CLIMATE MONITORING AND ASSESSMENT

STAR/CLIMATE RESILIENCY WORKGROUP (CRWG)

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

CLIMATE MONITORING & ASSESSMENT OUTCOME: "Continually monitor and assess the trends and likely impacts of changing climatic and sea level conditions on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects."

CLIMATE RESILIENCY GOAL: "Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environmental and climate conditions."

OUTCOME DISPOSITION ADVICE TO MANAGEMENT BOARD: REPLACE

RECOMMENDATION: REPLACE OUTCOME. The current outcome has two parts: 1) monitor and assess the trends of changing climate impacts and 2) monitor and assess effectiveness of policies, programs, and projects. Given that many of the jurisdictions and other partners are assessing climate change trends and using projections that best fit their needs, it is recommended that this outcome instead focus on developing and implementing a climate resiliency assessment framework that allows for effective integration of climate science across the outcomes. This would better inform the achievability of the outcomes in the amended Chesapeake Watershed Agreement, aid in adaptive management under changing climate conditions, and ensure that outcome leads have the needed science to incorporate climate resilience in their work. This outcome replacement would also allow the partnership to have a structured process to advance progress on actions identified in the Executive Council (EC) Climate Change Directive.

CONSIDERATIONS: Consider if the Outcome is SMART, timescale for completing the outcome, and if achieving the outcome is an incremental step or final. **ASSESSMENT:** The outcome language is not SMART. It does not have measurable objectives and uses the language, "continually…" which lacks a timebound objective. It is also very broad, which makes it unclear on the intent of the outcome. Focusing the outcome on integrating climate science to inform adaptive management of the goals and respective outcomes in the Chesapeake Bay Watershed Agreement could create a SMART direction for the outcome. Progress could be measured by how many outcomes have integrated climate science in their outputs to assess progress.

CONSIDERATIONS: Consider how the outcome relates to the Bay Agreement mission, vision, and themes/pillars and goals, the challenges to and opportunities for achieving the outcome, and whether it should be moved or restructured within the Agreement. **ASSESSMENT:** Climate change is a theme, a principal and goal within the Bay Agreement. Climate is also an elevated priority by the 2021 Executive Council (EC) Directive on Climate Change. The EC directive states, "Integrate climate science and adaptation to climate change throughout the work of the Chesapeake Bay Program and direct the Management Board to ensure the partnership's organizational structure effectively advances this integration." This scale of climate science integration is beyond the current capabilities of the CRWG. It would require a larger partnership effort to accomplish. There also have been challenges in monitoring and assessing the effectiveness of programs and policies given the lack of a formal structure within the program to do so. The CRWG has had success in reviewing and assessing sea level rise projections for the climate TMDL model with the Modeling Workgroup and the Water Quality Goal Implementation Team and marsh migration projections with the Wetland Workgroup. With these successes in mind, feedback from partners during the January 2025 CRWG meeting proposed that this outcome should focus on the Chesapeake Bay Program developing and implementing a climate resiliency assessment

framework and provide the science support needed to inform climate resilience considerations for all outcomes. The Strategic Review System (SRS) could be a mechanism to apply the climate resiliency assessment framework. This recommendation coincides with the climate small group recommendation for developing and implementing a framework for a climate adaptive Bay and watershed of the future in the Beyond 2025 report. By redefining the focus of this outcome, it would move away from monitoring and assessing trends using climate change indicators. However, state and federal partners have more up to date trend information that can be used and it is the integration of this science across the outcomes that is more needed beyond 2025.

CONSIDERATIONS: What value is added by having the Chesapeake Bay Program work on the outcome? Consider the risk or unintended consequences of removing or changing the Outcome. **ASSESSMENT:** Connecting climate science to all outcomes would enhance the understanding of the achievability of the outcomes under changing climate conditions and set realistic goals to restore and protect the Chesapeake Bay. It also supports progress on commitments identified in the EC Climate Change Directive under, "Adapt partnership structure and increase capacity to effectively advance integration of climate considerations in all aspects of the partnership's work." If this outcome is removed then there is the risk of having outcomes in the amended Chesapeake Bay Watershed Agreement that are not attainable or realistic.

CONSIDERATION: Consider resource needs to achieve the Outcome (high, medium, low) and availability/commitment of such resources. **ASSESSMENT:** Climate integration for all outcomes would require engaging other partners and pursuing increased resources from across the Chesapeake Bay Program to implement fully. Ideally, the Management Board would work with the Goal Implementation Teams on what a climate resiliency assessment framework would look like during the structure and governance discussions. Ultimately, it would be the implementing programs that would take the lead in using the climate resiliency assessment framework. The CRWG and other science support workgroups would assist in connecting outcome leads with existing and future climate science to inform outcome implementation.