



WATER QUALITY STANDARDS ATTAINMENT AND MONITORING (WQSAM) SCIENTIFIC, TECHNICAL ASSESSMENT AND REPORTING (STAR)

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

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.

WQSAM OUTCOME: Continually improve our capacity to monitor and assess the effects of the management actions being taken to implement the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) and improve water quality. Use monitoring results to report annual progress being made in attaining water quality standards and trends in reducing nutrients and sediment in the watershed.

OUTCOME DISPOSITION ADVICE TO MANAGEMENT BOARD:

Update

We propose for the WQSAM Outcome to be updated:

- The outcome language is neither quantitative nor SMART. “Continually improve,” makes it difficult to assess progress.
- It refers to activities (monitoring) and outputs (reports, trends) rather than ecosystem change.
- It does not address the attainment of water quality standards (WQS) as the ultimate endpoint.
- It does not closely align with the water quality goal text.

Challenges:

- In the near-term horizon, our fundamental water quality monitoring networks will face a detrimental loss in funding. ([See PSC Monitoring Report](#))
- The Chesapeake Bay Program (CBP) is unable to assess all WQS (i.e., dissolved oxygen, submerged aquatic vegetation, chlorophyll *a* criteria) in all segments due to current agreed-upon assessment methods.
- While there has been progress, the slow rate of water quality change in the Bay suggests that achievement of WQS is uncertain and remains in the distant future ([See CESR Report](#)).
- Nonpoint source programs are not generating enough pollutant reductions to meet Bay water quality goals ([See CESR Report](#)).

Opportunities:

- A more comprehensive assessment of water quality relative to other factors on living resource response. ([See CESR Report](#)). Jurisdictional managers and the public have stated they are interested in addressing water quality (e.g., bacteria, toxics, salt) to reflect the interests of people and their use of water resources ([Phase 1 Beyond 2025 process/Office Hours](#)).
- Leverage existing monitoring networks ([STAC](#)) and develop new partner supported assessment methods to understand progress in water quality goals.
- Align outcome language more with attaining WQS to represent improvement in water quality conditions while maintaining a focus on activities (i.e., monitoring, reporting) in [supporting documents](#).

Consider how the outcome relates or could relate to the Bay Agreement mission, vision, and themes/pillars and goals:

- Clean water is evident in the vision, themes, and goals of the 2014 Agreement. The Agreement emphasizes nutrient and sediment reductions to achieve healthy waters for animals and people. The current outcome language focuses only on the Bay TMDL and reduction in nitrogen, phosphorus, and sediment.

Consider the timescale for completing the outcome (5, 10, 15 years):

- The current outcome states to report progress annually. Partners advocated for reporting every two years or more to match required Integrated Reports and help show water quality changes.
- Ongoing monitoring and assessment of water quality is required in the future.

Consider resource needs to achieve the Outcome (high, medium, low):

- High: Current funding will only support CBP monitoring networks at present capacity and not priority needs for enhancement or keep pace with inflationary pressures. New resources will be needed to support the networks, address emerging networks, and prevent a significant contraction. In addition, analysis and reporting of CBP monitoring networks will require resources to continue understanding and communicating changes through time that support decision-making. Resource needs will increase if the monitoring and assessment efforts were to address a more comprehensive ecosystem response.

What value is added by having the Chesapeake Bay Program work on the outcome:

- Sustained and improved monitoring allows the CBP partners to assess and evaluate progress from restoration and conservation efforts, while identifying knowledge gaps.
- Analysis and synthesis of water quality data is essential to understanding and communicating attainment of water quality standards and trends in tidal and nontidal.
- Strengthens commitment to fund and use monitoring data alongside modeling information to support decision-making for the WIP Outcome.
- Coordination for a common monitoring and analysis framework to enhance data comparability and accuracy, improve efficiency and resource allocation, and improve science communication.
- Foster shared learning around monitoring and analysis. This collaboration empowers all partners to refine their strategies, maximize their impact, and participate in joint accountability.
- Achieving a healthy Bay is foundational for other Outcomes by supporting living resources, providing recreational opportunities, and contributing to community resilience.

Consider how the Outcome, as written, benefits the public:

- The monitoring activities and analysis outputs provide accountability for implementation efforts.
- Moving forward there are a few options to consider:
 - Directly connecting outcome language to attaining WQS
 - Comprehensive approach to assess water quality to connect more to living resources and people
 - Strengthen connection with Water Quality GIT and WIP Outcome, potentially combining the WQSAM and WIP Outcomes