, and/or water access within a 10-minute walk from homes, especially in historically and systemically under-resourced communities
- Engage local community members and special interest groups in planning (e.g., identifying needs, gaps, programming preferences, etc.)
- Invest in public access sites with facilities necessary to accommodate student groups
- Enhance engagement of community scientists in programs and volunteer activities
- Enhance interpretive programming focused on the watershed's natural history
- Increase public hunting and fishing access

"Conserving and restoring the Chesapeake ecosystem and our beautiful wildlife will require coordination, funding, and engagement on an epic scale. We will need to leverage a network of networks to protect wildlife habitat, address environmental justice, enhance outdoor recreation opportunities, and benefit water quality. By focusing on these activities, Chesapeake WILD is poised to be a game changer in our watershed."

– Joel Dunn
President & CEO
Chesapeake Conservancy

Sarah Rogers/NPS

Improving and expanding access is a key component to making recreational opportunities more equitable in the watershed.

Pillar 5, Water Quality: Improve and sustain water quality, upgrade water-management capability, and reduce flood damage to support fish and wildlife, habitats of fish and wildlife, and drinking water for people

Millions of people rely on Chesapeake Bay tributaries for drinking water. The watershed also supports diverse fish and wildlife that depend on high-quality water. Historically, portions of the estuary suffered from water pollution because of rapid population growth and industrial activities in the watershed. Great strides have been made in improving water quality in the watershed since the establishment of the Chesapeake Bay Program in the 1980s, but more work is needed to maintain and improve water quality for both people and wildlife. There are high demands on the water resources for the Chesapeake Bay watershed, ranging from municipal and industrial water supply to energy production and agricultural uses. Fish and wildlife also depend on water availability in the habitats where they live.

Sustainable water-resource management in the watershed is supported by the Bay Program and the goals of the Chesapeake Bay Agreement — especially the Chesapeake Bay Total Maximum Daily Load (TMDL) of pollutants — and by the participating state and federal agencies that regulate water uses to meet competing needs. Chesapeake WILD will coordinate with — but not participate in — existing regulatory activities, as appropriate. The program will focus on non-regulatory efforts to support availability of water resources to meet human and ecological needs, and to enhance resiliency to potential drought and flood conditions.

Goals:

- Protect and maintain water quality and quantity needed to support fish and wildlife, habitat function, and other ecological services
- Reduce flooding through projects and non-regulatory efforts aimed at improving land and watershed management
- Reduce pollutants that can impair water quality

Priorities for Conservation Action and Design:

- Partner with local government planning agencies and community organizations and fortify connections to community priorities (fishable/swimmable waters, natural flood risk/stormwater management, community stewardship efforts, TEK from Tribal Nations)
- Align and leverage local, state, and federal funding sources (soil and water conservation districts, departments of transportation, emergency management agencies; environmental impact bonds; low-to-no match grants for under-resourced communities), with an emphasis on capacity building for communities and organizations in need
- Target conservation/restoration actions in headwater areas, upstream locations, and uplands that benefit both local communities and the bay
- Emphasize measures that manage water with benefits to other resources, especially habitat (e.g., dam removal, riparian buffers, reduction of impervious surfaces, erosion management)
- Reduce point and nonpoint source pollution — including excess nutrients and sedimentation from agricultural, municipal, and urban landscapes — while supporting fish and wildlife, habitats of fish and wildlife, and drinking water for people
- Address relevant priorities of the Bay Program's Water Quality, Habitat, Sustainable Fisheries, and Healthy Watersheds Goal Implementation Teams and Climate Resiliency Workgroup
- Maintain healthy forests and riparian habitat along the bay and its tributaries to improve habitat, maintain base flow, and reduce flooding
- Promote conservation practices on working lands
- Improve groundwater base flow, recharge, and infiltration
- Reconnect floodplains to adjacent waterways to improve resiliency and reduce flood damage
- Conserve and restore wetlands to improve habitat and aid in flood protection
- Improve conservation of fish populations at water withdrawal facilities
- Support efforts to maintain minimum ecological flows and salinity values needed at key locations in priority watersheds to maintain healthy fish and wildlife resources
- Increase freshwater mussel and oyster populations to improve water quality

USFWS

Freshwater mussels, like the endangered dwarf wedgemussel, make rivers and streams more hospitable for aquatic species by stabilizing the bottom, and healthier for people by filtering out polluting particles.

Chesapeake Bay Program

Potomac River vista from historic Jefferson Rock in West Virginia.

In closing: Moving the needle for conservation

From wood thrush, to brook trout, to bumble bees, fish and wildlife populations often occupy habitats and complete their life requirements using ecological systems that cross state borders. That means effective conservation partnerships working at large scales, such as the Chesapeake Bay watershed, must look at the big picture. In order to succeed, we need to address key threats and habitat and management needs for a wide range of fish and wildlife species, including species of greatest conservation need as identified in State Wildlife Action Plans, threatened and endangered species, and other priority at-risk species.

By initiating and investing in a common understanding of landscape conditions and predicted change, and a common vision for adaptation, Chesapeake WILD provides a platform and funding for partners to rally around mutually beneficial conservation priorities.

This shared, strategic framework gives natural resource agencies and conservation partners the opportunity to collaborate effectively on projects at scales and rates that were previously unimaginable. These actions will move the needle for conservation in a positive direction, and provide direct societal benefits — sustaining a future for both wildlife and people in this treasured landscape.

Paul R. Johansen, Chief
Wildlife Resources Section
West Virginia Division of Natural Resources

Appendix I

Partners

Alliance for the Chesapeake Bay
American Institute of Architects
Anacostia Watershed Society
Appalachian Trail Conservancy
Atlantic Coast Fish Habitat Partnership
Audubon Mid-Atlantic
Baltimore Green Space
Blue Sky Fund
Blue Water Baltimore
Cacapon Institute
Capital Region Land Conservancy
Captain John Smith Chesapeake National Historic Trail
Caroline County Recreation & Parks
Chesapeake Bay Commission
Chesapeake Bay Foundation
Chesapeake Bay Funders Network
Chesapeake Conjure Society
Chesapeake Conservancy
Chesapeake Conservation Partnership
Chesapeake Research Consortium
Choose Clean Water
City of Annapolis
City of Richmond Department of Parks, Recreation and Community Facilities
City of Richmond Health Department
Defensores de la Cuenca
Delaware Department of Natural Resources and Environmental Control
Delaware State Parks
Delaware Division of Fish and Wildlife
Delaware Wild Lands, Inc.
Delmarva Restoration & Conservation Network
District of Columbia, Division of Fish and Wildlife
District of Columbia, Department of Energy & Environment
Ducks Unlimited
Earth Science Information Partners
Eastern Shore Land Conservancy
Enrichmond
Environmental Policy Innovation Center
Federal Highway Administration
Finger Lakes Land Trust
Forever Maryland Foundation
Greater Baltimore Wilderness Coalition
Greater Greater Washington
Groundwork RVA
Harford Land Trust
Hispanic Access Foundation
James River Association
Lancaster Conservancy
Land Trust Alliance
Lenape Indian Tribe of Delaware
Living Landscape Observer
Lower Shore Land Trust
Maryland Department of Natural Resources
Maryland Environmental Trust
Maryland Historical Trust
Montgomery Parks
National Aquarium in Baltimore
National Audubon Society
National Fish and Wildlife Foundation
National Oceanographic and Atmospheric Administration
National Park Service
National Parks Conservation Association
National Trust for Historic Preservation
National Wildlife Federation
Natural Resources Conservation Service
NeighborSpace of Baltimore County
New York Department of Environmental Conservation
Northern Virginia Conservation Trust
Penn State University
PennFuture
Pennsylvania Department of Conservation and Natural Resources
Pennsylvania Department of Environmental Protection Waterways and Wetlands Program
Pennsylvania Department of Transportation, Environmental Policy and Development Section
Pennsylvania Fish and Boat Commission
Pennsylvania Game Commission
Piedmont Environmental Council
Prince Charitable Trusts
Rural Maryland Council
S.H.E. Collective
Sakura Conservation Strategies
Southeast Rural Community Assistance Project
ShoreRivers
Sierra Club
Smithsonian Institution
South Mountain Partnership
Southern Maryland Heritage Area/Destination Southern Maryland
Susquehanna National Heritage Area
Susquehanna River Basin Commission
The Conservation Finance Network
The Conservation Fund
The Land Preservation Trust
The Nature Conservancy
The Piedmont Environmental Council
The Trust for Public Lands
The Urban Studio
Trout Unlimited
U.S Army Corps of Engineers
U.S. Department of Transportation
U.S. EPA Chesapeake Bay Program
U.S. Fish and Wildlife Service
U.S. Forest Service
U.S. Geological Survey
University of Maryland
Valley Conservation Council
Virginia Department of Agriculture and Consumer Services
Virginia Department of Conservation and Recreation
Virginia Department of Wildlife Resources
Virginia Outdoors Foundation
WeConservePA
West Virginia Department of Natural Resources
West Virginia University
Western Pennsylvania Conservancy
Wetland Land Trust

Appendix II

Associated plans and strategies

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Appendix III

Chesapeake Conservation Partnership & Chesapeake WILD Stakeholder Engagement Session documents:
https://www.chesapeakeconservation.org/wp-content/uploads/2021/03/Stakeholder-Engagement-Session-Summary.pdf