



Chesapeake Bay Program
SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEE
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December 10, 2024

Hon. Wes Moore, Governor of Maryland, Chair
Chesapeake Bay Partnership Executive Council
100 State Circle
Annapolis, MD 21401

Dear Governor Moore and Distinguished Members of the Executive Council,

The Chesapeake Bay Program (CBP) Scientific and Technical Advisory Committee (STAC) supports the CBP's commitment to advancing science-based decision-making by coordinating a range of collaborative efforts to guide established priorities and characterize emerging concerns. Our members from 35 institutions across the Bay watershed contributed nearly 3000 hours in 2024, valued at more than \$300,000.

STAC plays a vital role in the partnership's commitment to developing evidence-based policy and implementing effective management through tools such as technical reviews, workshops that convene scientific experts and stakeholders, and synthesis projects. Over the past year, STAC has sponsored one workshop, published six reports, participated on numerous CBP committees, and held four regular quarterly meetings that engaged both internal and external scientific experts in wide-ranging discussions on science supporting Chesapeake Bay restoration. The workshop reports published in the past year have addressed critical emerging issues with important implications for achieving the Bay watershed agreement goals, as well as human health and social and economic well-being. A full list of STAC's activities and products from this past year is provided as an attachment to this letter.

STAC also participated actively in the CBP Beyond 2025 effort and is satisfied that our recommendations and opinions were considered and incorporated appropriately in the final Beyond 2025 Report. We appreciate the attention given to the 2023 STAC Comprehensive Evaluation of System Response (CESR) Report during Beyond 2025 deliberations.

Looking forward to 2025, a pivotal year for the Partnership, STAC offers the following five primary recommendations as the program works on Beyond 2025 Phase 2 and considers the future:

1. **The Partnership should integrate public perspectives and participation to the greatest extent possible.** Without the full consent, support, and participation of the public, restoration of Chesapeake Bay and its watershed will always be an uphill battle. There are several ways in which public engagement can be further enhanced, most of which already exist. One is through greater engagement between CBP management and the CBP Advisory Committees, especially those representing local governments, stakeholders, and the agricultural community. STAC already enjoys an effective working relationship with the CBP due to its historic emphasis on natural science and environmental technology, but it has also established a new Social Science standing workgroup to explore specific ways in which social science expertise can be brought to bear on restoration efforts in the Bay watershed.
2. **The Partnership should articulate engagement opportunities with the advisory committees.** Building on the momentum started earlier this year, the Stakeholders' Committee recommends that

the Principals' Staff Committee (PSC) begin 2025 by releasing a statement on the Advisory Committees. Such a statement could affirm the unique role of each individual Advisory Committee, highlight opportunities for collaboration with the full partnership, clarify the duties of the Advisory Committee Chairs as non-voting members of the Management Board (MB) and PSC, and document plans for deeper collaboration.

3. **Likely climate change impacts can and should be built into all CBP planning and implementation efforts.** Climate change will impact many, if not most, CBP goals and outcomes in interconnected ways that have yet to be fully identified or explored. Several recent STAC workshops and reports have considered likely climate change impacts and made recommendations for mitigation and adaptation. Consideration of climate response may actually accelerate achievement of some CBP outcomes. STAC is prepared to help identify and prioritize climate change impacts and responses. .
4. **The Partnership should elevate the importance of living resources in its program goals.** Conservation and restoration of living resources throughout the Bay and its watershed are often among the highest priorities for the public. While water quality is an important prerequisite for improved living resource habitat, achieving water quality goals does not guarantee living resource restoration. The quality of shallow water habitat is particularly important for many species of concern, for example. A locally focused and holistic approach to prioritizing living resource conservation and restoration is needed, including clear articulation of desired outcomes and metrics.
5. **The Partnership should expand its capacity for flexible responses to changing conditions and improved understanding, embracing adaptive management approaches at multiple program levels to improve the CBP's capacity to learn while doing.** STAC believes that the CBP Strategy Review System (SRS) can serve as a basis for this expansion through revision, re-organization, and re-evaluation on a regular basis, assessing not only the capacity to address current outcomes but also whether the outcomes themselves need reassessing or revising.

STAC thanks the partnership for its ongoing commitment to using scientific evidence to design and implement effective management of this valuable ecosystem and its watershed. STAC looks forward to working with the Executive Council and the rest of the partnership to continue to apply sound, independent science to effectively restore and conserve Chesapeake Bay and its watershed for the benefit of its myriad stakeholders.

Sincerely yours,



Lawrence P. Sanford, Ph.D.

Chair, Chesapeake Bay Program's Scientific and Technical Advisory Committee

Attachment

Summary of STAC Activities June 2023- June 2024

STAC-sponsored Scientific and Technical Workshops (1)

- Chesapeake Bay Program Climate Change Modeling III: Post-2025 decisions

Planned Activities June 2024 – June 2025

STAC-sponsored Scientific and Technical Workshops (4)

- Striped Bass Survey Assessment and Habitat Connections
- Blueprint for Building Partnerships and Recommendations for Scaling Brook Trout Restoration in Stronghold and Persistent Patches
- Identifying Natural and Social Sciences Gaps to Support Market-Based Approaches to Chesapeake Bay Watershed Restoration
- Leveraging Artificial Intelligence and Machine Learning to Advance Chesapeake Bay Research and Management: A Review of Status, Challenges, and Opportunities

Reports Published by STAC June 2023 – July 2024 (6)

Links to reports are available on STAC's website at chesapeake.org/stac.

- *Using Carbon to Achieve Chesapeake Bay (and Watershed) Water Quality Goals and Climate Resiliency: The Science, Gaps, Implementation Activities and Opportunities*
- *Evaluating an Improved Systems Approach to Crediting: Consideration of Wetland Ecosystem Services*
- *Best Management Practices to Minimize Impacts of Solar Farms on Landscape Hydrology and Water Quality*
- *Using Local Monitoring Results to Inform the Chesapeake Bay Program's Watershed Model*
- *Using Ecosystem Services to Increase Progress Toward, and Quantify the Benefits of Multiple CBP Outcomes*
- *The State of the Science and Practice of Stream Restoration in the Chesapeake: Lessons Learned to Inform Better Implementation, Assessment, and Outcomes*