DRAFT Deliberative for CWIP Steering Committee Review

Dear WQGIT, Modeling Workgroup, and Watershed Technical Workgroup Chairs,

Please accept this request and update from the Conowingo WIP (CWIP) Steering Committee (SC) regarding modeling efforts to determine the nutrient reduction efficiency of Conowingo dredging. This request and update is in follow up to the Conowingo modeling approach presented at the July 26, 2021 WQGIT meeting.

Nutrient reductions associated with Conowingo dredging are site-specific and influenced by local hydrodynamic processes, watershed inputs, sediment bio-geochemistry, and estuarine fate and transport that are not appropriately derived from the scientific literature. As such and with the concurrence of EPA Chesapeake Bay modelers, the CWIP SC proposed back in July that nutrient reduction efficiencies associated with any Conowingo dredging are best quantified by integrating existing Chesapeake Bay and Conowingo modeling tools updated with the most current local data and information regarding nutrient bioavailability and geochemistry. We also proposed that oversight and technical evaluation of the modeling tools was better suited to the charge and technical capacities of the Modeling Workgroup, but that we would also keep the WQGIT closely tied in (also now the Watershed Technical Workgroup) as the body approving loading rate reductions used in the Chesapeake Bay Watershed Model per the BMP Expert Panel Protocols. Please consider the following requests and model status updates with this background and understanding in mind.

Currently, two options are being explored for model development: (1) use of Constellation Energy's (formerly Exelon) Conowingo Pond Mass Balance Model (CPMBM); and, (2) new Corps modeling through their Planning Assistance to States program. These two options are being pursued in parallel as a contingency. The CWIP SC recently received model documentation for the CPMBM (attached) and are requesting Modeling Workgroup review of this documentation for sufficiency and to provide recommendations on next steps for using the CPMBM to quantify nutrient credits. This is a critical step for deciding whether the CPMBM should continue to be pursued as a viable modeling approach. The CWIP SC is requesting a 60-day timeframe for this review and appropriate coordination with the WQGIT and Watershed Technical Workgroup.

For the Corps Conowingo modeling approach, the CWIPSC worked with EPA modelers to send a draft scope of work to the Corps for comments. This draft scope is being reviewed the Corp's Engineer Research and Development Center (ERDC) Once we hear back from ERDC we will work with the Corps on next steps and share the draft scope with your teams.

Lastly and as part of Maryland's Innovative and Beneficial Reuse Pilot, a regression model was also completed to estimate Conowingo nutrient reductions under different dredging scenarios. This is also being submitted evaluation, comment and how this might fit into the broader modeling approach.

Given this modeling-based approach for Conowingo dredging evaluation that is different from the typical BMP Expert Panel process, we want to make sure that we are proceeding in a proper

and transparent way with this effort that is consistent with the BMP expert panel protocols. We also want to express our strong support for the WQGIT's work plan's focus on updating the expert panel process and funding the panels. This focus aligns with the CWIP's goal to advance BMP innovations that will help the partnership meet and sustain our Bay restoration commitments. Thank you in advance for your consideration of these documentation review requests and help in determining appropriate modeling next steps. Please let us know if you have any questions or concerns.

Jill and Matt

CC: Lee, Michelle