



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION



Chesapeake Bay Program Office

Conowingo Watershed Implementation Plan

Agriculture Advisory Board
May 21, 2020

Tom Wolf, Governor

Patrick McDonnell, Secretary

Agenda

- Background
- Proposed Geography
- Link to PA Phase 3 WIP and Countywide Action Plans
- BMPs identified in proposed Scenarios
- Accounting for Climate Change
- Financing Strategy
- Next Steps

Conowingo WIP (CWIP) Overview

- The Conowingo Watershed Implementation Plan (CWIP) is developed to address the additional nutrient loads entering the Chesapeake Bay that were not previously addressed by the 2010 Chesapeake Bay total maximum daily load (TMDL) as a result of the Conowingo Reservoir reaching dynamic equilibrium. As part of this effort, an additional 6 million lbs. of nitrogen and 260,000 lbs. of phosphorus pollution per year.
- On January 31, 2019 the Principal Staff Committee (PSC) agreed to address these Conowingo pollution loads through a separate Conowingo Watershed Implementation Plan (CWIP) that all jurisdictions would work collectively to achieve by pooling partnership resources and by reducing implementation costs through targeting pollution reduction practices in the most effective areas.
- The PSC also agreed the CWIP must incorporate innovations in financing that leverage both private capital and market forces to reduce restoration costs.

Principal Staff Committee Timeline

- December 2017, PSC agreed to assign the total pollutant reductions attributed to the Conowingo Dam to a separate Conowingo Planning Target and to collectively develop a separate CWIP
- December 2017, PSC agreed to pool resources and to identify a process to fund and implement the CWIP
- March 2018, PSC agreed with EPA's request that the agency not have a member on the CWIP Steering Committee due to EPA's oversight role for the implementation of all the jurisdictions' WIPs, including the CWIP
- January 31, 2019, PSC approved final revisions to a Framework for developing the CWIP

CWIP Geography

- The CWIP Steering Committee agreed at the September 23, 2019 meeting to use the “Susquehanna + Most Effective Basins” option as the basis for the CWIP.
- A common theme across all the geographic scales is that BMP implementation is targeted to the most effective sub-basins (referred to as Land River Segments) of the watershed.
- The most-effective Land River Segments are not necessarily the areas within the upland drainage of the Conowingo Dam, nor closest to the Chesapeake Bay given the effect of local watershed characteristics on travel time, to include the impact of dams and impoundments.

CWIP and Pennsylvania's Phase 3 WIP

- The CWIP does not require the development of plans specific to local or priority geographies, rather an aggregation of targeted, priority implementation of practices, that together will achieve the necessary load reductions.
- The engagement strategy will be carried out in concert with the Partnership and jurisdictions' WIPs and local Countywide Action Plans.
- Generally, the strategies identified in the CWIP build upon the efforts by the Bay jurisdictions to develop the jurisdiction-specific Phase 3 WIPs.
- This ensures consistency in messaging and efficiency in the delivery of important communications to a variety of stakeholders.

CWIP and Countywide Action Plans

- The engagement strategy for the Pennsylvania portion of the CWIP is meant to align with Pennsylvania's outreach strategies for Tier 3 and 4 counties.
- The ongoing CAP process allows the CWIP to interact directly with local stakeholders and state agency staff in the development of integrated strategies. This will allow the CWIP to integrate the engagement strategy into the Phase III WIP strategy.

CWIP Scenarios

- The draft CWIP presents a set of best management practice (BMP) implementation scenarios for review and evaluation by the CBP Partnership and the public.
- These scenarios seek to reduce the overall cost of implementation while meeting nitrogen reduction targets by modeling various practices at differing geographic scales.
- Implementation is targeted to those areas where actions to reduce nutrients locally have the greatest impact on increasing water quality.
- A suite of CWIP scenarios are targeting priority geographic locations with “cost effective” agriculture and urban Best Management Practices.

CWIP Scenarios

- Primary focus in PA and MD, other states are also included
- Primary focus on Agriculture BMPs, include but not limited to:
 - Nutrient Management Core BMPs
 - Soil Conservation and Water Quality Plans
 - Nutrient Management Supplemental BMPs
 - Conservation Tillage and No-Till
 - Cover Crop
 - Prescribed Grazing/Precision Intensive Rotational Grazing
- Cost-effective Urban Practices also included:
 - Tree Planting
 - Urban Forest Planting

Accounting for Climate Change

- The CWIP will be assigned additional load reductions due to the impacts of climate change. At such time the additional loads are assigned, the two-year milestone periods will be used to adjust the scale and scope of the load reduction strategies.
- Accounting for climate change in the CWIP will help to mitigate flooding from storm events overtime.

Financing Strategy

- Recognizing this need for innovations in financing, the PSC has directed that a key component of the Conowingo WIP implementation is to develop a financing strategy that complements jurisdictional WIPs, accelerates Bay restoration overall, and provides healthy competition in the marketplace that will stimulate innovation and science while lowering costs.
- A draft financing strategy is scheduled for public review approximately a year after this Conowingo WIP will be finalized.
- The Chesapeake Bay Trust is leading the effort to develop the CWIP financing strategy, which will be provided as a separate document when completed in March 2021.

Milestones and Reporting

- The EPA will evaluate the draft and final CWIP and provide biennial evaluations of the progress toward attaining the goals in the CWIP.
- Development of the initial set of two-year milestones will be based on anticipated levels of funding both prior to and after the implementation of the Conowingo financing strategy.
- The CIT will work with the relevant State agencies to submit draft milestones to EPA by November 2021 and a final version by January 7, 2022.
- The CWIP Implementation Team will work with the jurisdictions to ensure the projects designated for the Conowingo are reported for review and submission by the jurisdictions before December 1 of each year.

Next Steps

- The development of the CWIP is arranged to occur in stages with the draft completed by July 2020, final CWIP completed by November 2020, followed by a financing strategy in March 2021.
- The implementation of the WIP is expected to continue beyond 2025 with opportunities to start implementation as funding becomes available.
- For example, implementation may begin as early as 2021 pending the availability of funding prior to the completion and implementation of the of the Conowingo financing strategy.



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