2025 WATERSHED IMPLEMENTATION PLANS (WIP)

WATER QUALITY GOAL IMPLEMENTATION TEAM (GIT3)

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

2025 WIP OUTCOME: By 2025, have all practices and controls installed to achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll a standards as articulated in the Chesapeake Bay TMDL document.

WATER QUALITY GOAL: Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.

OUTCOME DISPOSITION ADVICE TO MANAGEMENT BOARD: UPDATE

The Water Quality Goal Implementation Team recommends updating the "2025 Watershed Implementation Plan" outcome to reflect the continued commitment across the Chesapeake Bay Program partnership to implement practices and systems to reduce nutrients and sediment to meet the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation, and chlorophyll-*a* standards. Achieving these water quality standards supports living resources and protects communities in the Chesapeake Bay. Thus, the ultimate measure of success for this outcome is to meet and maintain the water quality standards established by the jurisdictions. WQGIT partners seek balance in measuring and communicating nutrient and sediment reductions and water quality progress across the entire watershed and the Bay (land and water) by using both modeling and monitoring data. Therefore, the WQGIT and STAR recommend a collaboration in this outcome to consider adding monitoring and assessment *outputs* for nitrogen, phosphorus and sediment to measure progress toward attaining water quality standards to create a holistic outcome using multiple lines of evidence to measure progress. Using data and trends from both monitoring and modeling tools will improve how the partnership communicates improvements in water quality across the watershed and the surrounding ecosystems. **The WQGIT also recommends renaming this outcome** to recognize either the focus of tracking (BMP implementation), or, that the measure of success is change in nutrient/sediment loads or, ultimately, water quality. Suggestions include, but are not limited to, "nutrients and sediment outcome" or "nutrients and sediment reduction outcome."

This outcome to take actions to improve water quality and reduce and eliminate the impact of excess nutrients and sediment to the Bay, has always been a pillar of the Bay Program. The preamble to the Clean Water Goal explicitly recognizes the need to reduce nitrogen, phosphorus, and sediment to achieve the goals of healthy fisheries, habitats, and communities in the Chesapeake Bay. In addition, partners recognize the value that comes from this outcome to support large scale planning and tracking to drive adaptive management and resources, setting clear goals for our partners, using a common framework, timeline, and tools to measure progress, and providing accountability to meet our shared goals.

Setting ambitious goals for water quality, combined with legislative funding and programmatic efforts by the Bay Program partners, has led to accelerated implementation efforts in the Chesapeake Bay watershed, even if progress was not on pace to meet all of the water quality goals by 2025. The partnership should continue to challenge ourselves and set targets that accelerate implementation and will result in measurable water quality and ecosystem improvements. The Chesapeake Bay Program partnership should set realistic incremental check points to measure progress and improve collaboration across outcomes to encourage multiple outcome benefits when setting implementation priorities.

There are numerous challenges to address when implementing practices and controls to observe water

quality improvements. Funding and technical assistance remains an ongoing need to continue to accelerate implementation to reduce nutrient and sediment loads. Landowner permission and maintenance are critical to access both new and existing areas sufficient to improve water quality. Additional science and learning are needed to understand the response gap between implementation and observed water quality changes. For example, the new TMDL Indicator and METRIC tool help identify watersheds where anticipated water quality results are observed and where anticipated results are not observed. Based on the Phase III WIPs, jurisdictions are predominantly relying on reductions in loads from the agriculture and urban/suburban source sectors. The Bay Program partnership identified a need to explore and support innovative ideas and support incorporation of jurisdiction-based programmatic and regulatory initiatives to address loads from nonpoint sources. Additional research and collaboration are needed to explore and recommend ideas, systems, or practices with the greatest potential to reduce loads from nonpoint sources. External factors will continue to influence nutrient and sediment loads at a systems scale, such as population growth/change, climate impacts, and fertilizer application rates. The CBP partnership will need to clearly communicate progress toward this outcome in the face of changing conditions in light of these numerous challenges.

Moving forward the WQGIT recommends an updated water quality outcome that balances modeling and monitoring data to measure and communicate progress; utilizes and builds on existing tools[1] to track and report progress; emphasizes conservation and protection in addition to restoration; explores and attempts to define a tiered implementation approach to demonstrate that progress is incremental over time; and ensures living resources are accounted for in measuring progress within the watershed.

Additional time will be needed to define all of the actions and outputs for this outcome as there is work underway in the CBP partnership that will inform the actions and outputs. This additional information is necessary to make this outcome SMART[2]. For example, the CBP partnership has agreed to the Phase 7 modeling update timelines for when to expect some of these work products. Outputs can be added, as this time sensitive work completes, to finalize updated planning targets using the final Phase 7 modeling tools, explore the concept of tiered implementation targets using the updated planning targets, continue to include mechanisms to account for conservation, and develop timelines and check points to demonstrate continuous improvement toward this outcome.

The WQGIT has considered possible options for new outcome language, not listed here due to space. We look forward to working with the Management Board on SMART outcome language that reflects the discussion above as the Management Board shift into Outcome Revisions.

[1] Tools include, but not limited to: CAST, the tidal and non-tidal monitoring networks, the jurisdictions' Integrated Reports, additional monitoring by jurisdictions and local partners,

[2] Specific, Measurable, Achievable, Realistic, and Timebound