Climate Resiliency Working Group SRS Review

What are our assumptions?

(1) What original assumptions did we make in our Management Strategy that we felt were important to our success?
    a. What "Factors Influencing Success" were originally identified in your Management Strategy?
        i. Scientific Capabilities
        ii. Variability of Watershed
        iii. Collaboration among Goal Implementation Teams (GITs), stakeholders and others that are addressing climate science and adaptation
    b. What programmatic gaps that fail to address those factors did you originally identify in your Management Strategy?
        i. Coordination of Modeling
        ii. Scientific Assessments
            1. Addressing Climate Science
        iii. Institutional capacity
    c. What were the "Management Approaches" you chose to include in your Management Strategy and Two-Year Work Plan in order to address those gaps?
        i. Define goals and establish baselines for the monitoring, modeling, and assessment of different aspects of climate change
        ii. Assess and Prioritize Climate Impacts and vulnerabilities
        iii. Establish adaptation outcome priorities
        iv. Implement priority adaptation actions

Are we doing what we said we would do?

(2) Are you on track to achieve your Outcome by the identified date?
    a. What is your target? What does this target represent (e.g., the achievement we believed could be made within a particular timeframe; the achievement we believed would be necessary for an Outcome's intent to be satisfied; etc.)?
        i. The Climate Resiliency Working Group is on target to meet the goals of both outcomes. While the CRWG management strategy outcomes lack a qualitative endpoint, we continue to make considerable progress
    b. What is your anticipated deadline? What is your anticipated trajectory?
        i. The CRWG continues to make progress on our anticipated deliverables.
    c. What actual progress has been made thus far?
        i. Compendium of Climate Change Research and Adaptation Efforts (2016)
        ii. Technical Recommendations to Modeling Workgroup: Guidance on climate projections & scenarios - sea level rise, temperature, precipitation "Recommendations on Incorporating Climate-Related Data Inputs and Assessments: Selection of Sea Level Rise Scenarios and Tidal Marsh Change Models"
        iii. STAC Workshops: BMP and The Development of Climate Projections for Use in the Chesapeake Bay Program Assessments
        iv. Development of Climate Change Indicators and Progress Measures for the Chesapeake Bay Program

v. Three, One-Day Workshops for SAV, Blue Crabs, and Oysters: "An Analytical Framework for Aligning Chesapeake Bay Program Monitoring Efforts to Support Climate Change Impact and Trend Analyses and Adaptive Management"
vi. Implementation of STAC Workshop "Monitoring and Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design"(September 2017)
vii. Climate Smart Framework & Decision-Support Tool Workshops with Toxic Contaminant, SAV, Tidal Wetlands workgroups
viii. Inform policy implementation of the Phase III Watershed Implementation Plans (WIPs) – 2017 mid-point assessment

d. What could explain any existing gap(s) between your actual progress and anticipated trajectory?
    i. Consistent incorporation of climate into jurisdiction efforts
    ii. Indicators to inform decision making
    iii. Impact of climate on BMPs

(3) Which of your management actions have been the most critical to your progress thus far? Why? Indicate which influencing factors these actions were meant to manage.
    a. STAC Workshop: The Development of Climate Projections for Use in Chesapeake Bay Program Assessments
    b. Development of Climate Change Indicators and Progress measures for the Chesapeake Bay Program
    c. Collaborative efforts with other working groups
(4) Which of your management actions will be the most critical to your progress in the future? Why? What barriers must be removed—and how, and by whom—to allow these actions to be taken? Indicate which influencing factors these actions will be meant to manage.
    a. STAC Workshop in September 2018: Chesapeake Bay Program Climate Change Modeling 2.0: Developing recommendations for new/refined methods for modeling techniques to assess future impacts of projected climate change on watershed loads and estuarine processes
    b. Research related to the impact of climate change on BMPs – "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"

Are our actions having the expected effect?

(5) What scientific, fiscal, or policy-related developments or lessons learned (if any) have changed your logic or assumptions (e.g., your recommended measure of progress; the factors you believe influence your ability to succeed; or the management actions you recommend taking) about your Outcome?
    a. Fiscal challenges associated with monitoring recommendations
    b. Uncertainty of climate science
    c. Lack of a qualitative endpoint

How should we adapt?

(6) What (if anything) would you recommend changing about your management approach at this time? Will these changes lead you to add, edit, or remove content in your Work Plan? Explain.

a. Modify the Climate Resiliency Working Group (CRWG) work plan format and narrow the work plan focus into four main areas:
    i. Shoreline condition and response
    ii. Climate change on BMPs
    iii. Inland and urban flooding
    iv. Stream health condition
b. Potentially narrow the focus of the work plan to report on those activities that the Climate Resiliency Working Group directly impact

(7) What opportunities exist to collaborate across GITs? Can we target conservation or restoration work to yield co-benefits that would address multiple factors or support multiple actions across Outcomes?
    a. The CRWG will continue to focus on climate change cross-outcome considerations with a particular emphasis on Black Duck, Wetlands, SAV, Brook Trout, Diversity, Fish Habitat, Forest Buffer, Healthy Watersheds, Stream Health, Water Quality

(8) What is needed from the Management Board to continue or accelerate your progress? Multiple requests for action, support or assistance from the Management Board should be prioritized, where possible, and all requests should be "traceable" to the factors influencing progress toward your Outcome. Because a limited number of agencies and organizations are represented in the Management Board's membership, we recommend naming those agencies and/or organizations that may play a key role in fulfilling your request for action, support, or assistance, in order to guide the Management Board in its work to contact, consult, or coordinate with partners.
    a. Addressing recommendations for data/research needs associated with the results of the "Monitoring and Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design" STAC Workshop:
        i. "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"
    b. Communicating monitoring priorities to nontraditional partners and Citizen Science programs.
        i. These priorities should include climate-related monitoring needs. MB (with input from CRWG and GITs) will develop a priority list of specific (space & time) data needs for this purpose.
    c. Promoting utilization of the Chesapeake Bay Program Climate Smart Framework & Decision-Support Tool –
        i. Encourage GIT chairs and coordinators to utilize this decision making tool in their workgroup decisions.
    d. Jurisdiction, WQGIT input and support re: WIP narrative guidance- a qualitative approach for incorporating climate change into the phase III WIPs