

A CRITICAL PATH FORWARD FOR THE CHESAPEAKE BAY PROGRAM BEYOND 2025



(Photo by Will Parson/Chesapeake Bay Program)

Chesapeake Bay Program

Beyond 2025 Steering Committee

Table of Contents

Introduction	2
Part I: Recommendations for Potential Consideration by the Chesapeake Executive Council	3
Chesapeake Executive Council Recommendation #1	3
Chesapeake Executive Council Recommendation #2:	3
Additional Background.....	4
Recognizing our progress toward meeting the <i>Chesapeake Bay Watershed Agreement</i>	5
Part II: High-level Recommendations and Considerations for the Chesapeake Bay Program	7
Science	8
1. Optimize monitoring, modeling, and analysis	8
2. Integrate existing and new science findings in decision making, resource allocation, and communication strategies	9
3. Prioritize research that addresses knowledge gaps in existing and emerging challenges	10
Restoration and Conservation	10
1. Support System-Scale Conservation and Restoration Planning and Implementation for Habitats and Communities	11
2. Review and, where necessary, revise existing goals, outcomes and management strategies to more effectively guide the partnership’s restoration and conservation efforts beyond 2025	11
3. Improve the Chesapeake BayProgram’s holistic approach to planning, prioritization, progress-tracking and accountability.....	12
Partnership	13
1. Adopt a systems approach to streamline governance and structure.....	13
2. Enhance Capacity Building and Administrative/Technical Assistance through Local Networks	13
3. Strengthen the Chesapeake Bay Program’s capacity to ensure watershed restoration is relevant to all communities.....	14
4. Enhance Communications and Transparency to Foster Long-term Success	14
Part III: Source Materials	16

Introduction

At its 2022 annual meeting, the Chesapeake Executive Council charged its Principals' Staff Committee to review progress toward achieving the 10 goals and 31 outcomes of the 2014 [Chesapeake Bay Watershed Agreement](#) and make recommendations for the future of the partnership known as the Chesapeake Bay Program, stating:

“...this Executive Council charges the Principals’ Staff Committee (PSC) in recommending a critical path forward that prioritizes and outlines the next steps for meeting the goals and outcomes of the Chesapeake Bay Watershed Agreement leading up to and beyond 2025...At our 2024 annual meeting, the PSC is to prepare recommendations that continue to address new advances in science and restoration, along with a focus on our partnership for going beyond 2025.”

The Chesapeake Bay Program formed a Steering Committee with representatives from the nine signatories to the 2014 *Chesapeake Bay Watershed Agreement*, six Goal Implementation Teams, three Advisory Committees, participating federal agencies and non-governmental organizations. Beginning in June 2023, the Steering Committee convened its 29 members monthly to review, discuss and determine recommendations for Management Board and Principals’ Staff Committee consideration. These recommendations are focused on providing a scope of work, or next steps, for the Chesapeake Bay Program as it prepares for the next chapter in its partnership beyond 2025.

As with any partnership, listening to a variety of perspectives, seeking middle ground and reaching consensus were crucial to forming the recommendations below. The Steering Committee came together as colleagues and partners, representing a diversity of organizations, perspectives and people, led by the common idea of a healthy, accessible and sustainable Chesapeake Bay and watershed with clean water, abundant life and conserved lands for the benefit, and through the engagement, of its people.

The public was invited to provide feedback on the first draft of the Steering Committee report, and this revised version reflects not only their thoughts and expertise, but also that of the many people who volunteered their time to help develop these recommendations. This revised report will be presented to the Management Board and Principals’ Staff Committee, as established in the [Governance and Management Framework for the Chesapeake Bay Program](#). The revised report will aid the Principals’ Staff Committee in providing recommendations to the Chesapeake Executive Council, thereby fulfilling the [charge](#) established in October 2022.

In Part I of this report, the Steering Committee offers two overarching recommendations for consideration by the Management Board and the Principals’ Staff Committee for elevation to the Chesapeake Executive Council. The Steering Committee concludes that the Chesapeake Bay Program, under the guidance of the 2014 *Chesapeake Bay Watershed Agreement*, continues to deliver valuable progress, locally, throughout the watershed and for the Chesapeake Bay itself. To accomplish further progress while addressing the latest scientific data and emerging challenges, the Steering Committee has identified several additional recommendations for improving efforts in the areas of Science, Conservation and Restoration, and Partnership. These additional recommendations, found in Part II of this report, require more detail and, in the Steering Committee’s view, merit further exploration by the Chesapeake Bay Program. Many of the recommendations proposed by the Steering Committee in Part II can be pursued within the partnership’s existing processes for prioritizing and strategizing efforts. The Steering Committee recommends consideration of all recommendations in this report.

Part I: Recommendations for Potential Consideration by the Chesapeake Executive Council

The Steering Committee offers the following recommendations for Chesapeake Executive Council action to the Management Board and Principals' Staff Committee for review:

- **Executive Council Recommendation #1:** The Beyond 2025 Steering Committee recommends that the Chesapeake Executive Council affirm its continued commitment to meet the goals of the *Chesapeake Bay Watershed Agreement* and direct the Principals' Staff Committee to propose specific amendments necessary to effectively implement the *Chesapeake Bay Watershed Agreement*.
 - At the 2024 Chesapeake Executive Council meeting, the Executive Council should affirm their continued commitment to work together in partnership to meet *Chesapeake Bay Watershed Agreement* goals and direct the partnership to continue implementation of the existing goals and outcomes as amendments are being considered.
 - The Chesapeake Executive Council should direct the Principals' Staff Committee, with support from the Management Board, Goal Implementation Teams and Advisory Committees, to propose amendments to the *Chesapeake Bay Watershed Agreement* necessary to incorporate new scientific understandings, to account for emerging challenges like climate change and more effectively engage the people living within the watershed. Any amendments to the *Chesapeake Bay Watershed Agreement's* vision, principles, preamble or goals should be prepared for consideration by the Chesapeake Executive Council at its 2025 meeting.
 - The Chesapeake Executive Council should direct the partnership to review all *Chesapeake Bay Watershed Agreement* outcomes to ensure that each contributes to achieving partnership goals, provides clear direction and enables accountability and progress evaluation. Revisions to outcomes should be adopted pursuant to the [Governance and Management Framework for the Chesapeake Bay Program](#). While not all outcomes will need revision, some reviews will likely result in consolidating, reducing, updating, removing, replacing or adding new outcomes. Proposed revisions should be considered as they are being reviewed, with every effort to complete most reviews and revisions by the end of calendar year 2025.
- **Executive Council Recommendation #2:** The Beyond 2025 Steering Committee recommends strengthening the Chesapeake Bay Program by identifying ways to simplify and streamline the partnership's structure and processes, including potential changes to the [Governance and Management Framework for the Chesapeake Bay Program](#) to ensure that partner commitments can be met.
 - The Steering Committee recommends that the Chesapeake Executive Council direct the Principals' Staff Committee to enhance partnership efficacy and transparency by streamlining its processes, while ensuring effective coordination, collaboration and

inclusivity, modifying the partnership structure and improving adaptive and science-based decision-making, to achieve a holistic vision of a healthy and resilient Bay and watershed.

- The aim of this recommendation is to ensure a program structure poised to implement the updated *Chesapeake Bay Watershed Agreement* effectively and efficiently, acknowledging that existing structures, including the Management Board, Goal Implementation Teams, workgroups and action teams may likewise require streamlining to better meet partnership goals. The Chesapeake Bay Program should consider enlisting a third-party with organizational expertise to help, and should also ensure that cross-program coordination, communication and the need to work equitably and inclusively are interwoven throughout the organizational structure and activities of the partnership.

Additional Background

The *Chesapeake Bay Watershed Agreement's* vision, principles, goals and outcomes should be reviewed to acknowledge and address emerging challenges impacting progress, apply new science and better connect the Chesapeake Bay Program's efforts with the benefits that this partnership aims to achieve for all people living, working in or visiting the watershed. The *Chesapeake Bay Watershed Agreement* identifies processes by which it can be amended, and some targeted amendments could improve the efficacy and efficiency of the partnership.

To ensure that the Chesapeake Bay Program remains relevant and is better positioned to realize its vision and goals, the partnership should carefully review the *Chesapeake Bay Watershed Agreement* outcomes and determine if any need to be updated, combined, replaced or removed. Revised outcomes would likely be specific, measurable, achievable, relevant, time-bound (SMART) and equitable. Outcome revisions should build upon the Outcome Attainability Assessment found in the [Charting a Course to 2025 report](#), while considering the SMART—based outcome assessments and recommendations provided in the [Chesapeake Bay Program Beyond 2025 Evaluation](#) prepared by the Eastern Research Group (ERG). Changes should reflect recent scientific reports and highlight continued emphasis on achieving water quality goals, the importance of conservation in addition to restoration, shallow water habitats, the impacts of climate change, land use changes and population growth, and benefits to the people who live, work and recreate in the region. Any revisions to outcomes should be approved by the Principals' Staff Committee or elevated, as needed, to the Chesapeake Executive Council.

This partnership is valuable in its ability to harness the resources and expertise of all seven watershed jurisdictions, federal agencies, academic institutions, non-governmental organizations, private industry, local governments and individuals to improve the health of the Chesapeake Bay and its watershed for current and future generations. To be effective in this mission, the Chesapeake Bay Program should ensure that its governance and structure is transparent, inclusive, equitable and organized to meet its goals, while reducing siloes and breaking down unnecessary complexity.

The partnership should continue to set targets, track progress and be mutually accountable for meeting meaningful science-based goals as specified in the *Chesapeake Bay Watershed Agreement*. As new and growing challenges like increased rainfall, higher temperatures, land use changes and other known or unanticipated factors continue to complicate efforts to meet *Chesapeake Bay Watershed Agreement*

goals, it is imperative that the partnership continuously improve its organizational capability to assess, respond, innovate and adapt.

Many of the recommendations detailed in Part II of this report and identified by the Steering Committee to improve progress towards meeting the partnership's goals do not require formal amendments to the *Chesapeake Bay Watershed Agreement* or direct action by the Chesapeake Executive Council, but they are, in the view of the Steering Committee, no less critical to charting a path forward for the Chesapeake Bay Program beyond 2025. The Steering Committee encourages the Chesapeake Executive Council to support the partnership in further exploring and implementing these recommendations through existing structures and processes.

Recognizing our progress and challenges toward meeting the *Chesapeake Bay Watershed Agreement*

While this report focuses on actions to strengthen the Chesapeake Bay Program beyond 2025, it is important to recognize the many successes the partnership has achieved in meeting the outcomes of the 2014 *Chesapeake Bay Watershed Agreement* and to highlight the strength and value of continued partnership. The signatories of the 2014 *Chesapeake Bay Watershed Agreement* have worked diligently to reduce pollution to meet clean water goals, improve habitat for living resources, conserve land, expand stewardship and build technical expertise as the partnership strives to achieve the *Chesapeake Bay Watershed Agreement's* 10 goals and 31 outcomes.

The Chesapeake Bay Program continues its concerted effort to do more and target actions to accomplish as much as possible leading up to and beyond 2025. These efforts have greatly benefitted from significant funding made available through federal and state budgets, as well as local and private investments.

At the 2023 Chesapeake Executive Council meeting, the Principals' Staff Committee provided an [update on](#) progress towards reaching the 31 outcomes in the *Chesapeake Bay Watershed Agreement*. Eighteen outcomes were reported to be on course or complete, with 11 outcomes off course and two uncertain pending future data updates. Of those off course, the Principals' Staff Committee committed to strengthening effort and investment in addressing nonpoint sources of pollution, forest buffers, urban tree canopy and both tidal and nontidal wetlands.

Notable partnership accomplishments include:

- **In 2023, partners planted the highest number of forest buffers since 2016.** While the goal of planting 900 miles of forest buffers per year is unlikely to be met by 2025; the partnership has increased its plantings each year since 2019.
- **Also in 2023, partners planted over 2,500 acres of tree canopy,** the highest acreage reported since tracking began in 2014.
- **Chesapeake Bay Program partners have added 248 new public access sites throughout the watershed,** achieving 83% of the Public Access Outcome's target to open an additional 300

new public access sites before 2025. Efforts are being made to open these sites in areas that currently lack access to green space and ensure the sites are equitable and inclusive for all.

- **Since 1988, 30,562 miles of streams and rivers reopened to migrating fish.** The Fish Passage Outcome reached its 2025 goal of opening 1,000 miles of streams and rivers to support migratory fish populations nine years early in 2016. In 2020, the target for this goal was modified to open an additional 132 miles of streams and rivers by removing blockages like culverts and dams every two years leading to 2025.
- **As of 2022, Chesapeake Bay Program partners have protected nearly 1.64 million additional acres of land throughout the watershed.** Overall, there are now approximately 9.1 million acres of conserved land, representing 22% of all land throughout the watershed.
- **Partners have successfully worked to maintain the blue crab fishery.** While subject to annual natural variation, female blue crabs have stayed above the threshold of what is needed for a sustainable blue crab population since 2014. Partners regularly come together to review pressures impacting blue crabs and make sound management decisions to ensure a healthy fishery.
- **In 2023, 79,234 acres of submerged aquatic vegetation (SAV) was preliminarily mapped in the Chesapeake Bay.** While SAV acreage is not expected to meet its 2025 target, the grass beds have rebounded since they were almost obliterated by Hurricane Agnes over 50 years ago. Additionally, in 2023, the Susquehanna Flats was approaching 11,000 acres of SAV.
- **Wastewater treatment plants have been updated throughout the watershed,** meeting the sector's goal to help reduce the amount of nitrogen, phosphorus and sediment pollution entering the Chesapeake Bay in 2016—nine years before its 2025 target.
- **Since 2014, the investment in the implementation of agriculture conservation practices is expected to prevent more than 11.7 million pounds of nitrogen from being delivered to the Chesapeake Bay,** as estimated from the partnership's Phase 6 suite of modeling tools.
- **Since 2014, 1,572 acres of oyster habitat have been restored in 11 Chesapeake Bay tributaries.** Partners have completed 1,572 acres of large-scale oyster restoration since 2014. Eight out of 10 restoration sites are now considered complete, and in 2019, Virginia completed an 11th bonus tributary.

Despite progress made to date, the Chesapeake Bay Program Science and Technical Advisory Committee's (STAC) *Comprehensive Evaluation of System Response (CESR)* [report](#) identifies many ongoing challenges to achieving our shared vision of a restored Chesapeake Bay and watershed. Challenges include generating more pollutant reductions from nonpoint sources to meet water quality goals; the need for increasing management attention towards living resources; and committing to improving the partnership's ability to "learn while doing", while adjusting our adaptive management approach to ensure efficient, effective and positive environmental outcomes.

Part II: High-level Recommendations and Considerations for the Chesapeake Bay Program

In October 2022, the Chesapeake Executive Council issued a [charge](#) to the Principals' Staff Committee, recognizing that the 2025 deadlines established for some goals and outcomes under the 2014 *Chesapeake Bay Watershed Agreement* would likely not be met, while also recognizing that data collection and analysis, science and changing environmental conditions must be re-evaluated and included in a critical path for the partnership's work beyond 2025. The Chesapeake Executive Council Charge organized nine strategic subjects, listed below, for review and consideration within three overarching topics of Science, Restoration and Partnership, with the expectation that at the 2024 annual Chesapeake Executive Council meeting, the Principals' Staff Committee will present recommendations addressing how the partnership will continue to include new advances in science and restoration, along with a focus on partnership priorities moving beyond 2025.

Chesapeake Bay Program, Executive Council Directive, October 2022 (Abbreviated)

Science

- Identify new and emerging scientific data and studies which could modify our progress reporting and adaptive management approach, as well as the goals and outcomes under the *Chesapeake Bay Watershed Agreement*.
- Enhance our monitoring and reporting capabilities to improve our understanding of existing conditions and trends.
- Define the existing and emerging challenges (e.g., climate change conditions, increasing growth, diversity, equity, inclusion and justice considerations) to accomplishing the partnership's work under the *Chesapeake Bay Watershed Agreement*, and how addressing those challenges might alter our collective restoration priorities, including the possibility of extending the target date for completing restoration of water quality beyond 2025.
- Identify opportunities to leverage action across multiple goals and outcomes of the *Chesapeake Bay Watershed Agreement*.

Restoration

- Develop and begin to implement a communication strategy that identifies key partnership successes, associated ecosystem improvements and areas where more effort is needed.
- Provide snapshots of outcome attainability under the *Chesapeake Bay Watershed Agreement* (e.g., which outcomes are likely to be met by the date(s) set by the partnership, which won't, and why) and options for communicating these snapshots to demonstrate progress in achieving our outcomes and the remaining work to be done, including gaps to be addressed.

Partnership

- Focus on moving beyond 2025 by seeking ways in which restoration can be relevant to all communities within the watershed.
- Assess the overall partnership to determine whether we are effectively hearing from and listening to all stakeholders and have systems of evaluation and decision-making to enable meaningful action and allocation of partnership resources.
Based on this assessment, develop recommendations for potential improvement.

As the Steering Committee commenced its work in 2023, it was recognized that additional challenges and emerging issues continued to arise since the 2022 Chesapeake Executive Council Charge was issued, and therefore should also be included and addressed in the response to the Chesapeake Executive

Council Charge. Together the Steering Committee members identified and prioritized their initial work around five topic areas, in order to capture the scope of the original Chesapeake Executive Council Charge and the breadth of new advancements in science, restoration and structure of the partnership. Thus, five Beyond 2025 Small Groups were established around Clean Water (CW), Climate (C), Healthy Watersheds (HW), People (P) and Shallow Water Habitats (SW). Extensive feedback, public input, analysis and synthesis of ideas, data, trends, best practices and lessons learned contributed to, and resulted in, five Considerations from each small group ([25 total Considerations](#)), categorized and abbreviated by CW1-5, C1-5, HW1-5, P1-5, and SW1-5 throughout this report and also found in *Part III: Source Materials*), and ultimately further synthesized by the Steering Committee to guide immediate next steps.

Concurrently, the Environmental Protection Agency Chesapeake Bay Program Office funded ERG, an independent consultant, to perform a [program evaluation](#) for the Steering Committee's consideration. ERG was tasked with answering three evaluation questions centered on program structure and effectiveness, stakeholder understanding and support, and outcome attainment. ERG reviewed key documents identified by the Steering Committee, held a series of group discussions across the Chesapeake Bay Program's organizational structure and performed an assessment of the *Chesapeake Bay Watershed Agreement's* 31 outcomes. The observations and conclusions outlined by the ERG Report are provided in Part III of this document (abbreviated through Findings 1-12 or ERG F1 – F12 and Considerations 1-11 or ERG C1 – C11) which further informed the Steering Committee's recommendations and synthesis of the Small Groups' Considerations, as demonstrated throughout this document.

This document seeks to succinctly capture the common themes that emerged throughout the Small Group Considerations, the ERG evaluation and Steering Committee discussions—organized under the Chesapeake Executive Council Charge's three subject areas of Science, Restoration and Partnership. In doing so, this report aims to identify the most relevant, pressing and impactful recommendations that will maximize benefits and results across the work of the Chesapeake Bay Program, while improving the way the partnership accomplishes its work.

Science

Rigorous science is the backbone of the Chesapeake Bay Program's restoration and conservation efforts. This scientific foundation informs policy decisions and strives to ensure resources are targeted in areas to accelerate progress. The partnership faces a number of existing and emerging challenges that require integration of new findings, fostering collaboration among researchers across the watershed and in different disciplines, and prioritizing areas where knowledge gaps exist. By remaining grounded in science, the Chesapeake Bay Program can ensure its future efforts are based on the most up-to-date knowledge.

1. Optimize monitoring, modeling, and analysis

Monitoring allows Chesapeake Bay Program partners to assess and evaluate progress from restoration and conservation efforts, while identifying gaps where more attention is needed in the future. **The Steering Committee recommends developing a long-term strategy to maintain the integrity of core monitoring networks and pursue opportunities for enhancements in monitoring.** (See [Enhancing the Chesapeake Bay Program Monitoring Networks](#)) Monitoring is critical for evaluating progress and

identifying challenges towards meeting the goals and outcomes of the 2014 *Chesapeake Bay Watershed Agreement*. However, monitoring is insufficient for many partnership outcomes, and a majority of the outcomes do not follow the SMART (specific, measurable, achievable, relevant and time-bound) criteria, lacking measurable qualities (ERG F11, *Monitoring Networks*). **The Steering Committee recommends that all updated outcomes have a clear target (i. e., measurable) for reporting and an existing monitoring plan (or coincident development of a fundable monitoring and analysis plan) to support assessment.** These factors are essential for ensuring a return on investment toward achieving a healthier Bay and watershed.

The Steering Committee recommends better utilizing our monitoring and assessment capacity, with increased emphasis towards characterizing watershed health at a local scale as well as for the entire basin (HW1). Characterizing watershed health at a local scale can enhance cooperation and coordination of monitoring across organizations, emphasize local priorities and environmental justice, and inform implementation efforts done at the local level while providing a more holistic understanding of watershed and Bay conditions (HW1; CW3). Additionally, there is a wealth of state, local and participatory monitoring data that may be used for learning, status and trends analyses, and model validation (CW3). **The Steering Committee recommends incorporating multiple lines of evidence in existing and new tools and models, or linking multiple models, to evaluate progress towards multiple goals** (CW1, SW2, HW5, STAC Climate). Incorporating various types of data (water quality monitoring, toxics and other emerging contaminants, living resources data, social science) into tools and models would address multiple Chesapeake Bay Program outcomes, strengthen the connectivity and offer a more complete picture of Chesapeake Bay and watershed health. **The Steering Committee also recommends modeling efforts integrate climate change projections to better understand changes across multiple indicators and inform strategic planning at the local and state level** (C1, C2, C3, C4; HW1; SW2).

2. Integrate existing and new science findings in decision making, resource allocation, and communication strategies.

The Steering Committee recommends adaptation to the latest scientific findings as well as improved communication on how these findings are integrated into decision making, resource allocation and management strategies. Many ongoing efforts within the partnership, like the CESR report, have identified emerging scientific data and insights. These insights offer opportunities to accelerate progress by, for example, incentivizing performance over counting practices (CW1; EC Charge), addressing nutrient imbalances, and prioritizing water quality attainment and living resource response in shallow and open waters, shifting focus away from solely the deepest portion of the Bay. Furthermore, and as detailed in the CESR report, the partnership will need to have an increasing emphasis on programs that control and minimize nonpoint sources of pollution to meet existing Watershed Implementation Plan targets, especially in agricultural and developed landscapes. By actively integrating these scientific findings into the Chesapeake Bay Program's decision-making, resource allocation and management strategies, the partnership can optimize its approach.

The Chesapeake Bay Program not only conducts cutting-edge research but also translates those findings into reports. Research should inform communication strategies that connect the health of the Bay to the well-being of people (P2). The Chesapeake Bay Program could more effectively link the partnership's

work to the tangible benefits it provides for people around topics such as soil health, ecosystem services and shallow water habitats to inspire broader engagement and action (C5, C4; SW4).

The Chesapeake Bay Program's data, scientific findings and reports are vast, so the **Steering Committee recommends improved access to information and cooperation among organizations to share data** (ERG F12, ERG C6; CW3; HW1). This includes creating an accessible data repository and fostering better coordination among monitoring programs at all levels. [ChesapeakeData](#) could support this need by serving as a central point of access to data resources and decision-support tools to promote collaboration and data sharing across multiple agencies and organizations.

3. Prioritize research that addresses knowledge gaps in existing and emerging challenges.

The **Steering Committee recommends prioritizing climate science and research on land use change** (EC Charge) **to enhance the partnership's understanding of these anticipated changes, and how conservation practices may respond.** Climate change and development is rapidly and significantly altering the Chesapeake Bay and its watershed. This requires a holistic biophysical and social science approach to better understand the interaction of these issues together and with other factors. The partnership should consider the impacts of rising temperatures on ecosystem health (STAC Climate), the role and design of nature-based solutions and green infrastructure to mitigate the impacts of climate change (C3, C4; Climate Directive; HW2), the impacts of a changing climate on restoration practices (CW2; SW1), vulnerability assessments for living resources, habitats and communities (C2; SW3), and synthesizing resilience strategies that maximize ecosystem services and benefits (C3).

The Steering Committee also recommends a greater focus on conducting social science research and applying its findings to ensure restoration and conservation efforts align with the well-being of people (ERG F8, C7). **Social science comprises a broad field of scientific study related to people and social relationships** (P5). Prioritizing the understanding of people's values and motivations can help ensure equitable inclusion of all communities in restoration and conservation efforts (CW1).

The Chesapeake Bay Program's capacity on climate and social science is constrained by limited personnel and funding. The partnership can enhance its knowledge and improve decision-making by expanding the Chesapeake Bay Program's climate science support team, continually engaging a diverse panel of social scientists who are actively working with communities, and dedicating resources for the strategic application of these topics (ERG C7; C1, C4; P5). By investing in these areas, the partnership can bridge the gap between knowledge and action.

Restoration and Conservation

Since its inception, the Chesapeake Bay Program has worked to restore the Bay and its living resources by addressing water quality concerns. However, a changing climate and a growing human population in the watershed have challenged the partnership's progress. The Bay of the future will be different from the Bay of the past and these changing conditions will make it more difficult to reach our goals (CESR). A holistic restoration approach continues to be necessary and is increasingly important in the context of emerging challenges. Working strategically to improve the Chesapeake Bay Program's holistic approach to restoration and conservation will help ensure our collective efforts are resilient and have the intended benefits for the Bay, as well as the watershed's ecosystems and communities.

1. Support system-scale conservation and restoration planning and implementation for habitats and communities.

Given the land use pressures associated with a growing population, **the Steering Committee recommends that the Chesapeake Bay Program elevate Conservation as a key guiding pillar alongside Science, Restoration and Partnership (HW 4).** To increase the impact of our work, we should broaden our vision of restoration to include conservation and stewardship of our natural and cultural resources. Protecting our natural and cultural resources (including lands, waterways and wildlife) from the impacts of development and other land use transitions can help protect investments made to restore water quality and natural habitats and improve quality of life in our communities. Conservation and stewardship of land and aquatic environments can support watershed health, expand and enhance publicly accessible natural areas and ensure the resilience of ecosystems that provide clean water, store carbon and provide numerous other ecosystem service and socio-economic benefits to local communities (C3, HW4). The partnership should identify mechanisms to further integrate conservation and stewardship throughout the Chesapeake Bay Program, importantly with regard to forest and wetland habitats.

In addition to sustaining ecosystem-wide management, and as explored in CESR, **the Steering Committee recommends planning for the restoration and conservation of nearshore habitats, inclusive of tributary rivers and streams—some of the most important places for people and the most productive habitats for living resources (CESR, P2, SW1).** Emphasizing the social, economic and ecological benefits of restored, resilient and connected shallow water habitats would strengthen the connection between people and habitats and promote proactive approaches to climate adaptation (C4; SW1, SW4). In urban areas, this may require intentional efforts to reestablish habitats and reconnect population centers with local waterways. However, it is essential to understand and plan for the changes these habitats will undergo due to climate change, including rising temperatures and water levels, to develop strategies to address vulnerabilities and sustain ecosystem function (C1, C4).

2. Review and, where necessary, revise existing goals, outcomes and management strategies to more effectively guide the partnership’s restoration and conservation efforts beyond 2025.

The partnership should apply recent science and lessons learned through the Strategy Review System to identify the ongoing and emerging challenges impacting our success and consider if goals and outcomes need to be modified to better account for emerging challenges. **The Steering Committee recommends reviewing and adapting the partnership’s portfolio of outcomes as needed to be more compatible with anticipated future landscape conditions, accounting for climate, population growth and projected land use change (C1; SW1, SW2).** In some cases, new or refined management strategies could be developed for existing goals and outcomes to address emerging challenges (C3, C4, C5).

The Steering Committee recommends streamlining goals and outcomes, as well as overall partnership structure, to improve the integration, efficacy and efficiency of restoration and conservation efforts. This could be done by reducing the number of medium- or long-term outcomes to better focus efforts (ERG C2) or by modifying and consolidating interconnected goals and outcomes to achieve greater collaboration, integration and efficiency (ERG C4; HW1, HW2, HW5). For goals and outcomes maintained in an amended agreement, time horizons and targets should be modified for off-track outcomes, including exploring a phased implementation of the Chesapeake Bay Total Maximum Daily Load (CW2). Some foundational off-track outcomes, like forest buffers, tree canopy and wetlands, will require new

management strategies and continued prioritization to accelerate progress. For outcomes that have been achieved, strategies should be developed to ensure continued success, new targets should be identified where appropriate, and any amendments should ensure restoration priorities reflect the needs of the public (P2).

3. Improve the partnership's holistic approach to planning, prioritization, progress-tracking and accountability.

Adopting a more holistic approach to address emerging challenges requires a strategic approach both before and after restoration and conservation practices are implemented on the ground. More strategic planning and prioritization could optimize the impact of our restoration and conservation investments and enable leveraging new funding sources. **The Steering Committee recommends developing and adopting approaches to better incentivize practices that maximize benefits to living resources and people.** Many water quality conservation practices can also deliver ecosystem service benefits for climate mitigation, ecosystem adaptation, community resilience, regenerative food systems, environmental justice and more, but only if their implementation is prioritized and targeted to effectively address local environmental and community concerns (C2, C3, C4, C5; CW5; SW 1, SW2, SW3, SW5). At the same time, a more holistic approach can facilitate evaluating tradeoffs between multiple objectives when needed (C3, SW2).

The Steering Committee recommends enhancing the local benefits of Chesapeake restoration and conservation by improving alignment of regional, state and local, plans and priorities (CW2, CW5).

Improving collaboration with networks of local partners and planners would facilitate both the development of restoration and conservation approaches that align with community priorities and where appropriate, the incorporation of watershed actions into local and tributary planning processes (HW2, SW3). Local engagement that seeks to understand local priorities would further increase outcome achievement by shaping restoration and conservation approaches that are co-designed with communities and reflect the local context, including current environmental and socioeconomic conditions and needs (P5, SW3).

The Steering Committee recommends improving progress-tracking and accountability to further support efforts to adaptively manage, to better target and prioritize resources and to provide technical assistance and communication of outcomes. The partnership should evaluate lessons learned through the Strategy Review System, identify effective approaches for improving progress-tracking and accountability, and provide supplementary federal funding as needed to support any additional monitoring or reporting requirements. This could include developing a tiered or phased implementation approach for meeting tidal water quality standards, assisting with data-driven decision-making and targeting lagging outcomes and critical or vulnerable habitats (CW2 CW4; HW1; SW1, SW3). The Water Quality Accountability Framework could also be revised to increase emphasis on measured outcomes and to incentivize innovative approaches to address stressors and target nonpoint sources of pollution (CW1). Shifting to a more transparent, multi-objective accountability system based on measured outcomes could better track a wider range of efforts supporting partnership goals (CW4, HW5, SW2, SW5) and enable improved outcomes under conditions of uncertainty (C1).

Partnership

The Chesapeake Bay Program is a long-standing regional partnership between states, federal agencies and other partners that guides the restoration and protection of the nation's largest estuary. The partnership is focused on moving beyond 2025 by adaptively managing how we work together and by seeking new ways in which restoration and conservation can be relevant to more communities within the watershed. To meet these ambitious goals and produce lasting results, the partnership needs to modify its governance and structure, utilize a partnership of network strategy for capacity building, broaden the scope of involved communities and improve communications and transparency.

1. Adopt an approach to streamline governance and structure.

The Steering Committee recommends that the partnership contract an independent party to help review and revise the Chesapeake Bay Program's governance and structure to improve efficacy, transparency and collaboration. With the support of an independent systems expert, the partnership can create an updated logic model that works backward from the goals and outcomes to their corresponding actions, thereby incorporating a theory of change to inform linkages between actions and goals and outcomes (P1; ERG C1). The partnership should also seek to simplify its complexity (ERG C3, ERG C4), and should consider cross-program coordination, cooperation and transparency to streamline logistics, increase knowledge sharing and eliminate silos (ERG C1, ERG C2). Additionally, strong internal collaboration and communication within jurisdictions can increase cross-program coordination, and in turn, create synergies and increased innovation. This reevaluation should also adequately balance product and process, ensuring that both are equitable.

The Steering Committee recommends the partnership revisit its adaptive management principles to better enable efficient and effective decision-making. To increase confidence and transparency in decision-making, the Chesapeake Bay Program can improve engagement with the Advisory Committees, as well as relevant leaders and subject matter experts accountable to their signatory for each Goal area, ensuring that all outcomes have decision-makers at the table (ERG C5).

The partnership should evaluate the successes of the Strategy Review System and strengthen its areas of need. The Strategy Review System is the Chesapeake Bay Program's adaptive management framework used to track progress towards meeting each of the outcomes in the *Chesapeake Bay Watershed Agreement* and to adjust course where needed (ERG C6, ERG C7; P1). The Strategy Review System needs to be more adaptive, embracing its role within the partnership's theory of change and logic model. The partnership should strategically apply relevant expertise at the Management Board and allow for flexibility within the framework. As part of the Strategy Review System, a clear process for assessing current and future vulnerabilities and changing conditions is necessary to provide the tools for adaptive planning (ERG C7; SW 3).

2. Enhance capacity building and administrative/technical assistance through local networks.

The Steering Committee recommends enhancing the Chesapeake Bay Program's structure so it can better serve as a partnership of networks that connect local implementors with data, tools, resources and technical assistance that build capacity on a local scale. Developing a more holistic, locally engaged approach to restoration and conservation will require additional capacity across the partnership. Coordinated capacity building and technical assistance through local networks can help leverage resources and expertise to address emerging challenges and to more comprehensively and efficiently

drive implementation of practices that support the Chesapeake Bay Program's goals and outcomes (CW 3, CW4, CW5; HW1, HW3, HW 4; SW 3, SW5). The partnership could begin by supporting jurisdictions and other partners, including nonprofit organizations, in establishing and deepening collaborative relationships with strategic networks of local liaisons that provide administrative and technical expertise to on-the-ground partners (CW5, HW3). Through these local liaison networks, federal and state partners can connect local implementors and decision-makers with interdisciplinary tools, data and other resources that drive conservation and restoration action (HW3, HW4; ERG C6). Partnership with these networks can also be leveraged to create feedback loops for sharing bottom-up insights that support learning from the local level (P2, P4). Long-term, the partnership should identify opportunities to resource strategic networks for sustained partnerships that create durable impact (P4; HW4).

3. Strengthen the Chesapeake Bay Program's capacity to ensure watershed restoration is relevant to all communities.

The Chesapeake Bay Program should commit to inclusive and meaningful engagement of people and communities that have been historically underrepresented, under resourced and underserved. The partnership should increase the number of historically excluded communities involved, collaborate with these communities to create varied and meaningful pathways for participation and increase the quality and authenticity of community engagement. This includes collaborating with the watershed's Indigenous communities to developing pathways for increased involvement in the Chesapeake Bay Program (ERG C10). In creating these pathways, the partnership should ensure engagement is a benefit not just for the Chesapeake Bay Program, but for the communities and groups engaged, and that information exchange is emphasized over information extraction.

The Steering Committee recommends, in response to the Chesapeake Executive Council [statement in support of diversity, equity, inclusion and justice](#), that the partnership institutionalize and actualize the Chesapeake Bay Program's [Diversity, Equity, Inclusion and Justice Implementation Plan](#). The diversity of the partnership should reflect the diversity of the watershed it is working to conserve and restore. The partnership should begin by assessing barriers to activating and implementing the existing DEIJ Implementation Plan. Once these considerations are accounted for, the partnership should incorporate DEIJ into the Chesapeake Bay Program's foundation via the DEIJ Implementation Plan. This will require the necessary capacity and financial resources for effective and sustained implementation of the plan, including working alongside and through trusted sources and ensuring the necessary staffing resources are in place (C2; P2, P3). As new programs, structures or priorities are formed, ensure that the commitments of the DEIJ Implementation Plan are incorporated through all relevant areas of the partnership's efforts, not limited to the Diversity Workgroup.

4. Enhance communications and transparency to foster long-term success.

The Steering Committee recommends prioritizing and improving communications and transparency to spur stewardship, drive restoration and conservation momentum and ensure long-term Chesapeake Bay Program efficacy. The partnership should continue to strengthen relationships between people and ecosystems by regularly communicating key partnership successes, associated ecosystem improvements and socio-economic benefits garnered from achieving *Chesapeake Bay Watershed Agreement* goals (ERG C5, ERG C6; SW4). This includes identifying key audiences and understanding local priorities, needs and challenges (P5) before identifying how and when the partnership wants to engage with these constituencies. Partners can also better facilitate information exchange by expanding state and federal

agency communications staff, engaging more deeply with the Chesapeake Bay Program's Advisory Committees and, as appropriate, utilizing coordinated, tailorable communications to amplify impact throughout the entire watershed. All levels of the partnership should enhance pathways for local networks, Advisory Committees and others to provide feedback on science and policy development to ensure that the Chesapeake Bay Program is effectively hearing from and listening to stakeholders. The partnership should strengthen its commitment to transparency both externally, particularly for stakeholders that have historically been excluded from the Chesapeake Bay Program because of overly complex systems and processes, and internally by relying on proven social science best practices and processes in decision-making, fostering a collaborative organizational culture that includes diverse voices (ERG C5, ERG C7; P5).

Part III: Source Materials

The below materials are listed in alphabetical order and can be found at <https://www.chesapeakebay.net/who/group/beyond-2025-steering-committee>. Abbreviations below some of the source materials correspond to how they are referenced throughout the document.

1. 2014 Chesapeake Bay Watershed Agreement: <https://www.chesapeakebay.net/what/what-guides-us/watershed-agreement>
2. Achieving Water Quality Goals in the Chesapeake Bay: A Comprehensive Evaluation of System Response (CESR): <https://www.chesapeake.org/stac/cesr/> (CESR)
3. Advancing Monitoring Approaches to Enhance Tidal Chesapeake Bay Habitat Assessment: <https://www.chesapeake.org/stac/document-library/enhancing-the-chesapeake-bay-program-monitoring-networks-a-report-to-the-principals-staff-committee/>
4. Beyond 2025 Small Group Findings and Considerations: https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/Beyond-2025-Small-Group-Findings-and-Considerations_FINAL.pdf
5. Cafe Summaries and Report Products from the Chesapeake Bay Program Strategy Review System's 3rd Cycle Biennial Meeting: <https://www.chesapeakebay.net/what/event/chesapeake-bay-program-srs-biennial-meeting>
6. Charting a Course to 2025: <https://www.chesapeakebay.net/what/publications/charting-a-course-to-2025>
7. Chesapeake 2000: https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/cbp_12081.pdf
8. Chesapeake Bay Program Beyond 2025 Evaluation: <https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/CBP-Beyond2025-Final-Report-for-SC-06-18-24.pdf> (ERG)
9. Chesapeake Bay Program Partnership Executive Council Charge to the Principals' Staff Committee: Charting a Course to 2025 and Beyond https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/EC-Charge-to-PSC_2025-Beyond_FINAL_2023-02-03-190848_hhec.pdf (EC Charge)
10. Chesapeake Executive Council Directive No. 21-1 Collective Action for Climate Change https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/climatedirective_final_3.pdf (Climate Directive)

11. *Chesapeake Governance Study: Report of 2021 Decision-Maker Interview Results:*
<https://digitalcommons.dartmouth.edu/facoa/4314/>
12. *Enhancing Chesapeake Bay Program Activities by Integrating Social Science:*
https://cbtrust.org/wp-content/uploads/UMCES_Social_Science_Final_Report_w_Apps_2.7.23.pdf
13. *Enhancing Chesapeake Bay Program Monitoring Networks:*
https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/Enhancing_the_Chesapeake_Bay_Program_Monitoring_Networks_A-Report_to_the_Principals_Staff_Committee.pdf
(Monitoring Networks)
14. *Governance and Management Framework for the Chesapeake Bay Program:*
<https://www.chesapeakebay.net/what/publications/chesapeake-bay-program-governance-document>
15. *Linking Soil and Watershed Health to In-Field and Edge-of-Field Water Management:*
<https://www.chesapeake.org/stac/document-library/linking-soil-and-watershed-health-to-in-field-and-edge-of-field-water-management/>
16. *Recognizing Political Influences in Participatory Socio-Ecological Systems Modeling:*
<https://sesmo.org/article/view/18509/18038>
17. *Retrospective on Lessons Learned from the Chesapeake Bay Program Strategy Review System's 3rd Cycle with Suggested Adaptations to Address Issues:*
https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/2.-Read-Ahead-Retrospective-on-Lessons-Learned-from-the-CBP-SRS's-3rd-Cycle_5.5.23_2023-05-09-175030_ddta.pdf
18. *Rising Watershed and Bay Water Temperatures: Ecological Implications and Management Responses:* <https://www.chesapeake.org/stac/document-library/rising-watershed-and-bay-water-temperatures-ecological-implications-and-management-responses/>
(STAC Climate)
19. *Using Ecosystem Services to Increase Progress Toward, and Quantify the Results of, Multiple Chesapeake Bay Program Outcomes:* <https://www.chesapeake.org/stac/document-library/using-ecosystem-services-to-increase-progress-toward-and-quantify-the-benefits-of-multiple-cbp-outcomes/>
20. *Using Local Monitoring Results to Inform the Chesapeake Bay Program's Watershed Model:*
<https://www.chesapeake.org/stac/document-library/22313/>