Chesapeake Bay Program
SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEE
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Dear Principal's Staff Committee Members,

In its role as advisory body to the leadership of the Chesapeake Bay Partnership, the Science and Technical Advisory Committee (STAC) respectfully offers the following comments on the draft Beyond 2025 report. We do so before your official review of the report, to highlight the fundamental insights STAC has already offered in its Comprehensive Evaluation of System Response (CESR). We do so in the spirit of ensuring that the Beyond 2025 report recognizes the challenges and opportunities called for in CESR so that the partnership can take full advantage of findings for improving the Bay program's effectiveness included in that report. We understand that a process broad engagement was used to produce the Beyond 2025 report and we recognize that the draft report acknowledges CESR by listing some of its findings within the list of 2025 potential actions. This letter lifts out and summarizes key CESR findings for your attention.

As the CESR report notes, Bay regulatory programs, voluntary programs and funding approaches before and after the TMDL have made improvements in water quality. However, the collective evidence clearly indicates that the current program designs will not result in meeting the water quality goals of the TMDL, especially in the face of the headwinds of significant population growth, land use change, agricultural intensification and climate change. STAC believes that if the challenges ahead are clearly stated and understood, that understanding will inspire commitment to necessary change. To be certain that the draft Beyond 2025 Report meets the original charge of the Executive Committee to the PSC in "recommending a critical path forward that prioritizes and outlines the next steps for meeting the goals and outcomes of the *Watershed Agreement* leading up to and beyond 2025" we offer our summary of the three most foundational challenges in CESR with their attendant risk of insufficient action. We further suggest an addition to the draft Beyond 2025 report that would both acknowledge remaining challenges and provide a more balanced view of the road ahead, without requiring extensive editing.

Recognize and respond to the challenges of generating enough pollutant reductions from non-point sources to meet Bay water quality goals. While significant progress has been made in reducing nutrients from point sources and atmospheric sources, meeting the TMDL goal now depends largely on reducing pollutants carried by agricultural and urban runoff. CESR deems that existing programs have not, and likely cannot, generate the scale of change needed to meet the TMDL. The Beyond 2025 report acknowledges the actions presented in CESR to accelerate progress (e.g., incentivizing pollutant removal performance, targeting conservation investments) but fails to emphasize the importance of making these fundamental changes to program delivery. According to the most recent CBP model estimates, we have reduced nitrogen loads by only a few million pounds over the past 15 years, compared to our goal of over 40 million pounds. If we

want to significantly accelerate our progress, substantive programmatic and policy changes must be designed and then implemented.

Increase management attention on living resources. CESR discussed how we can improve the "living resources return" on water quality investments. First, instead of monitoring and reporting only levels of nitrogen, phosphorus, and dissolved oxygen, we should monitor and report what really matters to people: the capacity of the bay to support an abundance of living creatures. Second, we need to prioritize areas that can provide the biggest boost to living resources, like focusing on shallow waters that are crucial for many species. Without attention to those things that matter the most to people, we run the risk of leaving potential living resource benefits "on the table" and losing public support for our efforts. Third, consider tiered implementation of the TMDL. While progress is being made to reduce the size and severity of low oxygen conditions (hypoxic zone), full attainment of the Bay water quality standards, especially in the deep channel, is going to take time and resources that only will become available over many years. A path to meeting the TMDL would prioritize an implementation strategy that makes load reductions in places that will offer the greatest near-term support for living resource abundance. CESR calls this a "tiered implementation of the TMDL". STAC endorses the concept of a tiered implementation of the TMDL as the pathway to maximize living resource abundance on this long journey. Interim targets would prioritize water quality investments where they make the most difference to living resource response, allowing us to focus efforts, achieve results, demonstrate progress, and do the necessary learning in the face of uncertainty in a changing physical environment that is markedly different than the one assumed when the goals were originally conceived. STAC recognizes that this will require a strong commitment and level of effort but believes that many of the necessary tools are already in place.

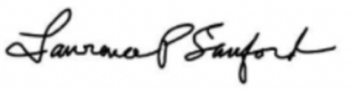
Confront what we do not fully understand and improve the partnership's ability to "learn while doing". STAC feels that to continue to improve, the CBP needs to more explicitly acknowledge the critical uncertainties in our decision-making. Critical uncertainties are those gaps in understanding that, if addressed and resolved, would potentially change our management actions. While the Chesapeake Bay is one of the best- studied estuaries in the world, there are many examples of what we don't know or are not completely certain about. For example, phosphorus pollution is increasing in many areas where reductions were expected, and we do not fully understand how people are using nutrients across the landscape. Thus, we may be mischaracterizing the effectiveness of our management approaches. The current accountability framework that is based on counting practices, not outcomes, obscures these issues and leads to a false sense of confidence. To be successful, a commitment to improving the partnership's capacity to learn while doing is central, else we doom ourselves to follow the path of continued slow and incremental change rather than implementing measures that will accelerate progress toward our goals. Amending and/or revising our accountability framework will require significant commitment and programmatic change.

Acknowledging these three foundational challenges, and others like them, will require significant modification of the draft Beyond 2025 report. The current draft report does not include clear statements about remaining challenges, resulting in a (perhaps unintentional) positively biased assessment of the status of the Bay restoration effort. STAC recommends a straightforward addition to the report that would address this problem. Specifically, pages 5 and 6 of the report contain a section entitled "Recognizing our progress toward meeting the Chesapeake Bay

Watershed Agreement". If this section were to be either expanded to include remaining challenges, or immediately followed by a separate section addressing remaining challenges, it would both provide a place to address the concerns we have raised here and present a more balanced view of the Bay Program's path beyond 2025.

Thank you for the opportunity to advise. STAC will continue to offer review and commentary on the draft Beyond 2025 Report as public feedback is made available, and we remain in service as an independent advisory committee to the Executive Committee, Principal's Staff Committee, and Management Board.

Respectfully representing the STAC,



Larry Sanford
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