

# BIENNIAL STRATEGY REVIEW SYSTEM

## Chesapeake Bay Program



### Logic and Action Plan: Post-Quarterly Progress Meeting (2023-2024)

**2025 WIP Outcome**— By 2025, 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.

**2023-2024 actions**

**Long-term Target:** 2025 Total Nitrogen target load = 214.88 million lbs; 2025 Total Phosphorus target load = 13.314 million lbs; 2025 Total Suspended Sediment target load = 18,587 million lbs

**Two-year Target:** (increment of metric for success)

<b>Instructions:</b> Before your quarterly progress meeting, provide the status of individual actions in the table below using this color key.
Action has been completed or is moving forward as planned.
Action has encountered minor obstacles.
Action has not been taken or has encountered a serious barrier.

Additional instructions for completing or updating your logic and action plan can be found on [ChesapeakeDecisions](#).

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<i>What is impacting our ability to achieve our outcome?</i>	<i>What current efforts are addressing this factor?</i>	<i>What further efforts or information are needed to fully address this factor?</i>	<i>What actions are essential (to help fill this gap) to achieve our outcome?</i>	<i>What will we measure or observe to determine progress in filling identified gap?</i>	<i>How and when do we expect these actions to address the identified gap? How might that affect our work going forward?</i>	<i>What did we learn from taking this action? How will this lesson impact our work?</i>

<p><b>(1) Best Management Practice (BMP) implementation:</b>          Technical assistance with implementing, tracking, reporting, and verifying practices</p>	<p>Jurisdictions developing and implementing their two-year milestones. Jurisdictions have invested in and expanded their technical assistance efforts.</p> <p>Significant federal and state funding has been adopted in the past two years. Partners have expressed concerns over capacity, ranging from training and retention of staff to administer funds or provide necessary technical assistance.</p> <p>The partnership's BMP Verification Ad Hoc Action Team (BMPVAHAT) has convened for the past ~1.5 years and their final report is anticipated in early 2023.</p>	<p>Accelerated implementation is needed to meet the 2025 outcome though it has been acknowledged at the 2022 Executive Council meeting that the partnership is unlikely to have enough practices in place to meet the 2025 WIP outcome.</p> <p>After the BMPVAHAT's efforts it may be necessary for the partnership to seek an independent 3<sup>rd</sup> party assessment of the verification framework's strengths and weaknesses.</p>	<p>[1.1] Jurisdictions to accelerate implementation of priority practices identified in the WIPs or two-year milestones and to continue to implement the Phase III WIP and milestone commitments.</p> <p>Track annual progress using Chesapeake Progress to determine distance to the 2025 Outcome</p> <p>[1.2] Dedicate WQGIT meeting time to sharing lessons learned on successful BMP implementation</p> <p>[1.3] Reducing burdens to implementing, tracking, reporting, and verifying practices; collective conversations to enhance cost-effectiveness and reduce administrative hurdles</p> <p>[1.4] [Placeholder for BMP verification next steps, likely a 3<sup>rd</sup> party assessment necessary to inform high level next steps]</p>			
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Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<p><b>(2) Funding for implementation and capacity enhancements:</b> Assistance in source sectors to implement local-scale programs, plans, and practices. Likely emphasis on the agricultural sector.</p>	<p>Jurisdictions assessing resource needs and identifying opportunities to increase technical assistance support, internally and externally.</p> <p>Continued federal funding through EPA Grant Programs (CBIG, CBRAP, 319, SRF), Watershed Implementation Plan assistance, state programs, and USDA Farm Bill and NRCS grant programs</p>	<p>A) Need additional technical assistance providers, and specificity on what assistance is needed, in the agricultural sector at the local scale</p> <p>B) Need additional state staff to administer programs.</p> <p>C) Funding to reduce and prevent pollution and improve living resources in areas not identified as “Most Effective Basins”</p>	<p>[2.1] Share lessons learned, clearinghouse(s), and examples of existing and new funding sources (i.e., IJJA funding) that can be used to maintain and accelerate the implementation of practices and controls to achieve water quality.</p> <p>[2.2] Convene a forum to assess what the technical assistance needs are and how the partnership could address technical assistance needs, including training and staff retention opportunities to maintain and implement BMPS.</p> <p>[2.3] Allocate agenda times to share examples of innovate approaches (e.g., pay-for-performance, pay for outcome) to accelerate implementation</p> <p>[2.4] Collaborate with Workforce Action Team</p>			

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
			to better understand opportunities and exchange peer-to-peer best practices for training and retaining staff from diverse communities that work to educate residents, and/or to fund, implement and maintain BMPs			

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<p><b>(3) Communication and coordination:</b> Consistent efforts with diverse stakeholders. Other potential audiences include states and DC; local jurisdictions; and federal agencies such as USDA, DoD and EPA</p>	<p>Communications workgroup is being re-envisioned as the strategic engagement team.</p>	<p>There is a lack of information on what to expect between now and 2025 and what happens after 2025 related to our outcome</p> <p>Finding trusted sources at the local-scale to aid with implementing practices and plans</p>	<p>[3.1] Related to our goal and outcome, coordinate with the Strategic Engagement Team on what to expect by 2025, and beyond 2025</p> <p>[Note: Overlaps with WQSAM action “Plan for communication messages about management practices in place by 2025 but standards are not attained until afterwards.”]</p> <p>[3.2] Support coordination between science and communications experts on how to use the monitoring data to communicate success stories and water quality improvement.</p> <p>[3.3] Support and engage with workgroups interested in adapting their charge or scope for 2025 and beyond.</p>			

<p><b>(4) CAST and other model updates:</b> Incorporating new science and data into models and decision support tools.</p>		<p>Additional information and decisions are needed to determine next steps with CAST and Phase 7 model development</p>	<p>[4.1] WQGIT to address the charges from the PSC and Management board related to (1) additional unaccounted loads, (2) fertilizer data concerns, and (3) a process to develop safeguards to prevent data analysis variations and assess reasonability of modeling results after CBP partnership protocols are applied.</p> <p>[4.2] Recommend a list of tributaries for the development of Multiple Tributary Models.</p> <p>[4.3] Exploration of local/state data sets to inform Phase 7 modeling.</p>			
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Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<p><b>(5) Water quality monitoring: Sustain and enhance monitoring and interpretation of results to help understand water quality response to management actions.</b> It is important to demonstrate progress towards attainment of water quality standards.</p>	<p>For more information, see (1) the 2022 PSC Monitoring report and (2) the joint Management Strategy with Water Quality Standards Attainment and Monitoring Outcome.</p>		<p>[5.1] Coordinate with STAR to explore opportunities of how water quality monitoring trend information can be used to illustrate achievement of water quality standards</p> <p>[5.2] Support and collaborate on actions under STAR’s WQSAM Logic &amp; Action Plan, particularly Management Approach 3: “Further explain and communicate the factors affecting trends and better understand response to management practices.”</p> <p>[5.3] Encourage the Partnership to expand and maintain the existing non-tidal and tidal networks of monitoring stations, using 2022 PSC monitoring report as a guide for cross-partnership monitoring needs.</p> <p>[5.4] Work with STAR, Stewardship GIT, and Chesapeake Monitoring Cooperative (CMC) to align opportunities to</p>			

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
			leverage participatory science and community monitoring data to accelerate or catalyze implementation and targeting and support maintaining the existing monitoring networks			



Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<p><b>(6) Increase and encourage implementation by aligning benefits for multiple outcomes beyond water quality:</b>  characterization of benefits beyond water quality improvements associated with existing BMPs to expand funding opportunities and increase implementation</p>			<p>[6.1] Review the forthcoming Comprehensive Evaluation of System Response (CESR) report for information to improve efficacy of reducing nutrients to meet our 2025 outcome as well as other Bay Agreement outcomes.</p> <p>[6.2] [Placeholder for one or more actions relating to CESR report or upcoming STAC ecosystem services workshop and how the WQGIT and partners can take iterative steps to better understand and improve our focus on policies and practices that may yield the desired ecosystem response]</p>			

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<p><b>(7) Climate change tracking:</b>  understanding and accounting for the impacts of climate change in watershed and estuarine processes and BMP performance</p>			<p>[7.1] Identify and target the implementation of climate resilient and water quality improvement BMPs.</p> <p>[7.2] Assess results from GIT funded projects and determine if changes are needed to BMP implementation projects or the WQGIT science needs. Examples include: the literature review to build climate resilience in stream restoration projects and “Optimizing Riparian Forest Buffer Implementation for climate adaptation and resilience.”</p> <p>[7.3] [placeholder for recommendation(s) from STAC Rising Water Temps workshop report]</p>			

## ACTIONS – 2023-2024

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Factor 1: BMP Implementation</b>					
<b>1</b>	<p>Jurisdictions to accelerate implementation of priority practices identified in the WIPs or two-year milestones and to continue to implement the Phase III WIP and milestone commitments.</p> <p>Track annual progress using Chesapeake Progress to determine distance to the 2025 Outcome</p>	<p>Number of acres/feet/units of BMPs installed for priority practices identified by a jurisdiction</p> <p>Use Chesapeake Progress to determine % of goal achieved.</p> <p>For BMPs associated with other outcomes that lag (forest buffers, wetlands), WQGIT to assist partnership attainability efforts and consider jurisdictions' associated action plans</p>	<p>Jurisdictions</p> <p>WQGIT for cross-outcome attainability support and information sharing</p>	Watershed-wide	2022+
<b>2</b>	Dedicate WQGIT meeting time to sharing lessons learned on successful BMP implementation	WQGIT agenda time spent sharing success stories; related written resources shared via WQGIT newsletter or emails	Jurisdictions, federal or local partners or NGOs with		2023-2024
<b>3</b>	Reducing burdens to implementing, tracking, reporting, and verifying practices; collective conversations to enhance cost-effectiveness and reduce administrative hurdles	Themed meeting(s) and time spent sharing lessons, stories of successes or challenges	WQGIT members, federal/state/local implementing partners		2023
<b>4</b>	[Placeholder for BMP verification next steps, likely a 3 <sup>rd</sup> party assessment necessary to inform high level next steps]	TBD following BMPVAHAT final report	TBD		

<b>PARKING LOT: Factor 1</b>					
<b>PL1-1</b>	Potential refinements to the partnership's BMP Expert Panel Protocols	Updated BMP Expert Panel Protocol in 2021-2022	WQGIT and Source sector workgroups	Watershed-wide	TBD, no sooner than 2024

### ACTIONS – 2023-2024

<b>Action #</b>	<b>Description</b>	<b>Performance Target(s)</b>	<b>Responsible Party (or Parties)</b>	<b>Geographic Location</b>	<b>Expected Timeline</b>
<b>Factor 2: Funding and capacity</b>					
<b>1</b>	Share lessons learned, clearinghouse(s), and examples of existing and new funding sources (i.e., IIJA funding) that can be used to maintain and accelerate the implementation of practices and controls to achieve water quality.	Number of speakers or shared stories or resources from partners; agenda time allocated to discussion and exchange	State and local agencies, federal agencies, funders, NGOs		2023
<b>2</b>	Convene a forum to assess what the technical assistance needs are and how the partnership could address technical assistance needs, including training and staff retention opportunities to maintain and implement BMPS.	Forum held	WQGIT and sector workgroups (e.g., agriculture, forestry, stormwater)		2023
<b>3</b>	Allocate agenda times to share examples of innovate approaches (e.g., pay-for-performance, pay for outcome) to accelerate implementation	Number of speakers or shared stories from partners; agenda time allocated to discussion and exchange; themed meeting	State and local agencies, federal agencies, funders, NGOs		2023-2024
<b>4</b>	Collaborate with Workforce Action Team to better understand opportunities and exchange peer-to-peer best practices for training and retaining staff from diverse communities that work to educate residents, and/or to fund, implement and maintain BMPs	[TBD as WFAT gets underway and ramps up] May include joint or shared meeting time with WFAT and WQGIT; shared stories or resources	Workforce Action Team as primary, with collaboration from WQGIT and other GITs or workgroups		2023-2024

<b>PARKING LOT: Factor 2</b>					
<b>PL2-1</b>					

<b>ACTIONS – 2023-2024</b>					
<b>Action #</b>	<b>Description</b>	<b>Performance Target(s)</b>	<b>Responsible Party (or Parties)</b>	<b>Geographic Location</b>	<b>Expected Timeline</b>
<b>Factor 3: Communication and coordination</b>					
<b>1</b>	<p>Related to our goal and outcome, coordinate with the Strategic Engagement Team on what to expect by 2025, and beyond 2025</p> <p>[Note: Overlaps with WQSAM action “Plan for communication messages about management practices in place by 2025 but standards are not attained until afterwards.”]</p>	<p>Communications strategy and materials on “what to expect”</p> <p>Coordinate with CBP Communication Team, Strategic Engagement Team, and WQGIT to develop a communication strategy on 2025 water quality standards message.</p> <p>When applicable, support jurisdictions in carrying through communication messages.</p>	WQGIT, CBP Communication Team, Strategic Engagement Team, jurisdictions, STAR		2023-2024
<b>2</b>	Support coordination between science and communications experts on how to use the monitoring data to communicate success stories and water quality improvement.	Success stories developed and published	WQGIT as support to STAR, USGS, Strategic Engagement Team		
<b>3</b>	Support and engage with workgroups interested in adapting their charge or scope for 2025 and beyond.	Goal to have all groups affirm or update their charge and scope by 2025. Some groups may need to sunset. Many groups under the WQGIT have not revisited their scope or charge since ~2012	WQGIT and workgroup leadership and members; GIT6	N/A	Ongoing
<b>PARKING LOT: Factor 3</b>					

PL3-1					
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**ACTIONS – 2023-2024**

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Factor 4: CAST and other model updates</b>					
1	WQGIT to address the charges from the PSC and Management board related to (1) additional unaccounted loads, (2) fertilizer data concerns, and (3) a process to develop safeguards to prevent data analysis variations and assess reasonability of modeling results after CBP partnership protocols are applied.	Provide recommendations on all PSC decisions	MB, WQGIT, ag and stormwater workgroups		
2	Recommend a list of tributaries for the development of Multiple Tributary Models.	Recommendation list	WQGIT & MB		Approved by MB November 2022
3	Exploration of local/state data sets to inform Phase 7 modeling.		WQGIT, state and local agencies, STAC local monitoring workshop (spring 2023)		STAC workshop in 2023; ongoing discussions at workshop and in workgroups throughout next two year period
<b>PARKING LOT: Factor 4</b>					
PL4-1	Assess the need to change the frequency of CAST updates under Phase 7 modeling tools. If a change is recommended propose options to the Management Board with pros/cons.				TBD

## ACTIONS – 2023-2024

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Factor 5: Water quality monitoring</b>					
1	Coordinate with STAR to explore opportunities of how water quality monitoring trend information can be used to illustrate achievement of water quality standards	Recommendations on other ways to evaluate progress with monitoring data to MB	WQGIT/STAR, jurisdictions, EPA (Kaylyn Gootman), Strategic Engagement Team  USGS: VA-WV; MD-DC-DE; and PA Water Science Centers		
2	Support and collaborate on actions under STAR’s WQSAM Logic & Action Plan, particularly Management Approach 3: “Further explain and communicate the factors affecting trends and better understand response to management practices.”	Joint meetings and presentations with STAR or workgroups; shared information and resources via email or WQGIT Newsletter  Active engagement from WQGIT Coordinator to support relevant actions in STAR’s WQSAM plan, e.g., [WQSAM 3.1] Increase technical interaction with state agencies and other stakeholders and community groups to identify priority needs to apply monitoring results. [WQSAM 3.2] Use results of jurisdictional meetings to better summarize existing information and plan new analysis to inform milestones through 2025	USGS: VA-WV; MD-DC-DE; and PA Water Science Centers  EPA  Jurisdictions  WQGIT Coordinator		
3	Encourage the Partnership to expand and maintain the existing non-tidal and tidal networks of monitoring stations, using 2022 PSC monitoring report as a guide for cross-partnership monitoring needs.	Support for maintaining monitoring to STAR and MB; themed joint meeting with WQGIT and STAR	WQGIT, STAR, USGS, EPA		

4	Work with STAR, Stewardship GIT, and Chesapeake Monitoring Cooperative (CMC) to align opportunities to leverage participatory science and community monitoring data to accelerate or catalyze implementation and targeting and support maintaining the existing monitoring networks.	CMC presentations, shared case studies and exchanges with STAR and the WQGIT; Shared discussions or themed meetings	WQGIT, STAR, Stewardship GIT, USGS, other federal/state/local agencies, CMC, NGOs		
<b>PARKING LOT: Factor 5</b>					
PL5-1					

### ACTIONS – 2023-2024

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Factor 6: Using benefits to multiple outcomes as a catalyst</b>					
1	Review the forthcoming Comprehensive Evaluation of System Response (CESR) report for information to improve efficacy of reducing nutrients to meet our 2025 outcome as well as other Bay Agreement outcomes.	Analysis of final document to seek efficiencies in meeting Bay Agreement outcomes.	WQGIT members and TBD groups and other partners		
2	[Placeholder for one or more actions relating to CESR report or upcoming STAC ecosystem services workshop and how the WQGIT and partners can take iterative steps to better understand and improve our focus on policies and practices that may yield the desired ecosystem response]				Workshop expected in spring 2023, with report and next steps to follow in late summer or fall 2023
<b>PARKING LOT: Factor 6</b>					
PL6-1					



## ACTIONS – 2023-2024

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Factor 7: Climate change</b>					
1	Identify and target the implementation of climate resilient and water quality improvement BMPs.	TBD  Presentation of Rising Water Temps STAC workshop report  [continue periodic tracking “heater” and “cooling BMP levels as done for STAC rising water temps workshop]	Jurisdictions, sector workgroups		
2	Assess results from GIT funded projects and determine if changes are needed to BMP implementation projects or the WQGIT science needs. Examples include: the literature review to build climate resilience in stream restoration projects and “Optimizing Riparian Forest Buffer Implementation for climate adaptation and resilience.”	Presentation of final GIT funded project results to the WQGIT	Stream Health and Forestry Workgroups, respectively; Habitat GIT; WQGIT leadership to support		2024 following completion of the GIT-funded project
3	[placeholder for recommendation(s) from STAC Rising Water Temps workshop report]	Presentation of Rising Water Temps STAC workshop report  [continue periodic tracking “heater” and “cooling BMP levels as done for STAC rising water temps workshop]	WQGIT, sector workgroups		
<b>PARKING LOT: Factor 7</b>					
PL7-1					

Total: 23\* actions

\*23 includes 3 placeholders, but does not count 2 parking lot actions