

## **Appendix B. Programmatic Policy Approach: Guidance Example**

*(Under development by the Climate Resiliency Workgroup and Water Quality Goal Implementation Team)<sup>1</sup>*

**Commented [KTM1]:** Refer also to WV Climate Change Guidance General Comments document.

### ***Programmatic “qualitative” Policy Approach: Optimize Phase III WIP Development and Adaptively Manage BMP Implementation***

**Description:** Within a practical time-period applicable to an individual source sector, initiative or action, the Partnership will consider new information on the performance of BMPs, including the contribution of seasonal, inter-annual climate variability, and weather extremes. Jurisdictions will assess this information and their support programs and adjust plans through the two-year milestone process to implement their Phase III WIPs to better mitigate anticipated increases in nitrogen, phosphorus, or sediment due to climate change. Jurisdictions will provide a narrative consistent with the Guiding Principles that describes their programmatic commitments to address climate change in their Phase III WIPs.

**Implementation Considerations:** The CBP’s assessment of the projected impacts and modeling results of climate change in 2025 and 2050 for a range of scenarios would be relayed to the jurisdictions. The jurisdictions would include a narrative strategy in their Phase III WIPs, outlining their programmatic and/or numeric commitments to address projected impacts consistent with the Guiding Principles, outlined below (approved by the PSC on December 13, 2016).<sup>2</sup> Narrative strategies could vary across jurisdictions; however, by following a “narrative template,” they could be standardized or harmonized to provide for transparency, accountability, and consistency. EPA could potentially use these elements as a guide to evaluate the proposed narrative strategies in the Phase III WIPs.

**Commented [HAC2]:** Because the Guiding Principles seem to be the foundation for this appendix, consider adding a link or reference the Guiding Principles as part of footnote #2. Consider referring to the “Guiding Principles” in a consistent way, hereafter.

**Commented [HAC3]:** The narrative is outlined below, not the Guiding Principles.

To inform implementation, over the longer-term, it is expected that the Partnership would need to work together to facilitate the collection and evaluation of BMP performance data. This will enable the Partnership to learn more about BMP performance and the sensitivity of BMPs that are attributable to climate change, to allow for consideration of these factors while adaptively managing for long-term change. Periodically, in support of this action, the CBP Partnership, through STAC working consultatively with CRWG, could compile and assess the latest climate and ecosystem science, research, or data, and relay this information to jurisdictions.

**Commented [MD4]:** This implies that the guidance will be used as review criteria to judge WIP3 adequacy. Do not agree unless it clearly endorses WV approach.

#### **Sample Narrative Template:**

<sup>1</sup> Appendix B includes informational material compiled by the CRWG, including a “Sample Narrative Template.” This document outlines a potential means and method for implementation of the proposed programmatic policy approach. Once the Partnership reaches agreement on the approach to consider climate change in Jurisdictions’ Phase III WIPs, formal implementation guidance will be developed and approved by the CRWG and WQGIT.

<sup>2</sup> Jurisdictions should also reference Chesapeake Bay TMDL, Section 7: Reasonable Assurance and Accountability Framework; and, Section 10: Implementation and Adaptive Management for guidance on developing narrative strategies.

## I. Scientific Assessment and Conclusions

- a) The CBP's assessment of the projected impacts and modeling results of climate change in 2025 and 2050 for a range of scenarios would be relayed to the jurisdictions. If the capacity exists, in response, jurisdictions should describe method(s) for gathering and assessing additional scientific data and information. This element allows for flexibility in jurisdictions' approaches to addressing climate change, and can incorporate local knowledge and information where quantitative data may be lacking.
- b) Identify conclusions based on scientific assessments.
- c) Address how the scientific conclusions guided their programmatic and/or numeric commitments. Jurisdictions should use local expertise and knowledge along with the latest climate information and science to inform their programmatic and/or numeric commitments.

**Commented [KTM5]:** WV can't independently do this. Our WIP will numerically accommodate our draft climate change responsibility. We will have the new assessment post 2020. We can then see if our progress accommodates the new loads and adapt from there. This should be a partnership effort through the expert panel process. When/if WV gets new specs or efficiencies, we will adapt.

## II. Programmatic and/or Numeric Commitments

- a) Outline programmatic and/or numeric commitments to address projected impacts consistent with the Climate Resiliency Guiding Principles. Commitments may vary across jurisdictions but could include activities such as undertaking demonstration projects; prioritizing implementation of climate-resilient BMPs; approaches for assessing vulnerability of planned BMPs; or enhancing plans, policies, regulations or on-the-ground efforts to address impacts, etc. Jurisdictions could also pursue BMPs with clear co-benefits and climate change-related positive impacts (e.g., habitat restoration and flood control).

**Commented [HAC6]:** Somewhere in this paragraph or document consider providing a link to the co-benefit fact sheet  
[https://www.chesapeakebay.net/channel\\_files/25480/climate\\_resiliency.pdf](https://www.chesapeakebay.net/channel_files/25480/climate_resiliency.pdf)

## III: Phase III WIP Development: Planning and Scoping<sup>3</sup>

- a) Describe the process used to guide Phase III WIP development, in accordance with the approved Climate Resiliency Guiding Principles for 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 where feasible* – 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.

**Commented [MD7]:** Will it suffice to say that WV is developing WIP3 on 2025 projected conditions that will periodically be tweaked. We plan to assess and adapt to alternative futures.

**Commented [MD8]:** Not likely WV will have any other concrete plans or strategies to discuss

<sup>3</sup> See Johnson, Z. et. al. In-Press. [STAC Workshop Report: Monitoring and Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design](#). (in press) for more information and guidance on implementation.

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.

IV. Phase III WIP Implementation: BMP Evaluation Process<sup>4</sup>

a) Describe the process used by jurisdictions to implement WIP programmatic and/or numeric commitments, including proposed the qualitative and/or quantitative evaluation of and implementation of BMPs, in accordance with the approved Climate Resiliency Guiding Principles: 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). Use existing WIP development, implementation and reporting procedures, as well as monitoring results and local feedback on performance, to guide this process.

**Commented [MD9]:** The BMPs in WV’s WIP input deck, at their established efficiencies will accommodate the extra 0.27 MM # N that was determined to be the WV responsibility in 12/17. End of story until new loads or efficiencies are mandated.

V. Documentation, Reporting and Adaptive Management

a) Establish a timeline for submission of documentation and reporting on all of the above. Reporting should include findings of new or updated scientific assessments and resulting changes to Phase III WIPs, including adjustments to two-year milestones. Documentation, reporting, and adaptive management shall be administered in accordance with Chesapeake Bay TMDL, Section 7: Reasonable Assurance and Accountability Framework<sup>5</sup>; and, Section 10: Implementation and Adaptive Management<sup>6</sup>.

b) Jurisdictions would identify programmatic and/or numeric efforts and plans to adaptively manage. Jurisdictions should describe processes that will 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.

**Commented [MD10]:** WV does not agree if this means a separate climate change reporting requirement - instead, rely on existing progress reporting, 2yr. milestones, EPA oversight

<sup>4</sup> See Johnson, Z. et. al. In-Press. [STAC Workshop Report: Monitoring and Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design](#). (in press) for more information and guidance on implementation.

<sup>5</sup> Chesapeake Bay TMDL, Section 7: Reasonable Assurance and Accountability Framework

<sup>6</sup> Chesapeake Bay TMDL, Section 10: Implementation and Adaptive Management