

Chesapeake Bay TMDL 2017 Mid-Point Assessment
Guiding Principles and Policy Approach for Addressing Climate Change Considerations in
the Jurisdictions' Phase III Watershed Implementation Plans

Principal Staff Committee
Policy Actions and Decisions
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Guiding Principles¹

Jurisdictions should adhere to the following principles when developing and implementing Phase III WIPs:

WIP Development:

1. *Capitalize on “Co-Benefits”* – maximize BMP selection to increase climate or coastal resiliency, soil health, flood attenuation, habitat restoration, carbon sequestration, or socio-economic and quality of life benefits.
2. *Account for and integrate planning and consideration of existing stressors* – consider existing stressors such as future increase in the amount of paved or impervious area, future population growth, and land-use change in establishing reduction targets or selection/prioritizing BMPs.
3. *Align with existing climate resiliency plans and strategies* – align with implementation of existing greenhouse gas reduction strategies; coastal/climate adaptation strategies; hazard mitigation plans; floodplain management programs; fisheries/habitat restoration programs, etc.
4. *Manage for risk and plan for uncertainty* – employ iterative risk management and develop robust and flexible implementation plans to achieve and maintain the established water quality standards in changing, often difficult-to-predict conditions.
5. *Engage Local Agencies and Leaders* – work cooperatively with agencies, elected officials, and staff at the local level to provide the best available data on local impacts from climate change and facilitate the modification of existing WIPs to account for these impacts.

WIP Implementation:

1. *Reduce vulnerability* - use “Climate-Smart” principles to site and design BMP’s to reduce future impact of sea level rise, coastal storms, increased temperature, and extreme events on BMP performance over time. Vulnerability should be evaluated based on the factor of risk (i.e. consequence x probability) in combination with determined levels of risk tolerance, over the intended design-life of the proposed practice.
2. *Build in flexibility and adaptability* - allow for adjustments in BMP implementation in order to consider a wider range of potential uncertainties and a richer set of response options (load allocations, BMP selections, BMP redesign).

¹ Approved by the PSC (12.13.16)

Use existing WIP development, implementation and reporting procedures, as well as monitoring results and local feedback on performance, to guide this process.

3. *Adaptively manage* - Allow for changes in BMP selection or WIP implementation, over-time, as new climate and ecosystem science, research, or data becomes available and the understanding of the impact of how changing seasonal, inter-annual climatic and weather conditions may affect the performance of watershed restoration practices. Consider new science on climate change impacts in future BMP Expert Panels, following the CBP partnership's BMP Expert Panel Protocols.

Policy Approach²

1. Incorporate Climate Change in the Phase III WIPs

Include a narrative strategy in the Phase III WIPs that describe the jurisdictions current action plans and strategies to address climate change, as well as the jurisdiction-specific nutrient and sediment pollution loadings due to 2025 climate change conditions, while incorporating local priorities and actions to address climate change impacts.

2. Understand the Science

Address the uncertainty by documenting the current understanding of the science and identifying research gaps and needs:

- a) Develop an estimate of pollutant load changes (N, P and Sediment) due to climate change conditions.
- b) Develop a better understanding of the BMP responses, including new or other emerging BMPs, to climate change conditions.
- c) In 2021, the Partnership will consider results of updated methods, techniques, and studies and revisit existing estimated loads due to climate change to determine if any updates to those load estimates are needed.
- d) Jurisdictions will be expected to account for additional nutrient and sediment pollutant loads due to 2025 climate change conditions in a Phase III WIP addendum and/or 2-year milestones beginning in 2022.

3. Incorporate into Milestones

Starting with the 2022-2023 milestones, determine how climate change will impact the BMPs included in the WIPs and address these vulnerabilities in the two-year milestones.