

COG WATER RESOURCES PROGRAM CHESAPEAKE BAY PROGRAM (CBP) UPDATES (as of 5/10/18)

Updates on key CBP activities that COG staff are monitoring or actively involved in that have critical impacts or potential implications for COG's members & the RWQM Work Program.

Bay TMDL - 2017 Midpoint Assessment (MPA) Activities

<u>Current Schedule & Pending Decisions</u> [updates to schedule noted in orange font] Some interim deadlines in the Bay TMDL Implementation Schedule have been delayed by 1-2 month; others have not. The schedule will be 'officially' modified when the Principal Staff Committee (PSC) meets on July 11th.

- Conowingo Dam/Susquehanna Watershed Loads Decisions regarding load allocations - March 2018 - CBP Partners agreed instead to a new/separate WIP process (see details below)
- EPA's Phase III WIP Expectations Document & '60% by 2017' Assessment Spring/Summer 2018
 - o 'Unofficial' modeling results of achieving the goals for Bay overall are:
 - Nitrogen 2017 not met, still gaps for 2025
 - Phosphorus met 2017, close for 2025
 - Suspended Solids met 2017, close to 2025
- Final Phase III WIP Planning Targets Mid-July 2018
- Final Draft Conowingo WIP March 2019
- Draft Phase III WIPs March 2019*
- Final Phase III WIPs late-June 2019*
- Climate Change Loads Agreed to a phased process & schedule to address various aspects of climate impacts and associated loads:
 - Evaluate results of analysis to improve the associated science of climate impacts on water quality <u>and</u> on BMP performance – March 2021
 - See details below regarding specific modeling efforts
 - o Account for Year 2025 climate-related loads and incorporate loads into:
 - Phase III WIP <u>Addendum</u> by September 2021, and/or
 - 2-Year Milestones beginning in 2022.

* Note: Schedule <u>no longer</u> allows a one (1) year interval from the issuance of the Final Planning Targets to issuance of the Final Phase III WIPs; so, timing of these items is likely to be modified/extended by about a month.

Planning Targets and Phase III WIPs

The CBP Partners are currently reviewing the Draft Planning Targets (based on the Phase 6 Model) as the basis for the Phase III WIPs. These efforts also include identification and incorporation of any 'special cases' (i.e., load adjustments) that would also need to be accommodated. Currently those special cases include:

 New York & West Virginia – Agreement was reached to adjust the allocated loads to both states to be 'equitable' with Phase II WIP allocations. Loads to support these adjustments came from air loads and finer interpretations of the Bay's 'assimilative capacity'. **COG Contact**

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• Delaware – A new load allocation adjustment request has been made; uncertain yet whether that requested adjustment is in response to technical issues or policy interpretations. The WQGIT is scheduled to make a recommendation on this matter on May 14th.

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The Final Planning Targets are now expected to be approved by the Principal Staff Committee (PSC) at a July 11^{th} meeting. The Phase III WIPs will detail plans for meeting those Planning Targets by reducing nitrogen and phosphorus loadings at the state-basin level.

This third round of WIPs will also account for population growth (according to land use projections being made to 2025), and climate change, and there will be a separate WIP process for the Conowingo Dam (see details below). This link provides good background information on the Planning Targets and WIPs: https://www.chesapeakebay.net/documents/Planning Targets Fact Sheet.pdf

COG Contact

Conowingo Dam / Susquehanna Watershed

Separate WIP to be Developed for Conowingo Dam/Susquehanna Watershed

The CBP Partners have agreed to develop a new/separate Conowingo WIP to address the additional loadings to the Chesapeake Bay due to the Conowingo Dam reaching 'dynamic equilibrium' (i.e., where loads are no longer retained behind the dam). This effort will be led by a Conowingo WIP Steering Committee to develop the WIP and a financing strategy. The Steering Committee will include CBP state representatives and is expected to include participation by Exelon, the dam's operator. For general information:

 $\underline{\text{https://www.chesapeakebay.net/news/blog/who is responsible for the conowingo dam}}$

In addition, MDE has also issued their 401 Certification for the Conowingo Dam, that includes a requirement that Exelon develop a plan to achieve specific annual load reductions (see details below). The annual Bay-wide Conowingo loads to be addressed by these efforts are currently defined as 6.34 Million pounds Total Nitrogen (TN), and 0.266 Million pounds Total Phosphorus (TP). The annual Exelon requirements defined by MDE are 6 Million pounds TN and 0.26 Million pounds (TP).

An initial concept was to perhaps to limit the geographic scope of where those load reductions will actually come from to just those deemed as 'effective basins'. But at this time - the geographic scope of where the reductions will be sought, how will those reductions will be funded, how will Exelon's obligations be met, and how these load reductions will be integrated with existing Phase III WIP efforts and load allocation decisions are still to be determined.

A key issue for COG's members is whether the load reductions for this new WIP will be limited to loads from so-called "effective basins", and whether those basins include any within the COG region. COG staff continue to monitor these matters and will be briefing the WRTC and CBPC at upcoming meetings.

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MDE Requiring Exelon to Reduce Pollution as Part of Conowingo Dam Relicensing

MDE, in partnership with MD DNR, has developed Water Quality Certification conditions that Exelon will be required to meet as part of the Exelon's 50-year federal relicensing process for the Conowingo Dam. Exelon will be required to reduce nutrient pollution in the amounts equal to what had been previously trapped by the Conowingo Dam, and reduce sediments as well.

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In addition, the certification will require installation of equipment to improve fish passage, and a study for a solar-powered trash collection wheel.

Link to Chesapeake Bay Magazine article

https://www.chesapeakebaymagazine.com/baybulletin/2018/5/1/md-

requires-exelon-to-reduce-pollution-flows-from-conowingo-

dam?utm_source=ALL+Mail&utm_campaign=95e8733ab3-

EMAIL CAMPAIGN 2018 04 25&utm medium=email&utm term=0 39a7fb9 96d-95e8733ab3-99484785

Link to MDE's 401 Certification letter (4/27/18):

http://news.maryland.gov/mde/wp-

content/uploads/sites/6/2018/04/Conowingo WQC 04-27-18.pdf

Watershed and Water Quality Models - Activities and Issues

Model Activities in Support of 2019 Climate Change Assessment

To meet a 2022 deadline for including additional nutrient and sediment load reductions in the Phase III WIPs to account for the impact of climate change, the Modeling Workgroup is currently planning several activities. These include documentation of all the modeling work that went into the current assessment of the impact on climate change, including a response to the peer review of the Scientific and Technical Advisory Committee (STAC) on that 2017 assessment.

The Workgroup also will review output from the Phase 6 Watershed Model used in the assessment, particularly changes in hydrology, temperature and precipitation. Modeling of climate change will have its own session at the upcoming Chesapeake Community Research and Modeling Symposium in June and will be the focus of a STAC workshop to be held sometime in the early fall. The goal is to complete the climate change assessment by the end of 2019.

COG staff will be organizing a WRTC work session to address these Bay Program climate modeling issues and related flood management issues in the coming months.

Long-range Modeling Priorities Under Development

The Bay Program's Modeling Workgroup has begun to focus on some longerrange issues as the model updates have been finalized for the Midpoint Assessment Process and the development of the Phase III Watershed Implementation Plans. Longer-range priorities include:

- a. Examining the models' ability to accurately simulate climate change which figure into the Bay Program's plans to fully quantify the effects for inclusion in the Bay TMDL by Year 2022; and
- b. Exploring the purpose and potential methods for including an uncertainty analysis of model output.

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COG WATER RESOURCES PROGRAM CBP UPDATES (s of 5/8/18)

Bay Program staff do not anticipate that they will produce completely new versions of the Watershed and Water Quality and Sediment Transport Models until the current Bay Partnership agreed upon 2025 deadline for full implementation of the Bay TMDL.

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