

Midpoint Assessment Policy Issues Coming Forward to the Principals' Staff Committee for Decision: December 2016 – December 2017

Big Picture PSC Midpoint Assessment Decision Making Schedule

By **December 2016**, need decisions by the PSC on:

- Proposed **Phase III WIP planning targets methodology**;
 - Recommended **allocation of the additional nutrient and sediment loads coming over Conowingo Dam** due to the Conowingo Reservoir reaching its capacity to trap nutrients and sediments;
 - Proposed **climate change assessment procedures**; and
 - Proposed **ranges of options for when and how to factor climate change considerations into the jurisdictions Phase III WIPs** with decisions in spring 2017 informed by the outcomes of the proposed climate change assessment procedures.
- A **presentation** will also be provided by the Co-Chairs of the Partnership's Local Area Planning Targets Task Force on preliminary recommendations for expressing local planning goals in the jurisdictions' Phase III WIPs.

By **May 2017**, we need decisions by the PSC on:

- Proposed **draft Phase III WIP planning targets**;
 - **Approval of the Phase 6 suites of Partnership models** and other decision support tools for management application by the Partnership and the individual partners based on resolution any identified fatal flaws in the Phase 6 suite of modeling tools;
 - Partnership's **Local Area Planning Goals Task Force recommendations** on options for developing local area targets in the Phase III WIPs and what will be factored into the final Phase III WIP expectations;
 - How to fully **offset the additional nutrient and sediment loads coming over Conowingo Dam** due to the Conowingo Reservoir reaching its capacity to trap nutrients and sediments;
 - **When and how to incorporate climate change considerations into the Phase III WIPs** as the partners work on the draft Phase III WIP planning targets due in June 2017; and
 - Proposed **approach to ensuring all future new pollutant loads are offset**.
- A **presentation** will also be provided on the Management Board's recommended final feedback to EPA on the draft final Phase III WIP expectations and EPA's proposed final Phase III WIP expectations.

By **December 2017**, we need decisions by the PSC on:

- Final **Phase III WIP planning targets**.
- **Presentations** will also be provided to PSC members from (1) each jurisdiction on their progress in developing and conducting local engagement strategies as part of their Phase III WIP development; and (2) the WQGIT chair on the final sets of jurisdictional and source sector Midpoint Assessment Profiles.

MPA Policy Issues and Challenges Getting to Partnership Decisions

Addressing Pollutant Loads Resulting from Infill of Conowingo Dam

Forthcoming Partnership Decision(s) and Schedule

- October – December 2016: (1) DECISION that the Partnership have an understandable story to tell about the effect of the Conowingo Dam and Reservoir on Bay water quality. (2) DECISION on the proposed Conowingo infill modeling approach to yield, by spring 2017, updated estimates of the additional nutrient and sediment loads which need to be offset. (3) DECISION on the allocation of the additional nutrient and sediment loads coming over Conowingo Dam due to the Conowingo Reservoir reaching its capacity to trap nutrients and sediments.
- April – May 2017: DECISION on how to fully offset the additional nutrient and sediment loads coming over Conowingo Dam due to the Conowingo Reservoir reaching its capacity to trap nutrients and sediments.

Challenging Issues

- Our jurisdictional partners have differing opinions on how to address increased nutrient and sediment loads as a result of the Dam's loss of trapping capacity (see *Where the Jurisdictions Stand Currently* below).
- There is a need to understand what role other parties (e.g., Exelon) may have in taking responsibility for increased loads due to Conowingo.
- In reaching a decision on how to allocate the additional nutrient and sediment loads, consideration will need to be given to the impacts of potentially increasing the level of effort for those jurisdictions (e.g., Pennsylvania) that already have a heavy lift in meeting their Bay TMDL allocations and/or are behind schedule in meeting these allocations by 2025.

Where the Jurisdictions Stand Currently

- Preliminary discussions to date with the seven Bay watershed jurisdictions reflect differing opinions on how to address the Conowingo Dam issue:
 - (1) every Bay watershed jurisdiction should take responsibility and share the burden of offsetting additional nutrient and sediment loadings;
 - (2) the three Susquehanna jurisdictions should assume responsibility for offsetting those loads; or
 - (3) the three Susquehanna jurisdictions and downstream jurisdictions (e.g., Virginia) that have received a benefit as a result of the Dam's trapping capacity should assume responsibility for offsetting those loads.

Factoring in Climate Change Implications into the Phase III WIPs

Forthcoming Partnership Decision(s) and Schedule

- October – December 2016: (1) DECISION to present the proposed climate change assessment procedures, including whether to use a 2025 or 2050 climate change projection to guide the future work of the Climate Resiliency Workgroup. (2) DECISION on the ranges of options for when and how to factor climate change considerations into the Phase III WIPs with decisions in spring 2017 informed by the outcomes of the proposed climate change assessment procedures.
- April – May 2017: DECISIONS on when and how to incorporate climate change considerations into the Phase III WIPs as the partners work on the draft Phase III WIP planning targets due in June 2017.

Challenging Issues

- There is a need for the Partnership to understand the climate change science analyses conducted to date, as this information has not yet been widely presented to the Partnership.
- Concerns were expressed about the implications to levels of effort if climate change impacts are incorporated into the Phase III WIPs.
 - The Partnership is interested in learning more about what the discernable changes will be due to climate change between now and 2025, and now and 2050, in order to gain a better understanding of the magnitude of those climate change impacts on levels of effort needed to achieve the 2025 targets.
- Jurisdictions also expressed concerns with the uncertainty associated with the climate change projections. However, a Partnership decision is needed as to whether we factor in climate change up through 2025 or through 2050. This decision is important since it will narrow the scope of the climate change analyses from a science application perspective.
- These concerns about increased levels of effort and uncertainty associated with climate change projections may make it difficult for some of our partners to reach a decision on these key climate change issues.

Where the Jurisdictions Stand Currently

- Please see above. With the exception of New York, the jurisdictions expressed concerns with how their levels of effort might change as a result of addressing climate change in their Phase III WIPs.

Partnership Approval of BMP Expert Panel Recommendations

Forthcoming Partnership Decision(s) and Schedule

- September – December 2016: DECISIONS on Phase 6 BMP Expert Panels by the Water Quality Goal Implementation Team.

Challenging Issues

- There are 19 BMP expert panels that are either underway or have recently been approved by the Partnership that will inform the calibration of the Phase 6 modeling tools. The deadline for delivering Partnership-approved panel recommendations to the Modeling Workgroup is September 30, 2016. However, several expert panels will miss this deadline due to infrequency of panel meetings; difficulty achieving consensus either during the panel deliberations or Partnership review stages; and/or the panel needing more time to develop their recommendations.
- Jurisdictions have expressed concerns in the past about not receiving credit for actions being implemented on the ground.
 - Therefore, discussions are ongoing with leadership from the WQGIT and Source Sector Workgroups, as well as the CBPO modeling team, to incorporate preliminary recommendations into the modeling tools to inform the next beta calibration of the Phase 6 modeling tools.
 - This type of contingency planning is critical as many of these BMPs have significant impacts to the jurisdictions' planning and implementation goals under their respective WIPs.

Where the Jurisdictions Stand Currently

- The jurisdictions would prefer to allow flexibility in the overall Midpoint Assessment schedule so their key BMPs are included in the Phase 6 modeling calibration.

Acting on the Recommendations on Local Area Planning Goals from the Task Force

Forthcoming Partnership Decision(s) and Schedule

- October – December 2016: DECISION on the next steps, timeline and upcoming Partnership decisions in regards to the work of and recommendations from the Partnership’s Task Force.
- March – May 2017: DECISION on the recommended Partnership’s Task Force recommendations on options for developing local area targets in the Phase III WIPs and what will be factored into the final Phase III WIP expectations.

Challenging Issues

- Concerns have been expressed by Task Force members if the Partnership’s decision support tools (e.g. CAST) can support the development of local planning goals at a scale smaller than the state-basin scale.
 - However, with the high-resolution land-cover and local land use, parcel and zoning data provided by local governments, as well as the development of the Phase 6 Chesapeake Bay Watershed Model, the Partnership now has the data and tools, which were not previously available, to assist the Bay jurisdictions in developing local area planning targets/goals in their Phase III WIPs.
- The Task Force was charged with two questions: should local planning goals be developed and if yes, what are the options for doing so? However, EPA’s preliminary draft Phase III WIP expectations sent to the Principals’ Staff Committee on June 27, 2016 includes the expectation for the jurisdictions to develop local planning goals.
- Although providing maximum flexibility on how to develop those local planning goals and at what scales is supported by all the Task Force members, including EPA, this specific expectation in the preliminary draft Phase III WIP expectations document has generated significant concern amongst our state and local partners.
- Concerns were expressed about developing local planning goals as it may undermine local engagement efforts already made to date, particularly as it relates to holding local partners accountable for meeting those goals.

Where the Jurisdictions Stand Currently

- The jurisdictions would prefer to make the determination as to whether local planning goals should be established. This preference is consistent with the current Task Force recommendations but is inconsistent with EPA’s preliminary draft Phase III WIP expectations document.
 - However, EPA is very supportive of each jurisdiction having the flexibility to establish variable approaches on goals within the jurisdiction.

Refining and Finalizing the Partnership’s Phase 6 Modeling Tools

Forthcoming Partnership Decision(s) and Schedule

- July – September 2016: STAC peer review of the Phase 6 Watershed Model.
- September – November 2016: STAC peer review of the Bay Water Quality/Sediment Transport Model.
- Late summer/early fall: Local review of the Phase 6 land use dataset.
- October 2016: Beta 4 version of the Phase 6 modeling tools is calibrated with all data inputs with the exception of the Phase 6 land use dataset.
- December 2016: The Phase 6 land use dataset is delivered to the Modeling Workgroup.
- January – March 2017: Final calibration of the full suite of Phase 6 modeling tools.
- March – May 2017: Partnership’s fatal flaw review of the Phase 6 modeling tools.

- May 2017: DECISION on approval of the Phase 6 suites of Partnership models and other decision support tools for management application by the Partnership and the individual partners based on resolution any identified fatal flaws in the Phase 6 suite of modeling tools.

Challenging Issues

- The Modeling Workgroup is concerned about the lack of Partnership review – particularly at the Source Sector Workgroup level – of the existing beta versions of the Phase 6 modeling tools.
- It is essential that gaps and concerns identified in the Phase 5.3.2 modeling tools are being satisfactorily addressed in the Phase 6 beta versions. For example, how nutrient management and phosphorus-saturated soils are modeled in the Phase 6 tools has significant implications for Phase III WIP development and implementation, as well as getting a clear picture of local water quality attainment.
- To ensure we have accomplished this objective, we need comprehensive reviews by the respective source sector workgroups AND each of the seven jurisdictions. To date there has been minimal reviews by the source sector workgroups and little to no reviews by the jurisdictions outside of the Modeling Workgroup.
 - CBPO is investing in efforts to present the input and outputs from each of the beta versions of the Phase 6 Watershed Model in easier to view and digestible formats. Initial scenario runs are also being conducted to show preliminary results leading up to the fatal flaw review period and the draft Phase III WIP planning targets.
- The jurisdictions have also expressed concerns about how the Phase 6 modeling refinements will impact the development of the Phase III WIP planning targets (i.e. will these refinements show that a jurisdiction will need to do more in order to achieve their Bay TMDL allocations).

Where the Jurisdictions Stand Currently

- The jurisdictions need to have confidence in the Phase 6 modeling tools to run initial scenarios and to understand how the levels of effort has changed, and what these changes mean for the Phase III WIP planning targets and decisions on key policy issues.
- Jurisdictions feel that any changes in levels of effort should be driven by the monitoring and trends data, as opposed to the modeled data. This is particularly true in those areas where jurisdictions are seeing improving trends.

Factoring in Findings from Monitoring and Explanation of Watershed and Tidal Water Trends *Forthcoming Partnership Decision(s) and Schedule*

- December 2016 Delivery Date: Regional scale explanation of observed trends to support development of the draft Phase III WIP targets by June 2016.
- June 2017 Delivery Date: More comprehensive responses to needs and requests from the May 26 2016 PSC meeting to support development of the final Phase III WIP targets by December 2017.
- December 2017 Delivery Date: Station by station explanations of the observed trends to support the jurisdictions' and their local partners' development of their Phase III WIPs.
- June 2018 Delivery Date: More in-depth station by station explanation of the observed trends along with more information of trends in local sources and local yields connections with the station specific trends to support finalizing the jurisdictions' Phase III WIPs.

Challenging Issues

- The Partnership needs for USGS and our academic partners to deliver a solid set of storylines on explaining the larger scale regional trends by the end of December 2016 in order to inform Phase III WIP planning target development process.
 - A technical and management working group has been convened to work with USGS and their academic partners on identifying what trends data would be most useful to the jurisdictions and larger Partnership to inform Phase III WIP development.
- It is recommended that each of the seven Bay watershed jurisdictions invest the time to work with USGS and the CBPO Modeling Team to directly compare the USGS watershed yield data by station with the appropriate Phase 6 Watershed Model calibration estimates. Given that the Phase 6 modeling tools are under development, now is the time to conduct this comparison. However, little investment has been made at this point.
- Some of the jurisdictions expressed the need that implementation progress should be measured by the monitoring data, as opposed to just the modeled data. However, a greater understanding of those factors influencing trends is needed in order to support any conclusions drawn from this monitoring data.

Where the Jurisdictions Stand Currently

- The jurisdictions want to be sure that the modeling data supports the water quality monitoring trends, and to gain a better understanding of the “stories” or factors that guide those trends since the cause and effect relationship is not quite known.
- Without those explanations, states could have a difficult time describing and communicating those trends to their local stakeholders.

Finalizing the Phase III WIP Expectation and Soliciting Partnership Feedback *Forthcoming Partnership Decision(s) and Schedule*

- June 27, 2016: EPA released its preliminary draft Phase III WIP expectations for Partnership review and feedback.
- January 2017: EPA releases the complete revised draft Phase III WIP expectations for Partnership review and feedback.
- January – March 2017: Partnership briefings and webinars on draft and revised Phase III WIP expectations based on Partnership feedback received to date.
- April – May 2017: Based on this Partnership feedback, EPA releases final Phase III WIP expectations.

Challenging Issues

- Some jurisdictions feel that the Phase III WIP expectations should be a Partnership document, as opposed to an EPA document.
- Preliminary feedback to date reflect concerns about:
 - Including the development of local planning goals as an explicit expectation for Phase III;
 - The role of the state jurisdictions in taking the lead on federal engagement in Phase III WIP development and implementation – states see this as EPA’s role; and
 - Including any information under issues that are currently “placeholder” sections in the expectations document, such as climate change and Conowingo, given that Partnership decisions have not yet been made.

Where the Jurisdictions Stand Currently

- Beyond the challenges listed above, some of the jurisdictions are moving forward with the initial stages of Phase III WIP development, while some would prefer to wait until key Midpoint Assessment decisions are made.

Developing and Finalizing the Phase III WIP Planning Targets

Forthcoming Partnership Decision(s) and Schedule

- October 24-25, 2016: WQGIT confirms changes to the E3 and No Action scenarios, and decides which base year to use for developing the Phase III WIP planning targets.
- October – December 2016: DECISION on the methodology for the Phase III WIP planning targets.
- June 2017: EPA releases the draft Phase III WIP planning targets.
- December 2017: EPA releases the final Phase III WIP planning targets.

Challenging Issues

- The current Phase II planning targets will change based on new data (e.g., updated land use and BMP efficiencies) and methods introduced in the Phase 6 modeling tools, an additional decade worth of expanded watershed and tidal monitoring network data, and Partnership decisions on how to spread the level of effort due to issues such as Conowingo Dam, James River chlorophyll criteria re-evaluation, and climate change.
 - These changes will likely impact the levels of effort needed to meet the Bay TMDL allocations by 2025.
- Some jurisdictions have expressed the opinion that they cannot make a decision on the methodology used to develop the Phase III WIP planning targets until the draft planning targets are released in June 2017. However, a decision on the methodology is scheduled for this fall.
- The biggest question the jurisdictions have raised on this issue is: Will the Phase III WIP planning targets make it easier or more difficult in meeting the Bay TMDL allocations? Will implementation efforts need to increase, even if the monitoring data shows improving trends?

Where the Jurisdictions Stand Currently:

- The jurisdictions want (and will have) six months to review the draft Phase III WIP planning targets between when they are released in June 2017 and when they are finalized in December 2017.
- During this 6-month period, the Partnership will have the opportunity to request and see the results of model scenarios and programmatic analyses that will inform the development of the final planning targets.