Workplan to Implement the Chesapeake Executive Council Directive No.21-1
Collective Action for Climate Change

Update on Progress

July 2024

1. **Refine and prioritize climate science needs and develop a resource plan.** Climate science needs for each outcome of the 2014 Chesapeake Bay Watershed Agreement have been identified through the Strategic Science and Research Framework (SSRF). Completing and addressing the climate science needs for all the outcomes will require stronger engagement and collaboration from our partners to evolve their work to match CBP needs. The Management Board will host 2 special sessions with support from STAR to 1) improve understanding of each outcome's climate science needs, 2) update the status of engaged resources addressing those needs, 3) identify priority climate science needs 4) quantify required additional resources for addressing remaining gaps, 5) and develop a plan for how partner programs, expertise and resources could be further leveraged to address priority climate science needs. The partnership will present their committed efforts to support implementation of the resource plan. The SSRF will be used to document and track future climate science needs identified for the outcomes and present, on an annual basis, to the Management Board to follow through with identifying opportunities to better engage science providers who can address these needs.

    - ***Update****: Climate science needs and next steps will be discussed with the Management Board at the July 18, 2024, meeting.*

2. **A Climate Directive Pilot Project**: Each signatory jurisdiction commits to launching an on-the ground, nature-based implementation project that meets the intent of the Climate Directive and advances progress towards multiple Chesapeake Bay Agreement Outcomes, with an emphasis on projects that help achieve the forest buffer, tree canopy, or wetlands outcomes. Jurisdictions will prioritize projects located in underserved and/or climate vulnerable communities and seek input from CBP Goal Implementation Teams and workgroups in selecting pilot project types and site locations. Projects could be supported by additional Infrastructure Investment and Jobs Act (IIJA) funding coming through CBP to the jurisdictions.

    - ***District of Columbia:*** *Sustainable DC estimates that the District and its partners will need to plant at least 10,850 trees every year to cover 40 percent of the District with a healthy tree canopy by 2032. In 2023, partners from across the District, including the District Department of Transportation, the Department of Energy and Environment, Casey Trees, volunteers, and other community partners and organizations exceeded the goal by planting over 12,777 trees. The increased canopy cover will provide millions of dollars in benefits to the city by improving air quality, reducing stormwater volumes, trapping greenhouse gasses, reducing the urban heat island effect, and increasing tourism and property values.*
    - ***Maryland:*** *The nonprofit Resilience Authority of Charles County, Inc's Resilience Forward – RAYC Ahead initiative seeks to build equitable climate resilience grounded in environmental justice through year-round employment and career*

development opportunities for local Charles County high school students and young adults that encourages diversity in natural resource careers and urban forestry, while building equitable climate resilience through tree canopy establishment at public schools and parks in urban heat islands. This effort is a product of the Resilience Authority's partnership with the Maryland Forest Service and Charles County Public Schools, and is funded through the MDOT Urban Tree Program, the Maryland Urban and Community Forestry Committee, and the first Cohort of the Maryland Forest Service's Community Catalyst Fund. The Resilience Authority Youth Corps (RAYC) members learn how to build equitable resilience to the climate effects of extreme heat and flooding by working with government and nonprofit professionals to design, plant, and sustainably maintain urban tree cover and healthy forests at public schools, parks, and community-based organizations in underserved communities throughout Charles County.

- ***Pennsylvania***: *Lancaster County Little Conestoga Blue/Green Corridor Project is a nature-based project that meets the intent of the Climate Directive and advances progress towards multiple Chesapeake Bay Agreement Outcomes, with an emphasis on projects that help achieve the forest buffer, tree canopy, or wetlands outcomes. PA DEP has provided millions of state and federal dollars in grant funding and collaborated with other agency programs regarding the permitting of the project. More information about this project, as well as pictures, can be found here: https://lccbgc.org/*
- ***New York****: In 2016, 750 bare root trees were planted at Hickories Park in Owego, NY through DEC's Trees for Tributaries Program administered by the Upper Susquehanna Program. Hickories Park is located on the Susquehanna River and Little Nanticoke Creek flows through the park, which is located in an area designated by EPA and the Chesapeake Bay Program as a disadvantaged community. Riparian buffers were established in two places along Little Nanticoke Creek utilizing Tioga Soil Water Conservation District (SWCD) staff, park staff, and volunteers. The planting site has since been maintained by Hickories Park and Tioga SWCD staff and the tree canopy is filling in. In 2022, Tioga SWCD hosted an additional volunteer planting to plant a half-acre section of the park with 30 community volunteers. This planting project is an example of capacity building through volunteers and the nature-based implementation projects being implemented across the Upper Susquehanna watershed.*
- ***Virginia:*** *Crater Planning District Commission - Assist the City of Hopewell with the City's EPA tree planting grant: This project has multiple objectives, which include expanding the tree canopy in the city, in order to reduce the urban heat island effect and marginally improve air quality. Additionally, this project will improve water quality through the introduction of a vegetative buffer that naturally filters stormwater and provide a physical tree buffer along a major corridor that will screen heavy industry, parking lots, and perimeter industrial chain link fencing. This will have the added benefit of improving the visual aesthetic along the Route 10 corridor by screening industrial fencing and heavy*

industry infrastructure from the roadway. Upon completion, Crater PDC and the City of Hopewell will report the total number of trees planted, percent increase in tree canopy cover within project limits, and any other reportable stormwater BMPs implemented.

- ***West Virginia:*** The Town of Romney has several tree canopy and green infrastructure *projects and WV is very proud of our Cacapon Institute's CommuniTree program. WV has funded the following IIJA Project through the CBTrust that are underway with the Town of Romney. Advancement of Partnership Forest Buffer, Urban Tree Canopy and Wetlands Goal. Romney 2023 Urban Canopy Project $120,268: This project will see the installation of 150 age and species appropriate trees in the Town of Romney, WV. 50 of these trees will be installed in impervious surfaces such as sidewalks and parking lots in order to assist in stormwater management and biofiltration efforts. The remaining trees will be strategically placed around the Town in order to maximize the urban canopy coverage in otherwise barren parts of Romney. This effort will not only have tremendous health, and aesthetic benefits for the population of Romney, WV; but the increase in urban canopy will be specifically implemented to maximize the water filtration and water cooling effects for stormwater that flows less one mile into the South Branch of the Potomac River from any point in Romney.*

3. **Advance conservation finance priorities**: The Enhance Partnering, Leadership, and Management Goal Implementation Team (GIT6) and the Budget and Finance Workgroup will work with jurisdictions and GITs to showcase lessons learned from the Finance and Investment Forum held in March 2020 (including the expert consultations), spotlight new jurisdictional innovations in conservation financing and carbon markets, and develop additional recommendations to advance these priorities.

    - ***Update****: The Budget and Finance Workgroup has been approved for a STAC workshop titled "Identifying Natural and Social Sciences Gaps to Support Market-Based Approaches to Chesapeake Bay Watershed Restoration". This will substantially relate to the part of the Climate Directive workplan that states "…spotlight new jurisdictional innovations in conservation financing and carbon markets. We expect the workshop to be conducted no later than first calendar quarter 2025.*

4. **Improve coordination on national funding for climate**: CBP will host focused meetings with partners to improve coordination, collaborative planning, and priority-setting around funding for climate-related objectives to enable access to national funding programs. The GIT-Chairs will convene an initial set of meetings with subject matter experts (i.e., from GITS, workgroups, STAR) with the objective of identifying shared climate funding priorities and opportunities for aligning short and long-term funding proposals. A second series of meetings hosted by the Budget and Finance Workgroup will convene funders, grant-writing partners, and potential funding recipients to exchange lessons, improve understanding of national funding programs and the challenges and strategies for accessing these programs for climate change investments, and to identify potential funding routes for supporting priority climate needs. Meetings will also be used to identify opportunities for improving targeting and impact of funding on climate

vulnerable communities in the Chesapeake Bay region and for improving awareness of the needs, threats, and challenges facing these communities.

- ***Update:*** *The GIT Chairs have infused climate considerations into the work of the Goal Implementation Teams in several ways. The Strategy Review System is a direct mechanism to embed climate considerations as goal implementation teams go through their adaptive management analysis. The outcome summary review specifically asks them to consider and highlight the impacts of a changing climate in their ability to achieve their outcome but also to explore collaboration with other goal implementation teams on climate adaptation or mitigation strategies and pursue multi-disciplinary project funding from various federal programs. We have used the information surfaced in the quarterly reviews to connect teams to experts in the federal funding programs. The Chesapeake Conservation Partnership hosted a panel of federal funding agency representatives from US Forest Service, US Fish and Wildlife Service, Bureau of Land Management, US Department of Agriculture, Department of Defense, and National Park Service for partners to better understand the selection criteria for funding and align federal, state and partner DEIJ, climate and land conservation priorities to position the conservation and restoration work to take advantage of the new federal investments and using land conservation to build community and habitat resilience in the face of the changing climate. The Stewardship goal team's workgroups have connected with NOAA, NPS and USFS on exploring investments for: 1) school curriculum to reflect our growing knowledge and understanding of climate change into environmental literacy for K-12 students and 2) matching partners with federal funding investments to mitigate urban heat island effects with tree plantings and other restoration techniques that help with climate adaptation/climate resiliency and create access to nature and refuge for people. Chesapeake WILD has specifically emphasized climate as a foundational pillar to the project selection criteria and we have hosted a series of webinars and office hours to help partners and applicants coordinate on projects and apply, with excellent success of awarding projects submitted by traditionally underrepresented community organizations to address their climate and habitat restoration/conservation needs.*

5. **Establish a learning and capacity building network**: Building on the efforts of the Climate Resiliency Workgroup and the Education Workgroup, CBP will takes steps to support climate change education and learning and to improve awareness and institutional capacity to address climate change in all the partnership's work. The Management Board will identify partnership leads for the following actions:

    a. Identify and expand opportunities for partner staff to participate in comprehensive training, workshops, and in-depth topical discussions and symposia, such as through establishment of an exchange network or website.

    b. Convene leaders and stakeholders in climate and environmental education to develop a common understanding of climate change education in the region and determine how learning and action related to climate change can help advance the environmental literacy goal.

    - ***Update:*** *The Chesapeake Bay Program's Education Workgroup, which is chaired and coordinated by staff from the NOAA Chesapeake Bay Office, held the Environmental*

Literacy Summit at Bowie State University on November 1, 2023. This biennial event convened federal, state, and nongovernmental leaders from throughout the Chesapeake Bay watershed to think strategically about meeting the Environmental Literacy goal of the Chesapeake Bay Watershed Agreement. The Summit focused on influential actions schools can and are taking to lessen the effects schools have on both climate and the local environment and building and strengthening green career pathways for young people, both with a strong emphasis on climate. State networks continue to move this work forward.

6. **Next steps for implementing the Principals Staff Committee (PSC) Monitoring Report**. Monitoring the trends and impacts of changing climate conditions on the Chesapeake Bay ecosystem and communities is critical to assessing the effectiveness of restoration practices and tracking progress and challenges towards meeting the climate resiliency goal and other goals of the Chesapeake Bay Watershed Agreement. The Summary of Monitoring Needs and Investment Report to the PSC (PSC Monitoring Assessment Report) finds that current monitoring programs are insufficient for meeting long-term monitoring needs across outcomes, but that new funding programs and sources in addition to new or redirected investments from partners may provide opportunities to address these needs, including towards addressing gaps in monitoring the impacts of climate change. This action includes three subtasks:

    a. Identify recommendations in the PSC Monitoring Assessment Report that support ongoing climate change monitoring programs.

    b. Create a forum for identifying action-oriented endpoints on investment and partnering to address climate monitoring needs. Consider funding opportunities provided by the Infrastructure Investment and Jobs Act (IIJA).

    c. The Monitoring Review Team will update the partnership annually on the monitoring investment and implementation progress along with insight on new networks designs, status of development, and gaps in addressing monitoring needs.

    - ***Update:*** *The Monitoring Review Team updated the partnership on monitoring investment and implementation progress, including monitoring enhancements to the tidal and nontidal monitoring networks, small agricultural watershed monitoring, community monitoring, monitoring of SAV, and land use/land change. Significant enhancements to the monitoring networks and capabilities have been made possible with increased investment through IIJA funds. The team emphasized the urgent to need identify a plan to support these investments over time and to adapt priorities to address Beyond 2025.* *Enhancing CBP Partnership Monitoring Networks: Update*

7. **Create Bay-wide plan for tidal wetland restoration, marsh migration, and coastal resiliency**: There is a need to develop a comprehensive tidal wetland restoration plan that identifies 1) recommended siting criteria for tidal wetland restoration projects that incorporates various marsh habitat benefits (e.g., low marsh for fish, high marsh for birds) and marsh and community resilience considerations, 2) potential restoration areas based on criteria, and 3) partners that could implement projects. The Management Board will identify funding to create this Bay-wide comprehensive plan to guide coordinated implementation of tidal wetland restoration projects that consider marsh migration, improve marsh and coastal community resiliency, maximize habitat benefits, and enable access to national funding programs. The Management Board will

also identify a partnership lead to coordinate development of the comprehensive plan across the various partners involved in tidal wetland restoration and/or marsh resilience planning and identify resources that can support this coordination. This project will build on the outcomes of the GIT-funded project, "Partnership-Building and Identification of Collaborative Tidal Marsh Adaptation Projects.

- ***Update**: EPA funded the Wetland Capacity Building Grant to address findings from the 2024 Wetlands Workgroup Strategy for accelerating progress and to advance tidal wetland priorities. The grant will support strategic planning to 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. It will also develop a consistent protocol for monitoring coastal wetland projects; engage communities to determine the best ways in which landowners and those who influence landowners receive information; and design a wetland restoration project in Pocomoke Sound.*

8. **Complete climate change-related activities crosswalk and promote biennial reporting of climate efforts to the Climate Resiliency Workgroup**: The Management Board Climate Directive planning group will finalize the crosswalk of partner and partnership climate adaptation, mitigation, and resilience activities and present it to the Executive Council as part of the Climate Directive strategic workplan. The Management Board will take steps to promote partner participation in the Climate Resiliency Workgroup's biennial request for information about climate adaptation, mitigation, and resilience efforts, completed as part of their Strategy Review System (SRS) process.

    - ***Update:** A climate change-related activities crosswalk was completed concurrently with the Climate Directive workplan.*

9. **Improve understanding of Best Management Practice (BMP) responses to climate change conditions**. Further data and research are needed to understand the risks that climate change poses to BMP performance and to support implementation of climate-resilience BMPs. The Water Quality Goal Implementation Team, with support from the Climate Resiliency Workgroup and the Modeling Workgroup, will organize cross-workgroup meetings to discuss findings from recent assessments and research (e.g., Virginia Tech BMP Climate Resilience Assessment Report) to develop a research agenda framework for climate-adapted BMPs. The CBP will also support progress on priority initiatives identified in the Urban Stormwater Workgroup's memo "Recommendations on Next Steps to Advance Efforts to Maintain Resilience of Stormwater BMPs."

    a. ***Update**: EPA is funding work to advance the recommendations of the Urban Stormwater Workgroup and Climate Resiliency Workgroup to develop information and tools that help localities integrate climate considerations into stormwater planning, management and/or design. This work will also provide estimates for the impacts of future hydrology on a range of widely used BMPs and pollutant removal efficiencies for different BMPs and uncertainties associated with future hydrology*.