



2025 WATERSHED IMPLEMENTATION PLANS (WIP) WATER QUALITY GOAL IMPLEMENTATION TEAM (GIT3)

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

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 & Consolidate**

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 meet the Bay’s dissolved oxygen, water clarity/submerged aquatic vegetation, and chlorophyll *a* standards to support living resources and protect communities in the Chesapeake Bay. 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 progress by using both modeling and monitoring data. Therefore, the WQGIT and STAR recommend a collaboration in this outcome by 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 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, “[BMP] implementation outcome” or “nutrients and sediment outcome” or “water quality 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

Commented [JH1]: Note to WQGIT: this is why we say “& consolidate” for now. We welcome input on this approach that was first raised at our January meeting.

will result in measurable water quality and ecosystem improvements. The CBP 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. 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 message progress toward this outcome in the face of changing conditions. Based on the Phase III WIPs, jurisdictions are predominantly relying on reductions in loads from the agriculture and urban/suburban source sectors. The CBP partnership identified a need for innovative ideas to address loads from nonpoint sources. Additional research and collaboration are needed to reduce loads from nonpoint sources.

Moving forward the WQGIT recommends an updated water quality outcome that balances modeling and monitoring data to measure and communicate progress; utilizes existing tools to track and report progress; emphasizes conservation and protection in addition to restoration; uses a tiered implementation approach to demonstrate that progress is incremental over time; and ensures living resources are accounted for in measuring progress by using tiered implementation targets.

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 these actions and outputs. This additional information is necessary to make this outcome SMART. The CBP partnership has approved the timelines for when to expect 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, creating tiered implementation targets using the updated planning targets, continuing to include mechanisms to account for conservation, and developing timelines and check points to demonstrate continuous improvement toward this outcome.

PROPOSED OUTCOME LANGUAGE to CONSIDER:

Option 1: Have practices and systems in place to achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll *a* standards.

Option 2: Have practices and systems in place using tiered implementation to reduce point and nonpoint sources of pollution to achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll *a* standards to protect, conserve, and restore the living resources of the Bay.

Option 3: Achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll *a* standards.

PROPOSED OUTPUTS to INCLUDE (this is not a full and complete list and timelines will be determined after new targets are finalized): Assess the effects of the management actions (trends in N, P, S) as compared to a 2025 baseline; Assess water quality criteria and report on progress in water quality standards as compared to a 2025 baseline; Assess implementation progress toward the latest planning targets to meet water quality standards as compared to a 2025 baseline;

Commented [JH2]: Note to WQGIT: we had space to offer these options and we don't seek a decision. The MB/PSC can determine their preferred direction and/or phrasing and we offer these as starting points.