

Water Quality Goal Implementation Team Meeting

September 25 - 26, 2017 / Annapolis, MD

Actions and Decisions

B. Current Status of the Phase 6 Suite of Modeling Tools:

ACTION: The Modeling Workgroup will conduct additional analyses on the Phase 6 relative effectiveness. These analyses will include running the Phase III WIP planning targets on Phase 6 relative effectiveness with current conditions to assign loads to each state basin. The presentation of this analysis will also include an explanation of the changes in relative effectiveness due to recalibration of the Phase 6 Watershed Model and Water Quality Sediment Transport Model (WQSTM), and the expected effect on relative level of effort from jurisdictional basins due to changes in the model. Additional investigation into why WIP attainment of planning targets decreased significantly for WV, NY, MD, and DC and increased significantly for DE and VA between Phase 5 and Phase 6 will also be presented to the WQGIT.

ACTION: The CBPO Modeling Team will analyze changes to the assimilative capacity of the Bay in the transition to the recalibrated Phase 6 Watershed Model and Phase 6 WQSTM. The CBPO Modeling Team will also analyze changes to the Bay's assimilative capacity with the addition and removal of loads from the Conowingo Dam and 2025 projected climate change impacts to the Bay. This will result in 6 different scenarios of assimilative capacity: Conowingo on; Conowingo off; 2025 climate change on, 2025 climate change off, both Conowingo and climate change on, and both Conowingo and climate change off. The results of these analyses will be presented to the WQGIT at upcoming meetings for review in preparation for making final recommendations on the draft Phase III WIP planning targets.

C. Establishing a Scenario Year for the Phase III WIP Planning Targets:

DECISION: The WQGIT approved using 2010 as the scenario year to establish the Phase III WIP planning targets. This recommendation will be presented to the PSC for approval at the October 31 PSC meeting.

D. Accounting for the Effect of Conowingo Dam and Reservoir on Bay Water Quality:

DECISION: The WQGIT will recommend to the PSC to begin addressing additional loads from the Conowingo Dam infill now, with the knowledge that dynamic equilibrium conditions are already occurring, and with consideration that Partnership decisions should inform the ongoing recertification process between Maryland and Exelon through Section 401 of the Clean Water Act. However, practicable implementation levels with regard to E3 need to be considered, along with diminishing efficiency in allocating load to additional jurisdictions. With this in mind, the "Effective Basins" scenario and the "Susquehanna Only" scenario were determined to be the most effective and efficient strategies. Additional strategies include acknowledging that the load will be addressed through various efforts, potentially by assigning it as a local planning goal and including Exelon in the implementation discussions.

ACTION: The Modeling Workgroup will conduct additional analyses on the assimilative capacity in the Bay with and without the Conowingo load distribution scenarios, and will develop explanatory materials to represent the options for distributing additional Conowingo phosphorus and sediment loads in future presentations to the WQGIT and PSC.

DECISION: The WQGIT will recommend to the PSC to address Conowingo loads separately as a local planning goal shared between the Susquehanna and most effective basins in the watershed, and additional loads from Conowingo will not be included in the Phase III planning targets.

DECISION: If the PSC does not approve the local planning goal approach for addressing additional Conowingo phosphorus and sediment loads, then the WQGIT will recommend that consideration of the “All Basins” and “Susquehanna + MD + VA” responsibility scenarios be removed, and that the PSC consider only the “Susquehanna + Most Effective Basins” scenario. However, all scenario options will be shown to the PSC for comparative purposes.

DECISION: If the additional Conowingo loads will be included in the draft Phase III planning targets, the WQGIT will recommend using the same effort/effectiveness curve for calculating wastewater targets that was used to establish the wastewater targets in the 2010 Chesapeake Bay TMDL.

DECISION: The WQGIT recommended to the PSC that additional loads from the Conowingo infill should be addressed now, given the current knowledge of Conowingo as an already-changed condition. Partnership decisions made now will also inform the current Clean Water Act 401 certification discussions between Maryland and Exelon.

ACTION: CBP Modeling Team will provide information on how the relative effectiveness of each basin changes between the Phase 5.3.2 and Phase 6 models. One suggested method is to provide a relative ranking of Phase 5.3.2 effectiveness values on graphics with Phase 6 effectiveness values.

ACTION: The CBP Modeling Team will run a ‘necessary reduction beyond WIPs’ scenario with Conowingo loads at 1990s conditions.

ACTION: The CBP Modeling Team will run a scenario with 1990’s Conowingo condition and relative effectiveness values.

ACTION: The CBP Modeling Team will develop two relative effectiveness options to look at for scenarios: 1) relative effectiveness of Conowingo operating under current understanding, and 2) using 1990’s understanding of Conowingo and relative effectiveness under the Phase 6 model.

E. Potential Use of 2025 Growth Projection Scenarios in the Phase III WIPs:

DECISION: The WQGIT recommended updating the growth projections every 2 years with the best available data to inform the development of two-year milestones.

DECISION: The WQGIT recommended using 2025 growth projections in the development of the Phase III WIPs. The Chesapeake Bay Foundation cited concerns with this recommendation, and abstained from the decision-making.

DECISION: The WQGIT approved the use of the Chesapeake Bay Land Change Model and Maryland Department of Planning’s Land Use models to develop the 2025 forecasts for use in the Phase III WIPs. This includes the potential to include new, more accurate data if/when it is available during 2-year milestone updates.

DECISION: The WQGIT approved the LUWG recommendation to eliminate the “Historical Trends” scenario, and develop the new “Current Zoning” scenario by November 15, 2017. The “Current Zoning” scenario will serve as

the principle scenario for the 2025 forecasts. The “Current Zoning” scenario will be available in CAST by January 2018.

ACTION: The “Conservation Plus” scenario (formerly “Utopia” scenario) will be completed by January 15, and will be available in CAST by March 1. The large data collection effort required to develop the “Zoning Plus” scenario will delay development until later in 2018; “Conservation Plus” was determined to be of higher priority.

ACTION: The CBP Land Data Team will provide information on the total coverage of zoning information informing the “Current Zoning” scenario.

ACTION: The LUWG will continue to develop alternative futures scenarios identified at the June Local Government Advisory Committee Forum.

F. Options for Factoring Climate Change Impacts and Considerations into the Phase III WIPs:

ACTION: The WQGIT did not reach consensus on a recommendation to the PSC on adopting a climate change policy option for the Phase III WIPs. The WQGIT and the Climate Resiliency Workgroup will revise the policy language for both the numeric and programmatic policy options and will provide revised options to the PSC for decision at the December 19-20 PSC retreat.

ACTION: The WQGIT will also provide the PSC a list of pros and cons under each policy option and recommendations for additional measures the PSC should adopt if the programmatic climate change policy option is selected.

ACTION: The WQGIT proposed the following revision to the numeric policy option language: remove the last clause from the numeric policy option language, to reflect that potential changes in level of effort may not always be increases in level of effort with added climate change projections considered. The WQGIT also proposed a language change in the numeric policy option to reflect the best available knowledge that some impacts from climate change may be addressed implicitly through changes in assimilative capacity, and some climate change impacts will be addressed explicitly through changes in jurisdictions’ Phase III WIP levels of effort.

ACTION: The WQGIT proposed the following changes to the programmatic policy option language: Element A will be removed as a stand-alone policy option and instead incorporated into Element B. The Climate Resiliency Workgroup will revise the climate change policy options accordingly and present to the WQGIT for approval at an upcoming conference call.

ACTION: The CBPO Modeling Team will provide jurisdiction-specific climate change projections for 2025, to give each jurisdiction information on how climate change may impact their level of effort in implementing the Phase III WIPs.

DECISION: The WQGIT recommended that if the programmatic policy option is selected by the PSC, the PSC could also provide the jurisdictions with the flexibility to adopt numeric approaches to address climate change impacts.

ACTION: The CBPO Modeling Team will run 2025 climate change scenarios using 0.17 sea level rise, and will present any changes between these projections and projections run on 0.3 m sea level rise to the WQGIT.

G. Recommendations on the Draft Phase III Planning Targets:

ACTION: The WQGIT will review the findings and products from the CBP Modeling Team over the next 6 weeks and will make a recommendation to the PSC on adoption of Phase III planning targets at the joint WQGIT/Modeling Workgroup meeting on December 4-5, 2017.

ACTION: The CBPO Modeling Team will do new geographic isolation runs on the recalibrated Phase 6 WQSTM to calculate the assimilative capacity of the Bay.

ACTION: The CBPO Modeling Team will investigate the effects on assimilative capacity of 2025 climate change projections and Conowingo infill conditions at the 1990s and current condition, and will brief the WQGIT on any changes in relative effectiveness, assimilative capacity, and effects on draft Phase III planning targets which may arise from these new analyses.

DECISION: The effectiveness curve for point source loads will remain identical with the curve used in establishment of the 2010 Chesapeake Bay TMDL. Any additional effort due to changes in the Phase 5 - Phase 6 transition, climate change, or Conowingo will be added to the all-else line.

DECISION: The WQGIT will retain the 20% slope between most and least effective basins on the effectiveness/"hockey stick" graph, in order to calculate the Phase III planning targets.

ACTION: A briefing on tools that will be available to review the geographic isolation runs will be provided to the WQGIT at an October conference call.

DECISION: The Phase III planning targets will be calculated with current relative effectiveness values. To avoid double-counting Conowingo loads, the difference between 1990s relative effectiveness and current conditions relative effectiveness will be used to subtract out Conowingo loads from basins that are affected by Conowingo.

H. Timeline for Releasing the Draft Phase III WIP Planning Targets:

ACTION: Pending review and concurrence from the CBPO Modeling Team, the WQGIT will recommend a 6 week change in schedule for the release of the final recalibrated Phase 6 suite of modeling tools and key scenario results, recommendations of the draft Phase III planning targets, and jurisdictions' development of the draft Phase III WIPs. The WQGIT will also recommend that the PSC October 2017 retreat be moved to December 2017, to allow for the necessary analyses of key scenarios and calculation of draft planning targets options by the Modeling Workgroup, and appropriate time for the WQGIT to review and make recommendations to the PSC on the draft Phase III planning targets.