

Summary of Comments, WQ Management Strategy (MWCOG, USGS and EPA)

General:

- Note: Specific PA comments on the management strategy (September 2018) were included in the revised strategy distributed in early October 2018 for review.
- The Management Strategy is such a mix of past and present tense now between 2017 and 2025 it is very confusing as to what we are going to do and where we are going to go. The specific priorities are not clearly identified, nor how we are going to document progress towards achieving those priorities. It has gotten so long, I question that anyone outside of our immediate group will want to read it. If our target audience is the general public, we have definitely not reached them with this document. Sorry. [PA]
- Part V, Current Efforts and Gaps, should state that the watershed did not meet its 2017 nitrogen target—that is clearly a “gap”. [EPA]
- Current Efforts section: suggest editing tense to indicate actions that are complete
- In general, references to new data streams or collecting new monitoring data should include consideration of Storet/WQX for data collection purposes [EPA]
- CBP should make a statement on whether it believes the 2017 outcome was achieved. [EPA]
- In general, BMP implementation references should expand to include wastewater practices as well [COG]

Specific Comments:

I: Introduction

- Water quality outcomes include toxics and riparian forest buffers, So, clarify that we are only talking about the 2017WIP, 2025WIP and WQ Standards [EPA]

II: Goal, Outcome and Baseline

Background

- Remove reference to “integrated approach”: outdated from older version of strategy

III: Participating Partners

- Should Participating Partners include USDA? Should DOD be included? [EPA]

IV: Factors Influencing Success:

Improved Technical Information

- Factor 2: Consider exploring getting more data into WQX/Storet from various grant programs (e.g., 319) so that it can be used by CBP partners for decision making, targeting, measuring progress, etc. Suggest using available WQX/Storet data in decision-making. This should be put into the workplan as an action [EPA]
 - This comment also applies to factor 3
- Factor 5: Remove references to Phase 7 modeling tools. Phase 7 is premature [EPA]
- Factor 7 should include references or links for publication efforts [EPA]

Response of Water Quality Conditions to Management Practices

- Factor 11: Modeling references should be consistent with PSC decision to freeze planning targets through 2025 [EPA]
- Factor 12 should be updated to reflect PSC October 2018 decisions on Conowingo WIP and steering committee, or remove reference to PSC decisions on Conowingo WIP [EPA]
- Factor 13: If this [James River chla criteria attainment] is a task that CBP intends to support, it should be included in the workplan. I am not clear on what “implementation efforts” the partnership would support beyond the efforts provided to the entire watershed. [EPA]

Section V: Current Efforts and Gaps

- Should state that the watershed did not meet its 2017 nitrogen target—that is clearly a “gap”. [EPA]
- Assessing effectiveness of implementation actions: Is the partnership doing this through BMP verification or through updates to the BMP expert panels or through on-the-ground monitoring? If so, we should ensure that these actions are clearly documented in the workplan. “Assessing effectiveness” means more than just verifying a practice is still in place. [EPA]
- Monitoring is a critical piece that seems to get lost in this document and the workplan. In the monitoring section, we could add language to support the use of monitoring data in measuring progress towards the 2025 goal.
- Gaps should include septic controls, wastewater treatment, manure technologies in addition to conservation practices [EPA]
- COG recommends adding an additional gap: Financial capability to continue to maintain new and existing implementation practices.
- Language on necessary new capacity to address gaps should be included in “Lessons Learned” discussions in workplan [EPA]
- “more localized monitoring in watershed areas to assess effects of BMPs” should be identified in workplan. Reference use of Storet/WQX for collection of this data [EPA]

Section VI: Management Approaches

Enhancing Monitoring:

- “the CBP has begun developing new methods for assessing incremental progress towards water quality standards attainment” should be included in the workplan [EPA]
- model uncertainty analysis needs to be more clearly defined in the workplan [EPA]
- references to air monitoring should be linked to efforts to improve monitoring or be removed from the strategy language [EPA]
- Findings from the 2009 review of modeling are not included in workplan [EPA]
- USGS recommended addition: “The CBP partnership conducts annual monitoring of river flow to the Bay to help explain yearly changes in DO, clarity/SAV, and chlorophyll-a conditions. Living resources monitoring is used to assess changes in populations of lower trophic levels (SAV and invertebrates) and fisheries (crabs, oysters and selected finfish species) that are dependent on habitat conditions. The CBP nontidal water quality monitoring program monitors nutrient and

sediment at 115 sites in the watershed to help document and understand the factors affecting the response to management practices.”

- USGS recommended addition: “Continue to incorporate continuous monitoring in nontidal tributaries and estuaries in order to better understand the nature and timeframe of estuarine responses to watershed inputs. Recent monitoring has shown differences in short-term loadings from continuous monitoring that differ from those from current models. High frequency monitoring of inputs and the estuary will help better assess the timing and magnitude of responses in the estuary relative to watershed inputs.”
- USGS recommended deletion: “The STAR team is continuing a project to better measure and explain progress toward water quality improvements. This project will generate and improve understanding of the factors affecting system response (the Bay and its watershed) to implementation of management practices. STAR (under the CBP Modeling Workgroup) is also pursuing with the Scientific and Technical Advisory Committee (STAC) approaches to reduce uncertainties for models. Additional efforts to enhance monitoring are described in the Monitoring Progress section of this document.”
- USGS recommended addition: “Changes in water quality and related parameters, including dissolved oxygen, chlorophyll-a, water clarity, nitrogen, phosphorus, and total suspended solids, across the CBP long-term tidal water-quality monitoring network. These estimates show long-term (up to 35-year) and shorter-term (most recent 10-year) changes by adjusting for seasonal cycles and variability in river flow or salinity.”

Enhanced Analysis:

- USGS recommended addition: “Continue to support science to understand response times to watershed management. Continue and build upon current efforts to understand groundwater lag times for nitrogen, soil-phosphorus storage and release for phosphorus, and transport times for fluvial sediment.”

Phase III WIP Implementation:

- EPA recommends revising “phase III WIP implementation” Header to read “Phase III WIP and 2-year Milestone Implementation”
- USGS Recommended Addition: “Work with the jurisdictions to coordinate place-based research activities and insights with the spatial distribution of Phase III WIP implementation.” the idea is that we should mine the Phase III WIPs for content (such as local planning targets and spatial distribution of implementation) that can help inform our workplans. This is also useful to consider for the 2-year milestones, which are opportunities for the states to adjust their strategies and for us to provide more information as it arises. [USGS]
- USGS recommended addition: “Complete analysis of Conowingo and Estuarine monitoring to support Conowingo WIP development”
- List all workplan actions for Phase III WIP and milestones implementation here [EPA]

Approaches Targeted to Local Participation:

- “The CBP partnership is currently exploring how to express programmatic and implementation goals at the local level in the Phase 6 modeling tools to assist the jurisdictions in tracking

progress with their local goals, if preferred”; it’s up to jurisdictions to track progress with local planning goals. Consider deleting or editing. [EPA]

Cross-Outcome Collaboration and Multiple Benefits:

- Define who will compile and approve list of science needs and prioritization [EPA]

Section VIII: Assessing Progress

2017 WIP Outcome

- USGS and modeling workgroup project to enhance comparisons with modeled and monitored loads; should be included in workplan with a completion date, so that jurisdictions will know if it will be used in 2018-2019 milestones evaluation in Jan 2020 [EPA]

Water Quality Standards Attainment and Monitoring Outcome

- USGS recommended addition: “Analyzing trends in nitrogen, phosphorus, suspended solids, water clarity, chlorophyll, dissolved oxygen, benthic populations, SAV, and related parameters in the estuary and tidal tributaries.”
- Language related to groundwater data in shallow systems was in previous version—should we investigate use of this data for purposes of informing targeting strategies. I thought Emily T. was using this data in some of her storyline presentations [EPA]

Section IX: Adaptively Managing

- Reference to midpoint assessment of 60% implementation of reductions by 2017 should be included in “gaps” section of strategy [EPA]
- CBP should make a statement on whether it believes the 2017 outcome was achieved.
- Define “integrated approach” term [EPA]
- COG recommends the following additional question:
 - Are there fundamental changes due to climate impacts or other factors that require reconsideration of the water quality standards that the Bay TMDL was originally based on?
- EPA recommends the following additional questions:
 - How do we make the best implementation decisions under economic constraints at the state and local level?
 - How do we best target nutrient and sediment reduction practices to achieve the best outcomes?
 - How do we better leverage resources?