

EPA EVALUATION OF THE CONOWINGO 2022-2023 MILESTONES

Executive Summary

The Chesapeake Bay Program (CBP) partnership's Principals' Staff Committee (PSC) agreed to develop a separate and collaborative Conowingo Watershed Implementation Plan (CWIP) and associated two-year milestones that would outline the programmatic and numeric commitments that could be taken to reduce the adverse water quality impacts to the Chesapeake Bay resulting from Conowingo Dam infill. According to the CBP partnership's Phase 6 suite of modeling tools, it is estimated that an additional reduction of 6 million pounds of nitrogen and 0.26 million pounds of phosphorus is needed to mitigate the water quality impacts of Conowingo Dam infill. This additional reduction must be addressed to attain applicable water quality standards in the Chesapeake Bay.

To assist in this effort, the PSC established the CWIP Steering Committee (Steering Committee), which is composed of a representative from each Bay watershed jurisdiction and the Chesapeake Bay Commission. This Steering Committee is responsible for coordinating the development and implementation of the CWIP and two-year milestones, with oversight and direction from the PSC.

The U.S. Environmental Protection Agency (EPA) is providing this evaluation of the 2022-2023 Conowingo milestones to the CBP partnership and the public in accordance with its oversight role and responsibility under the CBP partnership's accountability framework and the PSC framework for the CWIP. This evaluation includes an assessment of programmatic and numeric commitments (e.g., Best Management Practices or BMP implementation targets) for the 2022-2023 milestone period and the status of the relevant water quality monitoring trends. There has not yet been a submission of annual BMP implementation data to EPA to demonstrate progress towards attaining the nutrient targets within the Susquehanna Basin, as there is no funding in place to initiate and support BMP implementation; therefore, EPA could not conduct a detailed load reduction review, as is usually the case with EPA's evaluations of the jurisdictions' two-year milestones.

Detailed Evaluation of Programmatic and Numeric Commitments

Overview

This evaluation is based on the programmatic and numeric milestone commitments that were submitted to EPA on January 13, 2022. It is understood that since the milestones submission in January, several efforts are underway to fund and initiate BMP implementation within the Susquehanna Basin. It is recommended that the CWIP Steering Committee either update the Conowingo 2022-2023 milestones or document these efforts in its annual progress report due to EPA in January 2023.

In its evaluation of the final CWIP, EPA noted that the final CWIP BMP implementation scenario meets the necessary nitrogen reductions and focuses implementation in the most effective areas of the Susquehanna River Basin. However, no implementation of the CWIP or numeric commitments reflected in the 2022-2023 milestones has been initiated, as there has been no source of funding in place to implement the CWIP or the 2022-2023 milestones. Therefore,

there is currently no progress towards meeting the nutrient targets as reflected in the final PSC-approved CWIP.

EPA also expressed the expectation in its evaluation of the final CWIP that further details on programmatic and numeric actions, capacity to implement the CWIP, finer-scale targeted geographies for CWIP BMP implementation, and the role and engagement of local stakeholders in CWIP implementation will be addressed through the Conowingo two-year milestones. While EPA appreciates that the 2022-2023 milestones include commitments to build implementation capacity, foster innovation, and expand partnerships to increase BMP implementation over time, there is insufficient detail in the programmatic and numeric milestones regarding which geographic areas within the Susquehanna Basin will be targeted for implementation, the identification of local stakeholders that will be targeted for engagement as part of these implementation efforts, and specific funding sources to initiate implementation.

Programmatic Review

Building Implementation Capacity

2022-2023 Milestone Strengths

- Finalized the Letter of Understanding that establishes the Susquehanna River Basin Commission (SRBC) as the financing authority for the CWIP and two-year milestones.
- Commits to deliver funding to SRBC for implementation of the CWIP and two-year milestones.
- Commits to complete the BMP opportunity analysis with support from local stakeholders to support project planning efforts.
- Commits to completing the Audit Framework to ensure that projects being tracked towards the CWIP are being implemented as reported and do not overlap with other BMPs that are being tracked for the jurisdictions' Phase III WIPs. This also includes the implementation of new features necessary to align the Audit Framework in FieldDoc.

Key Areas to Address in the 2022-2023 Milestone Period

- Provide further details on how specific restoration investments will be identified as part of SRBC serving as the financing authority for the CWIP and two-year milestones.
- Provide further details on the process by which SRBC will manage funding for CWIP and two-year milestone implementation, including project selection and oversight.
- Provide further detail on whether the implementation pilot project(s) is intended to achieve the numeric commitment of achieving at least 25 percent of the nitrogen reductions identified in the CWIP.
- Clarify whether identifying and securing one or more funding sources for CWIP implementation over the 2022-2023 milestone period and identifying and scoping one or more implementation pilot projects to achieve numeric CWIP goals are separate activities or interrelated.

Expanding Partnerships

2022-2023 Milestone Strengths

- Commits to holding 12 training sessions for BMP tracking, verification, and reporting across the Susquehanna River Basin.

- Commits to reconvene stakeholder groups within the Susquehanna River Basin to evaluate progress and make recommendations to inform the next set of two-year milestones that are due in January 2024.

Key Areas to Address in the 2022-2023 Milestone Period

- Provide additional detail on which local stakeholders will be targeted for engagement within the Susquehanna Basin and their roles in BMP implementation, tracking, verification, and reporting.
- Clarify whether the annual progress report due to EPA on January 15, 2023, will reflect progress on BMP implementation data and/or updates on implementing the programmatic commitments under the CWIP and two-year milestones.

Fostering Innovation

2022-2023 Milestone Strengths

- Continues current initiatives to close science gaps and potentially credit freshwater mussel restoration and dredging as CBP partnership approved BMPs.

Key Areas to Address in the 2022-2023 Milestone Period

- Provide further details on how financial innovations will be explored (e.g., the role of pay-for-performance in two-year milestone implementation) and which private-public partnerships could be targeted for engagement.

Numeric Review

2022-2023 Milestone Strengths

- None.

Key Areas to Address in the 2022-2023 Milestone Period

- While there is a commitment to implement practices to reduce at least 25 percent of the nitrogen reductions identified in the CWIP, or 1.675 million pounds of nitrogen, there is no detail on which practices will be targeted for implementation, the specific geographies in which implementation will occur, and the local stakeholders involved in the implementation efforts.
- There is currently no funding in place to support BMP implementation to achieve at least 25 percent of nitrogen reductions within this milestone period.

Potential Federal Actions and Assistance

At its July 19, 2022 meeting, the PSC reached consensus that the Susquehanna jurisdictions of Pennsylvania, New York, and Maryland can address the Conowingo nutrients loads through the actions outlined in the CWIP using a phased approach that extends beyond 2025. This phased approach will allow time to build the organizational infrastructure to implement the Conowingo WIP. Phase 1 will focus on implementation through 2025. EPA, in coordination with the PSC, will assess progress towards achievement of the Conowingo nutrient targets in

2026 to determine if there will be a Phase 2 of implementation or if an alternative path forward needs to be pursued. The Conowingo nutrient targets to the Susquehanna jurisdictions will be those reflected in the final and PSC-approved Conowingo WIP.

EPA will continue to work with the PSC on the details of the phased approach for Conowingo WIP implementation in the coming months. The CWIP Steering Committee should identify additional funding sources to help ensure the Conowingo nutrient loads are addressed in a collaborative and innovative fashion.

As noted in its evaluation of the final CWIP, EPA remains prepared to assist the CWIP Steering Committee and the PSC in implementing the 2022-2023 milestones. EPA plans to continue to commit staff, contractual and funding resources to support the implementation of the Conowingo 2022-2023 milestones and future two-year milestones. This support includes evaluation of the most-effective practices and locations, annual funding assistance to address priority implementation needs, evaluation of implementation capacity under various staffing, funding, regulatory and programmatic scenarios, local planning outreach, legislative and regulatory gap analysis, and monitoring trend analyses. EPA will continue its commitment to track annual progress of the CWIP and two-year milestones and make those results available to the partnership and the public. [See: <https://www.epa.gov/chesapeake-bay-tmdl/epa-oversight-watershed-implementation-plans-wips-and-milestones-chesapeake-bay> and <https://www.chesapeakeprogress.com/>]

Monitoring Trends Summary

The CBP partnership's Chesapeake Bay Program Nontidal Water Quality Monitoring Network, supported by EPA, the U.S. Geological Survey (USGS), SRBC, and the Bay jurisdictions, generates water quality monitoring data in freshwater rivers and streams throughout the watershed that is analyzed by USGS for nutrient and sediment loads and trends. The most recent USGS results (www.usgs.gov/CB-wq-loads-trends) over the long-term period 1985-2020 and short term 2009-2020 for most stations were made available in September 2020. New nutrient and suspended-sediment load and trend results became available for the nine River Input Monitoring (RIM) stations for the long-term period 1985-2020 and short term 2011-2020. While identifying drivers behind individual trends is often complex, the monitoring results are worthy of the CWIP Steering Committee's consideration as it develops the programs and BMPs planned for the next two years.