Chesapeake Bay Program Press Backgrounder

Chesapeake Bay Program: Midpoint Assessment and Planning for the Phase III Watershed Implementation Plans

The Chesapeake Bay Total Maximum Daily Load (Bay TMDL), established by the Environmental Protection Agency (EPA) in 2010, calls for an assessment in 2017 to review the progress that watershed jurisdictions (Delaware, District of Columbia, Maryland, New York, Pennsylvania, Virginia and West Virginia) are making to reduce the amount of nutrients (nitrogen and phosphorus pollution) and sediment flowing into the Chesapeake Bay and local rivers and streams. The Bay TMDL calls for all pollution reduction practices to be in place by 2025.

How is Progress Determined?

Under the Bay TMDL, jurisdictions and the EPA have agreed to develop short-term goals, called two-year milestones, to check in on progress being made to reduce pollution. The midpoint assessment will look at the jurisdictions' final 2016 – 2017 milestones and 2017 progress data to determine if jurisdictions have practices in place to achieve 60 percent of the necessary pollution reductions. These results will be finalized in spring 2018.

Watershed Implementation Plans (WIPs) are developed by the jurisdictions to help them determine how they will meet their pollution reduction goals. Phase I WIPs were developed in 2010 and Phase II WIPs were developed in 2012. The midpoint assessment will help inform the next iteration, the Phase III WIPs, which will guide the jurisdiction and their local partners and stakeholders on what actions and controls they will need to take and put in place to meet their pollution reduction goals by 2025.

Over the past several years, the Chesapeake Bay Program (CBP) partnership has been reviewing the latest science, data, tools and best management practices (conservation practices implemented by farmers and other individuals or organizations to reduce pollution and restore waterways) to consider all lessons learned and to incorporate a much expand level of local data into the tools that are used by the jurisdictions and their local partners to develop the Phase III WIPs and guide implementation through 2025.

Why is the Midpoint Assessment Important?

The midpoint assessment is a chance for the CBP partnership to step back and assess how the Bay TMDL and WIPs are making a difference in Bay restoration, if they are working as intended and if there's a better way to implement priorities and achieve local water quality as well as Bay restoration goals.

The ultimate goals of the midpoint assessment are to streamline implementation and work to overcome challenges to restoring local and Bay water quality as 2025 approaches and to set the jurisdictions up for success in the development and implementation of their Phase III WIPs.

What's new since the Bay TMDL was established?

There have been several enhancements since the Bay TMDL was put into place in 2010 and the Phase I and II WIPs were developed.

- Improved modeling tools: The new Phase 6 Watershed Model, which is used to develop WIPs, has a more simplified structure than the previous version and includes improved nutrient data, cutting edge high-resolution land cover data, and new and improved information about the efficiencies of pollution-reducing best management practices. It also contains over thirty years' worth of monitoring data to calibrate, or verify the accuracy, of the model. There is now an on-line version accessible for use by local partners and stakeholder in helping make local decisions effecting their waterways.

- High-resolution land cover data: A one-meter by one-meter resolution land cover data set of the entire Chesapeake Bay watershed with a high degree of accuracy, providing 900 times the amount of information over the existing data set.

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- Hundreds more best management practices available to be credited: For example, in December 2016, CBP's Agriculture Workgroup approved several voluntary measures taken by farmers to improve water quality in their own local watersheds. The full list of creditable practices includes everything from rain gardens to oyster aquaculture, as well as stream restoration and urban tree planting among others.

- Enhanced data gathered from local agricultural and municipality partners: The new modeling tools include an additional decade of new science and data from hundreds of monitoring stations across the watershed as well as local planning and zoning data gathered by working directly with counties and municipalities across the watershed.

- Monitoring trends: The partnership has increased the number of monitoring stations throughout the watershed, giving a more complete picture of real-time conditions and trends. This helps to visualize and explain the observed long-term trends in local streams and rivers, and how jurisdictions and their local partners and stakeholders can best use those new insights in planning for their Phase III WIPs.

What's next?

On December 19 – 20, 2017, the Chesapeake Bay Program's Principals' Staff Committee (PSC) will meet to make several policy decisions for the partnership that will impact the development of the Phase III WIPs. These decisions include:

- Accounting for Growth: Determination will be made on how to account for a projected increase in population in the Chesapeake Bay watershed. In this case, population refers not only to people, but also animals, crops, housing density, zoning information, etc.

- Assimilated Capacity: This refers to the amount of nutrient and sediment pollution that the Chesapeake Bay ecosystem can absorb and still meet water quality standards. The PSC will look at the science and data gathered over the past several years to determine if the current total acceptable nutrient and sediment pollutant loads should be adjusted.

- Climate Change: The PSC will decide how to incorporate climate change considerations into the Phase III WIPs, such as the effects of storm intensity, how to quantify the impacts of changes in watershed flows and changes in hypoxia, otherwise known as the 'dead zone', due to increased temperatures and sea level rise.

- Conowingo Dam: Efforts are currently underway to better understand how nutrient and sediment pollution is impacting water quality due to the Conowingo Dam reaching its capacity for trapping and storing sediment and nutrient within its reservoir. The PSC will decide who will be responsible for addressing increased nutrient and sediment loads as a result of the Conowingo Dam's loss of trapping capacity and help target actions that can be taken to address those loads.

- Draft Phase III WIP Planning Targets: The PSC will set draft nutrient and sediment pollution reduction targets for each jurisdiction at the state-major river basin scale, so they may begin planning their Phase III WIPs. Final targets will be provided in spring 2018 following a four month review period in which the jurisdictions can work with local partners to ensure these draft targets can also be used to help address local water quality restoration needs.

- Phase 6 Modeling Tools: The PSC will be asked to adopt the new suite of modeling tools for use in developing and supporting implementation of the Phase III WIPs.

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