Summary of Comments, WQ Workplan/Logic Table (EPA, PA, USGS):

General:

- Clarify references to updated modeling tools and consistency with PSC decisions on stopping rule and freezing planning targets through 2025 [EPA]
- We see the workplan needs many of the columns completed, so perhaps with that extra detail much of our concerns will be addressed. However, our initial reaction is the workplan action step descriptions get mixed with performance targets where it isn't clear as to what is actually proposed to get done and how we are going to measure completion. It looks like a lot of work is being proposed, maybe more than what can get accomplished in the next two years. I would hate to lose sight of what has to get done in favor of the latest wish list. There is no connection that we can see to the list of priorities the WQGIT identified and how we are going to move those priorities forward. There may be some very good ideas being proposed here, but the detail just isn't there as to what is being done, by whom and when to understand how this work will move us forward. [PA]
- Confusion on key actions and performance targets, and what should be included in each one
- USGS included STAR responsible parties for WQ standards attainment and monitoring-related actions and performance targets; minor USGS formatting and language updates to WQ standards attainment and monitoring logic table and workplan items

Logic Table:

- Factor 1 and 2: MD programs are included in metrics (MACs, BRF)—should clearly identify as state-specific examples. Should we consider other state-specific examples?[EPA]
- Factor 2: Reference to citizen monitoring programs should be listed under a different factor [EPA]
- Factor 2: "Refinement of the assessment of need and best use can be improved" in Metrics should be a clear action of the WQGIT [EPA]
- Factor 3: include references to enhanced analysis and research to link drivers to changes in aquatic conditions [USGS]
- Factor 5 (new data streams): concern over adding additional information to track while limited in current data analysis capacity [EPA] Do we not have enough monitoring stations to assess? If that is the case, perhaps we should say that or be specific. If we don't have enough stations to support targeting or something else, we should say that.
- Factor 5: Suggested addition "Centralize monitoring data from varied sources (non-CB grants) to make it available to the partnership for analysis" this is a reference to Storet/WQX [EPA]
- Factor 7 (next gen models, enhance Phase 6 and develop Phase 7): remove reference to Phase 7, focus only on enhancing Phase 6 [EPA]
- Factor 8 (historical BMP review): may be duplicative with Factor 6 (quantifying reductions and verification). Should there be a workplan action that clearly addresses this text: "need for streamlining and simplifying BMP verification programs based on available resources"? [EPA]
- Factor 9 (communication and synthesis): include website references for these communication products [EPA]
- Factor 10 (co-benefits and cross-GIT):

- USWG GIT funding proposal should be removed because they were not selected for funding [EPA]
- Clarify how these co-benefits/outcomes were selected for inclusion in the workplan as opposed to other outcomes in the 12 selected priorities for WIP fact sheets [PA]
- Factor 11 (oyster/filter feeder BMPs): consider including freshwater mussels in filter feeder BMPs [EPA]
- Factor 12 (climate projections improvement and climate resilient BMPs): recommendation to use 2050 climate projections rather than 2025 projections. This expectation needs to reflect "beyond 2025." [PA]
- Include references to USGS's new modeling approaches for sediment source targeting (addressing factors 1 & 3) [EPA]

Workplan:

- General: Make sure to include performance targets for all actions and management approaches [EPA]
- General: References to data collection for updating land use (1.3) and modeling tools (1.4) should reference the PSC stopping rule to freeze model updates until the 2020 milestones. [EPA]
- Action 1.2: Include references to USGS's new modeling approaches for sediment source targeting (addressing factors 1 & 3) [EPA]
- Merge 1.4 and 1.7 for soil phosphorus work in AgWG. [EPA]
- Consider moving 1.7 (improving Phase 6 model for soil 6) to MA #5 (Phase III WIP implementation) [EPA]
- 2.1: Include annual progress reporting on for milestones as well as annual implementation progress reporting [EPA]
- Recommend adding an MA 2.4 for developing an indicator for measuring incremental progress towards WQ standards attainment. [EPA]
- Action 3.2 (new data streams): reference use of WQX and STORET in support of reporting new monitoring streams and data collection [EPA]
- USGS recommends adding new Action 3.3: "Expand continuous monitoring in tributaries and the bay to improve the understanding of direct responses in the bay to watershed inputs"
- Edit MA 4 language to read: Management Approach 4: Enhance analysis of modeled and monitored data of projects identified for additional analyses following the Midpoint Assessment to enhance our understanding of factors affecting water quality to better target pollution reduction practices and to better measure progress towards attaining Water Quality Standards. [EPA]
- MA 4: header language is unclear. The action steps look like a big wish list for research, half of which I am not sure what the purpose is. Until some form of prioritization of research needs is done by the Management Board, I suggest deleting this. A workplan on how to address those research needs can then be developed once that list is defined. [PA]
- Management Approach 4 header language is way too long. Revise to read: Enhance analysis for of projects identified for additional analyses following the Midpoint Assessment to enhance our understanding of factors affecting water quality [USGS]

- Include new measures (indicator) of incremental progress towards WQ standards attainment in Action 4.5 (improvement and enhanced development of metrics to assess change, e.g GAMs) [EPA]
- 4.6: Remove reference "to improve models in the future"; premature [EPA]
- 4.7: Make action language more specific (currently reads "Employ statistical methods or models to assess and quantify interactions" [USGS]
- USGS recommends adding action 4.9: Build capacity for analysis and communication of linkage between watershed changes and estuary response
- USGS recommends deleting action 4.10 (refine studies and tools to improve understanding of relation between BMP implementation and watershed and estuary response). Merged with 4.8, and unsure who will be able to carry out this action.
- Action 4.11: Change action language to: "Provide enhanced focus how population changes and economic influences may affect nutrient and sediment loads, and estuary changes. impact restoration activities." [USGS]
- Action 4.11: Unsure who will carry this out. Need to get commitment from Modeling team or Land Use Workgroup
- Action 4.12: consider removing model uncertainty analysis if no performance target [EPA]
- Action 4.14: updating land cover/land use is listed under MA 6 in the strategy [EPA]
- USGS recommends adding action 4.15: Provide analyses of Conowingo and estuarine monitoring through 2018 high flows to support Conowingo WIP development
- USGS recommends deleting Action 4.16: continue and expand engagement of scientists to advance the understanding of estuarine responses to watershed management.
- MA 5 (Phase III WIP implementation): EPA recommends several performance targets for actions under MA 5. Consider how the WQGIT should assist on evaluating cost effectiveness of source-sector distribution of loads [EPA]
- MA 5.1, 5.2, 5.3: PA recommends removing these actions (revenue sources, cost effectiveness considerations and funding gaps identification for Phase III WIPs). These are already in the Phase III WIPs
- MA 5.3: EPA suggested performance target language: "Return on Investment" analysis of installed BMPs from data in grants (costs and pollution reductions) to better target BMPs and funding" EPA recommends that the WQGIT and/or other source sector workgroups or another entity (contractor) evaluate BMPs installed per various grant programs to see the actual costs and the actual N, P and S reductions.
- Merge 5.4 (evaluation of BMP implementation and maintenance costs) into Management Approach 7 (cross-outcome, multiple benefits and optimization) [PA]
- 5.5 (oyster BMP panel work): consider removing if work is already in progress [PA]
- Action 5.6: Consider inclusion of trading programs; don't limit to just ag and ag certainty programs [EPA]
- EPA recommendation: add actions <u>5.7</u> (Work with other federal agencies to build capacity that will support an efficient and robust trading market) and <u>5.8</u> (Guide development of jurisdictions' trading and offset programs) EPA recommendation: add actions <u>6.2</u> (Development of success stories/lessons learned to share with local entities (focus on local water quality, improvements in flood protection, livability, economic growth, in addition to improvements to the Bay)) and

<u>6.3</u> (Developing and supporting state or regional approaches to improve local implementation (e.g., circuit rider programs))

- Key action 8.4 (stronger use of results to inform WIP implementation): clarify exactly what results are referenced [EPA]
- Actions 7.1 7.4 and 8.1 8.4: USGS added 2019-2020 timeline
- Actions 7.1 8.4: USGS added to responsible parties some combination of CAST team, selected workgroups, STAR, USGS:
 - o 7.1: Add CAST team
 - 7.2: Add selected WGs from other Goal Teams
 - 7.3: Cross-Outcome Coordination Team, selected WGs from other Goal Teams, USGS
 - 7.4: Add WQ source sector workgroups, USGS
 - 8.1: Add "working with WQ source sector workgroups"
 - 8.2: Remove "STAR workgroups", add "ITAT, USGS, working with source sector workgroups"
 - 8.3: Add STAR GIS team, CBP modeling team
 - o 8.4: Add "STAR interacting with WQGIT and jurisdictions"
- Need clarification and definition of parameters and teams for Management Approaches 7.1, 7.2, 7.3 (optimization tools and co-benefits quantification) [PA]
 - PA comment, 7.1: I thought 7.1 (optimization tools) was already under development and close to being finished. Why are we "exploring" other tools. For what purpose and what will be the deliverable?
 - PA comment, 7.2: What is the Cross-outcome coordination team? Who created it and who should is on it?
 - PA unclear on meaning of 7.3 (benefits and risks of practices addressing multiple outcomes)
- EPA recommends adding action 8.5: Development of success stories
- Action 7.4 performance targets (multiple benefits projects for toxic contaminants and USWG projects (stream restoration, MS4 stormwater programs). Clarify deliverables and exact outcomes desired [PA]
- Add a performance target under 7.4: Conduct STAC workshop on either agricultural or storm water settings, to inform benefits of nutrient, sediment, and contaminant reductions, list TCW and STAC as responsible parties [USGS]
- Action 8.3 (expansion of technical tools and development of new tools for decision support): clarify what tools and how they will be developed [PA]