Chesapeake Bay Watershed Technical Workgroup

WTWG SCOPE AND PURPOSE – WQGIT JANUARY 2023

CASSIE DAVIS, NYS DEC/WTWG CHAIR

Watershed *Technical* Workgroup

Definition of Technical:

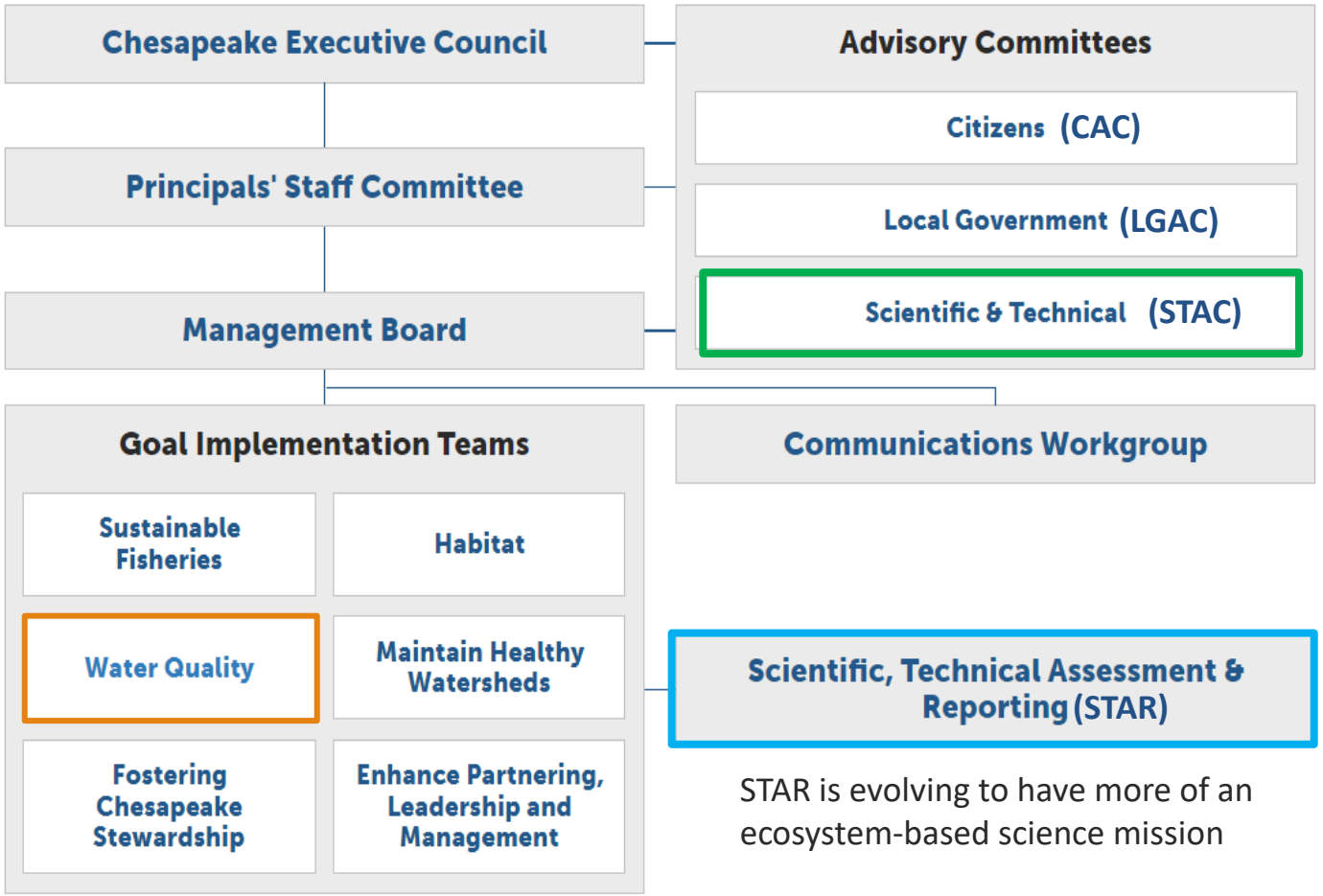
- "Having special and usually practical knowledge especially of a mechanical or scientific subject"

We typically do not assist with decisions that are related to:

- *Policy*
- *Management*
- *BMP Verification framework*

Where we fit in the Chesapeake Bay Program

Where we fit in the Chesapeake Bay Program with other technical groups



STAC provides scientific and technical guidance to the CBP by reviewing and recommending scientifically sound policy, programs and research.

STAR supports the CBP's goal implementation teams (GITS) by providing them with technical support such as GIS data, modeling and monitoring data, information management and web support.

STAR is evolving to have more of an ecosystem-based science mission

Frequently Asked Questions – STAC (chesapeake.org)

Scope and Purpose

The charge of the cross-sector Watershed Technical Workgroup is to provide a forum for communication and discussion between and among the jurisdictions and other CBP participants on technical issues related to Best Management Practices (BMPs), Chesapeake Bay Watershed Model processes, and management strategy development and implementation reporting.

Functions include: *(next 6 slides)*

Proposed updates in red

Scope and Purpose

Functions include:

- Support the Water Quality Goal Implementation Team (WQGIT) and the greater Bay Program partners in implementing management strategies to achieve the nutrient and sediment reductions necessary to restore the Bay.

"implementing management strategies" may include:

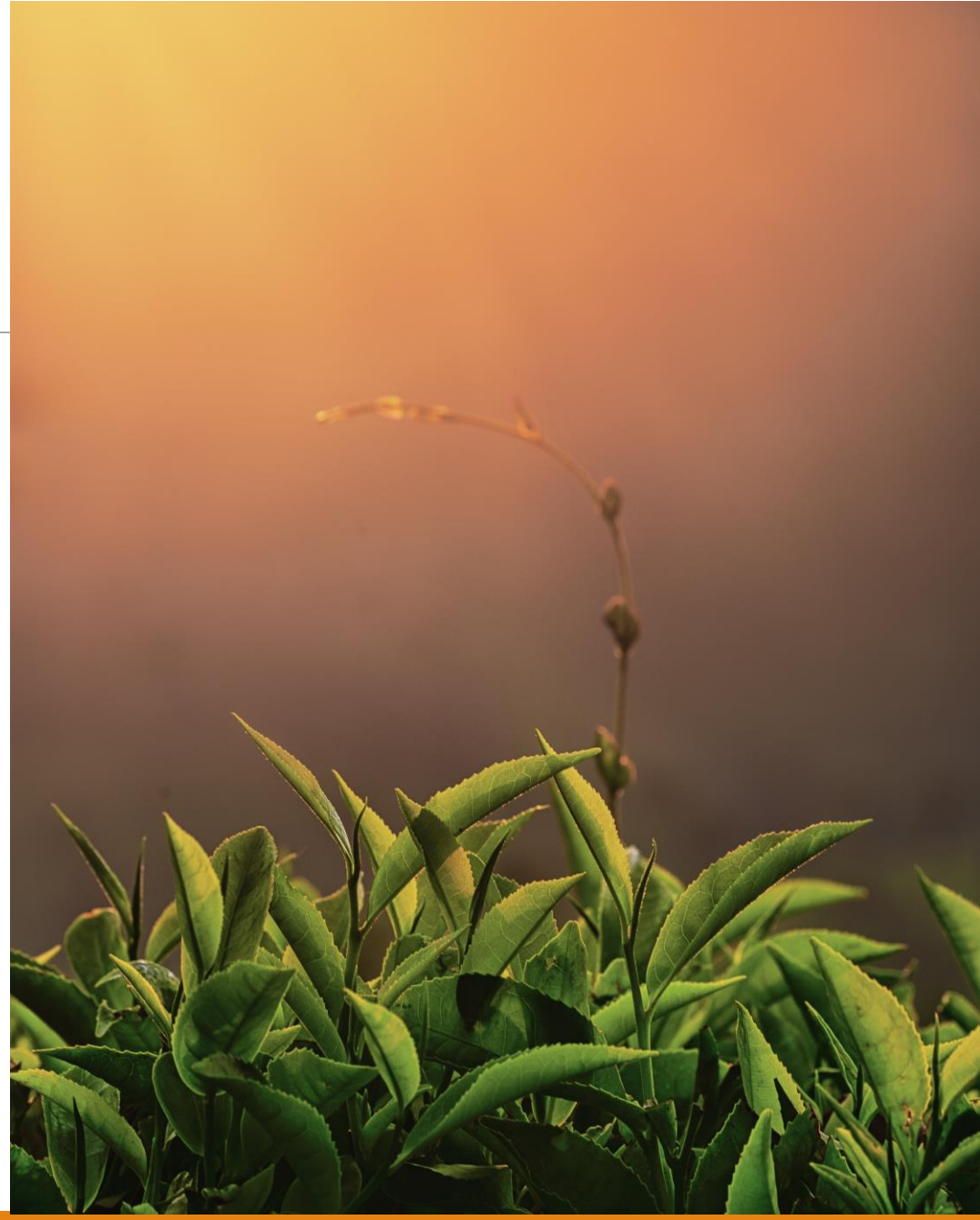
- BMP targeting or implementation analyses
- Policy and/or programmatic analyses
- Evaluating of effectiveness of BMP implementation

Scope and Purpose

Functions include:

- Support development of BMP Expert Panel technical appendices
- Review and approve the recommended BMP definitions and efficiencies from source workgroups and local jurisdictions, in collaboration with the Scientific and Technical Advisory Committee (STAC) and WQGIT workgroups. Ensure that BMPs are consistent across sectors and communicated clearly.

Proposed updates in red



Scope and Purpose

Functions include:

- Review and approve how BMPs are *simulated* in the Watershed Model to ensure that the assumptions accurately reflect real world conditions and are consistent and equitable between the different sectors.
- Review and approve how BMPs are *tracked and reported* by CBP partner jurisdictions and agencies for use in the Watershed Model to ensure that the assumptions accurately reflect real world conditions, are consistent and equitable between the different sectors, and are communicated clearly.

Proposed updates in red

Scope and Purpose

Functions include:

- Provide technical review & recommendations to the CBP Modeling team and WQGIT on updates to watershed model processes, input data, and assessment of annual progress.
- Review and/or assess scoping scenarios, as needed.

Proposed updates in red

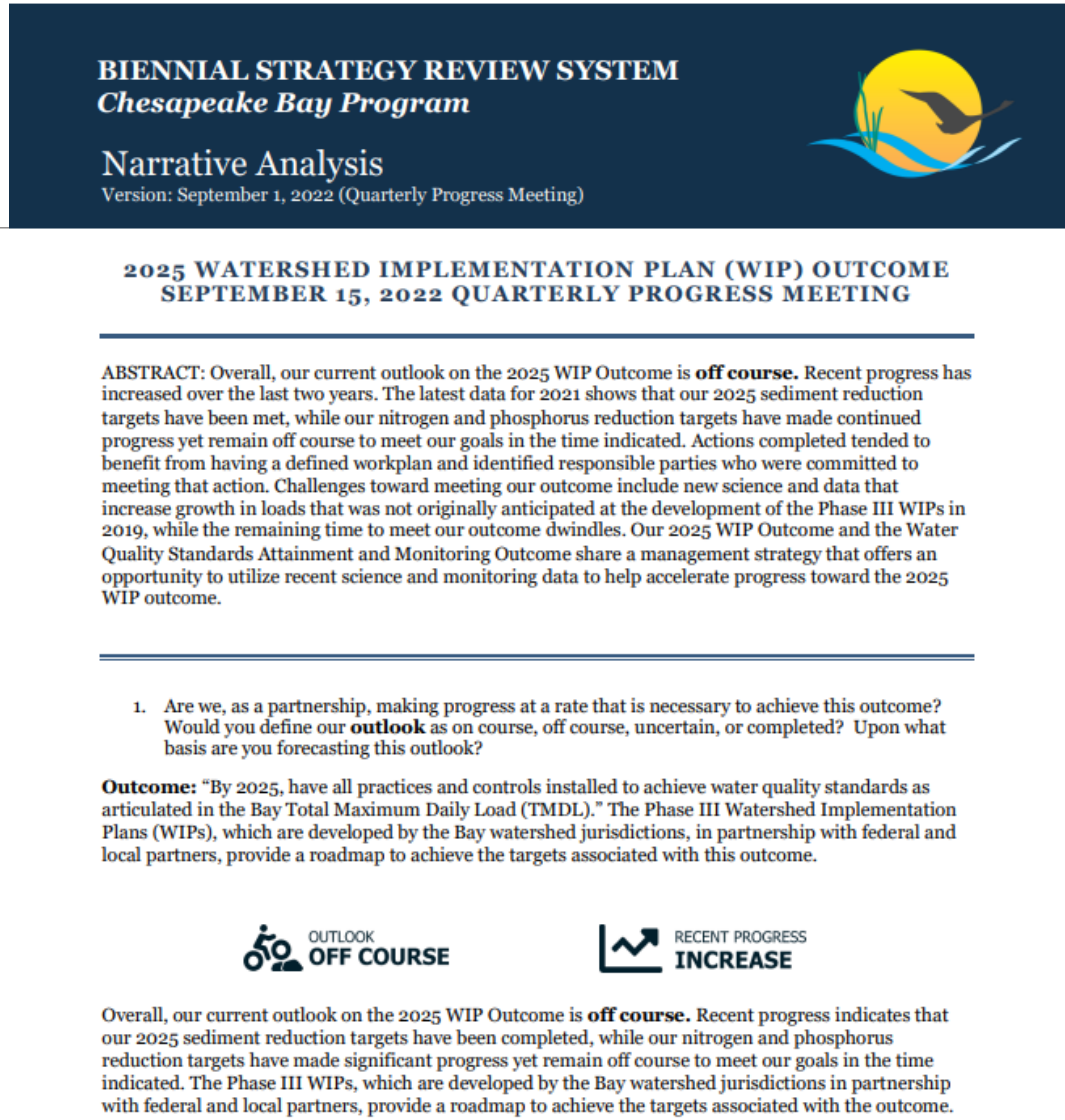
WQGIT Strategy Review System – Logic and Action Plan

While we are revisiting our role, is there overlap between our workgroup and the WQGIT SRS logic and action plan?

Biennial WQGIT Strategy Review System

Factors:

- BMP implementation
- Funding for implementation
- Communication and coordination
- CAST & other model updates
- Water quality monitoring
- Using co-benefits as a catalyst to increase implementation by aligning with priorities and goals beyond water quality
- Climate change tracking



BIENNIAL STRATEGY REVIEW SYSTEM
Chesapeake Bay Program

Narrative Analysis
Version: September 1, 2022 (Quarterly Progress Meeting)

2025 WATERSHED IMPLEMENTATION PLAN (WIP) OUTCOME SEPTEMBER 15, 2022 QUARTERLY PROGRESS MEETING

ABSTRACT: Overall, our current outlook on the 2025 WIP Outcome is **off course.** Recent progress has increased over the last two years. The latest data for 2021 shows that our 2025 sediment reduction targets have been met, while our nitrogen and phosphorus reduction targets have made continued progress yet remain off course to meet our goals in the time indicated. Actions completed tended to benefit from having a defined workplan and identified responsible parties who were committed to meeting that action. Challenges toward meeting our outcome include new science and data that increase growth in loads that was not originally anticipated at the development of the Phase III WIPs in 2019, while the remaining time to meet our outcome dwindles. Our 2025 WIP Outcome and the Water Quality Standards Attainment and Monitoring Outcome share a management strategy that offers an opportunity to utilize recent science and monitoring data to help accelerate progress toward the 2025 WIP outcome.

1. Are we, as a partnership, making progress at a rate that is necessary to achieve this outcome? Would you define our **outlook** as on course, off course, uncertain, or completed? Upon what basis are you forecasting this outlook?

Outcome: "By 2025, have all practices and controls installed to achieve water quality standards as articulated in the Bay Total Maximum Daily Load (TMDL)." The Phase III Watershed Implementation Plans (WIPs), which are developed by the Bay watershed jurisdictions, in partnership with federal and local partners, provide a roadmap to achieve the targets associated with this outcome.

OUTLOOK
OFF COURSE

RECENT PROGRESS
INCREASE

Overall, our current outlook on the 2025 WIP Outcome is **off course.** Recent progress indicates that our 2025 sediment reduction targets have been completed, while our nitrogen and phosphorus reduction targets have made significant progress yet remain off course to meet our goals in the time indicated. The Phase III WIPs, which are developed by the Bay watershed jurisdictions in partnership with federal and local partners, provide a roadmap to achieve the targets associated with the outcome.

WQGIT SRS Actions that Relate to WTWG

WQGIT SRS Factor: BMP Implementation

- Action: Potential (future) refinements to the partnership's BMP Expert Panel Protocols
- Action: Understand how volunteers or citizen scientists can be used to alleviate capacity shortfalls for BMP Verification
- Action: Create an ad hoc group associated with the modelling workgroup to revisit the WIP atmospheric deposition crediting methodology, so that these practices can become part of the states' WIP reduction portfolio

WQGIT SRS Factor: CAST & Other Model Updates

- Action: Implement and complete the CAST 2021 work plan
- Action: Understand the time it takes for different tidal segments to achieve water-quality standards to better understand responses to restoration efforts in the watershed

WQGIT SRS Factor: Water Quality Monitoring

- Action: Incorporate more monitoring trends and loads data into assessment of progress toward outcome (e.g., Bay Barometer)
- Action: Use monitoring data to target practices to demonstrate success

Additional Tasks

Charges from the Grant Guidance and Updated BMP Protocols:

- Review new expert panel reports and technical appendix
- Review requests for changes to data collection and reporting requirements for BMPs
- Review requests for changes to the NEIEN Appendix and approve NEIEN Appendix https://www.epa.gov/system/files/documents/2022-04/attachment-7_data-submission-specifications-and-requirements_march-2022.pdf

Charges from the Verification Framework:

- Develop a method for applying verification in the model (credit durations)
- Develop the protocols for analyzing BMP submission data (Appendix V)

Charges from the Management Board:

Revisiting back-out and cut-off procedures.

Other Roles the WTWG takes on

- Forum to discuss CAST topics that are *outside* the scope of the modeling workgroup
  - Review technical changes to CAST (e.g. backout/excess)
  - non-bmp data submissions to CAST (e.g., biosolids, CSO, animal unit percents, construction acres, harvested forest acres)
- Forum to discuss annual progress submission challenges and seek assistance
- Forum to discuss how we use the CAST data outside of just progress reporting

Proposed updates in red

Updated Scope and Purpose

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- Support development of BMP Expert Panel technical appendices.
- Review and approve the recommended BMP definitions and efficiencies from source workgroups and local jurisdictions, in collaboration with the Scientific and Technical Advisory Committee (STAC) and WQGIT workgroups. Ensure that BMPs are consistent across sectors and communicated clearly.
- Review and approve how BMPs are *simulated* in the Watershed Model to ensure that the assumptions accurately reflect real world conditions and are consistent and equitable between the different sectors.
- Review and approve how BMPs are *tracked and reported* by CBP partner jurisdictions and agencies for use in the Watershed Model to ensure that the assumptions accurately reflect real world conditions, are consistent and equitable between the different sectors, and are communicated clearly.
- Provide technical review & recommendations to the CBP Modeling team and WQGIT on updates to watershed model processes, input data, and assessment of annual progress