

EPA EVALUATION OF DELAWARE'S 2024-2025 and 2026-2027 MILESTONES

Executive Summary

The Chesapeake Bay Program (CBP) partnership established a goal to implement and maintain practices and controls to reduce nitrogen, phosphorus, and sediment in order to achieve applicable water quality standards as described in the [Chesapeake Bay Total Maximum Daily Load](#) (Bay TMDL). The CBP partnership, including the seven jurisdictions (Delaware, the District of Columbia, Maryland, New York, Pennsylvania, Virginia, and West Virginia) and the U.S. Environmental Protection Agency (EPA), agreed to develop and implement a framework for holding each partner accountable for reducing nitrogen, phosphorus, and sediment loads to meet the [CBP partnership interim water quality targets](#).

In that role, EPA evaluated Delaware's progress toward attaining nitrogen, phosphorus, and sediment goals at the state and state-basin level and progress toward meeting sector-specific programmatic commitments for the 2024-2025 milestone period. This evaluation also provides an assessment of the final 2026-2027 commitments to maintain and accelerate progress over the next two years.

In reviewing Delaware's final programmatic progress for the 2024-2025 milestones, the 2025 numeric progress, and the final 2026-2027 milestone commitments, EPA identified sector-by-sector strengths as well as areas for improvement. According to the data provided by Delaware for the 2025 progress run, Delaware did not achieve its [statewide interim target](#) for nitrogen, nearly achieved its statewide interim target for phosphorus and achieved its statewide interim target for sediment. EPA stands ready to assist Delaware with implementing its 2026-2027 two-year milestone commitments.

Some notable strengths identified in this evaluation of Delaware's 2024-2025 milestone progress and the final 2026-2027 milestone commitments include:

- Delaware met or exceeded several best management practice (BMP) implementation targets for the 2024-2025 milestone period.
- Delaware established several milestones with numeric targets for priority BMPs in the agricultural sector for 2026-2027 including all wetland, stream restoration, and buffer BMPs.

Some key areas that EPA expects Delaware to address in the 2026-2027 milestone period and beyond include:

- Continue to accelerate BMP implementation in the agricultural sector, especially because the Phase III Watershed Implementation Plan (WIP) is relying on this sector for the majority of the remaining reductions.
- Report progress for the timely reissuance of wastewater National Pollutant Discharge Elimination System (NPDES) permits in Delaware that address arrangements for alternative

wasteload allocations between Seaford, Bridgeville, and Invista to adhere to wastewater NDPS permitting requirements.

- Continue to accelerate BMP implementation in the developed (urban/suburban stormwater) sector, especially because that sector continues to experience growth.

Background and Looking Forward for Future Reviews of Progress

Since 2009, the CBP partnership has used two-year milestones to identify shorter-term actions for implementing WIPs and to document progress toward the partnership's water quality targets. In January 2025, the Principals' Staff Committee¹ (PSC) approved an updated approach to the two-year milestones to streamline both the development of milestone commitments and the reporting of progress, starting with the 2026-2027 milestone cycle. Under this updated approach, jurisdictions, the Conowingo WIP Steering Committee, and Federal Agencies--collectively referred to as Milestone Partners--are [expected to identify](#) high-level programmatic actions they plan to implement during the 2026-2027 milestone period to maintain or accelerate implementation toward meeting interim water quality targets.

At the September [2024 Management Board² meeting](#) the CBP partners agreed to define the "water quality targets" as the Interim Targets and Conowingo Targets.³ The Interim Targets are the Phase III Planning Targets factoring in 2025 changing environmental conditions and Unaccounted Additional Loads (UALs)⁴. In the most recent [Chesapeake Bay Watershed Agreement](#), the CBP partnership agreed that through 2030, the signatories will continue to accelerate completion of all water quality targets through implementation of Chesapeake Bay WIPs, two-year milestone commitments and other innovative strategies to achieve and maintain reduced levels of nitrogen, phosphorus and sediment. This evaluation and future evaluations through 2030 will measure progress toward the water quality targets using Chesapeake Assessment Scenario Tool (CAST 2023), unless amended by a future CBP partnership decision.

Concurrently, the CBP partnership is updating to the Phase 7.0 suite of modeling tools, which are expected to be completed and approved by the partnership in 2028. By December 31, 2030, the CBP partnership committed to revise the planning targets approved by the PSC for nitrogen, phosphorus, and sediment, incorporating the latest watershed modeling, monitoring data and research findings. The CBP partnership also committed to develop new or amended WIPs to meet those updated targets by 2040.

¹ As of July 2026, the PSC name changed to the Policy Steering Committee.

² As of July 2026, the Management Board was dissolved as part of the revised Governance and Management Framework.

³ The PSC approved a phased approach for what can be achieved at Conowingo by 2025. Conowingo has a separate WIP and milestones to meet those targets.

⁴ The UALs are equal to the increased load from cumulative Phase 6 CAST updates to model inputs that occurred after the Phase 3 Planning Targets were set in 2018. Accounting for the UALs balances the load increases from the model changes. Additional reductions necessary to account for Conowingo infill are not included.

In addition to updating tools, targets, and WIPs, the CBP partnership is exploring ways to better explain progress and the changing conditions of the Chesapeake Bay, using a combination of modeling results and monitoring data. EPA encourages each of the Milestone Partners to review and assess both the available real-world monitoring data and the most recent modeling results (Progress Year 2025) to inform the priority strategies.

Detailed Evaluation of Overall Load Reductions and Source Sectors

Load Reduction Review – Statewide and by Major River-Basin⁵

Each year, jurisdictions in the CBP partnership report the BMPs they have installed, tracked and verified, along with the pollutant load reductions from wastewater treatment plants. When evaluating Delaware's 2024-2025 milestone implementation, EPA simulated nutrient and sediment loads using CAST-23⁶ and wastewater discharge data reported by Delaware and compared those loads to its water quality targets.

According to the data provided by Delaware for the 2025 progress run, Delaware did not achieve its statewide and state-basin targets for nitrogen and phosphorus but did achieve its statewide target for sediment. EPA expects Delaware to accelerate and maintain BMP implementation levels to ensure progress toward meeting its nitrogen and phosphorus targets continues and that its sediment target is sustained.

Table 1. Loads and Targets for Delaware based on CAST-23 and reported wastewater data.

Pollutant	2009 Progress Loads (M lbs/year)	2025 Progress Loads (M lbs/year)	Water Quality Target Loads (M lbs/year)	Percent of Target Achieved
Nitrogen	6.61	6.73	5.61	0% ⁷
Phosphorus	0.12	0.11	0.11	99%
Sediment	48	26	27	100%

The summary progress from the CBP partnership's modeling tools for 2009 and 2025 incorporate BMP credit duration. The CBP partnership decided to remove reported BMPs from the model simulation at the end of their established credit durations unless verified by the state as inspected and continuing to function as designed. Verification is labor intensive but critical

⁵ Major river-basin refers to the eight major river basins draining to the Chesapeake Bay, some of which are shared by more than one Bay jurisdiction. For example, the Susquehanna River is shared by New York, Pennsylvania, and Maryland; Pennsylvania-Susquehanna refers to the Pennsylvania portion of the river. The phrase "major river-basin" is interchangeable with "state-basin" in this document.

⁶ CAST-23 is part of the Phase 6.0 suite of modeling tools for the Chesapeake Bay.

⁷ A value of 0% indicates that increased loads outpace current implementation efforts; in some of these cases these implementation efforts were offset by growth impacts.

for ensuring practices are implemented and reductions are credited. The CBP partnership is exploring opportunities for new technologies and systems to streamline verification. Delaware is expected to provide detailed programmatic milestones to support these BMP implementation targets. In the sector-specific sections below, EPA provides its evaluation of these programmatic milestones and the connection to increased implementation.

Monitoring

EPA encourages each of the Milestone Partners to review and assess both the available real-world monitoring data and the most recent modeling results (Progress Year 2025) to support meeting the priority strategies and actions identified in the final 2026-2027 milestones. Milestone Partners can use the [Chesapeake Assessment Scenario Tool \(CAST\)](#) to access the latest modeled progress results and build scenarios estimating future nitrogen, phosphorus, and sediment loads. The CBP partnership's Chesapeake Bay Nontidal Water Quality Monitoring Network, [supported by twenty-five groups](#) representing local, State, and Federal agencies, including the EPA, the U.S. Geological Survey (USGS), the Susquehanna River Basin Commission (SRBC), and the Bay jurisdictions, generates water quality monitoring data in freshwater rivers and streams throughout the watershed that is analyzed by USGS to provide monitoring-based information about the amount of nitrogen, phosphorus, and sediment entering the Chesapeake Bay through its nontidal rivers. These data inform watershed management by providing information on which to base restoration and conservation actions. The most recent results (www.usgs.gov/CB-wq-loads-trends) for the full 123-station network over the long-term 1985-2023 and short term 2014-2023 were published in March 2025.

Additionally, the [Monitored and Expected Total Reduction Indicator for the Chesapeake \(METRIC\) tool](#) can be used to compare observed water-quality trends with expected outcomes based on management actions, helping to clarify progress and guide priorities.

Future EPA evaluations will continue to stress the importance of using both modeling and monitoring information to target water quality actions such as milestone commitments to maintain and accelerate meeting the partnership's water quality targets. This integrated approach supports more accurate assessments and reduces misinterpretation, ultimately aiding partnership efforts to maintain and accelerate restoration and conservation efforts to achieve the water quality targets.

Source Sector Review

Delaware's 2026-2027 programmatic milestones are not grouped by sector. Grouping 2026-2027 milestones by sector is an option, but not a requirement in the latest [milestone expectations](#). EPA's comments about 2026-2027 milestones, however, are organized by sector to be consistent with the evaluation template for the 2024-2025 period.

Agriculture

Delaware is predominantly relying on agriculture BMP implementation to meet its interim water quality targets. Delaware continues to make incremental progress toward its goals, but

the current pace of implementation is not on track to meet its statewide nitrogen target by 2030. EPA expects Delaware to accelerate BMP implementation in the agricultural sector.

2024-2025 Milestone Achievements

- Completed conservation tillage and cover crop surveys. Met or exceeded several BMP implementation targets including cover crop implementation, manure relocation, tree plantings and afforestation and wetlands restored.
- Completed Whitemarsh Wetland Creation Project.
- Completed GIS analysis of land use data to identify landowners (>1/4 acre) who are eligible for Buffer Incentive Program.
- Completed the Vegetative Restoration project at Hickman farm.
- Hosted multiple soil health workshops and continued to implement and host all outreach programs.

2024-2025 Milestones Not Achieved

- Reported missed targets for several BMPs including manure relocated out of the watershed, wetland enhancement and rehabilitation, forest buffers, and farms inspected. EPA notes that the milestone for farms inspected was not met due to avian influenza.
- The Nanticoke Wetland Creation Project and Stream Restoration Projects at Cat Tail, Cart Branch, and Stafford were not completed during the milestone period and will all continue into 2026.
- BMP guidebook for tax ditch officers was drafted but not distributed. Currently being revised.

2026-2027 Milestone Strengths

- Established several milestones with numeric targets for priority BMPs in the agricultural sector for 2026-2027 including all wetland, stream restoration, and buffer BMPs.

Key Areas to Address in the 2026-2027 Milestone Period and beyond

- Report progress on efforts to accelerate BMP implementation in the agricultural sector and identify which programs were implemented to achieve the implementation targets, especially since some BMP implementation targets were not met in the 2024-2025 milestone period.

Urban/Suburban Stormwater

2024-2025 Milestone Achievements

- The Delaware Community Conservation Assistance Program (DeCAP) funded the installation of 6 BMP projects at 5 new properties cross the Chesapeake Bay Watershed. An additional 5 are planned to be installed in Spring 2026 and 5 more are planned to be installed within 2026.
- Verified 493 acres of the 403 committed acres of street sweeping.
- Verified 752 acres of the 529 committed acres of erosion and sediment control practices.

- Projects showcasing urban green infrastructure BMPs were designed, funded, and/or installed in Laurel and Seaford.
- Developed an online course for contractor certification in stormwater facility maintenance in both English and Spanish and launched in 2025.
- Completed a conservation landscape garden demonstration site at the University of Delaware and public workshops were held to provide education to members of the public regarding meadow installation, maintenance, and ecological benefits.
- Continued to increase the acreage of households enrolled in the Livable Lawns program during the reporting period.

2024-2025 Milestones Not Achieved

- Implemented 11.5 acres of the 1,602 committed acres of conservation landscaping.
- Implemented 33 acres of the 177 committed acres of urban tree plantings.
- Completed 925 feet of the 17,633 committed feet of urban stream restoration.
- Completed 747 treated acres of the 1,025 committed acres treated from runoff reduction performance standard practices.
- Completed 3,747 treated acres of the 5,560 committed acres treated from stormwater treatment performance standard practices.
- Verified 570 acres of the 23,556 committed acres treated under urban nutrient management plans.
- The Phase II Tier 2 Municipal Separate Storm Sewer System (MS4) general permit was not issued.
- The Phase I New Castle County MS4 permit was not issued.
- The Industrial Stormwater general permit was not issued.

2026-2027 Milestone Strengths

- Providing programmatic milestones intended to support several BMPs on Developed Lands from its Phase III WIP (urban and non-urban stream restoration, urban nutrient management) along with several BMPs for the developed sector supported by the Delaware Community Conservation Assistance Program (DeCAP).

Key Areas to Address in the 2026-2027 Milestone Period and beyond

- Continue to accelerate BMP implementation in the developed (urban/suburban stormwater) sector, especially because that sector continues to experience growth and Delaware is expecting additional nutrient reductions from the developed sector according to its Phase III WIP.

Wastewater Treatment Plants and Onsite Systems

2024-2025 Milestones Not Achieved

- The Seaford Wastewater Treatment Facility NPDES permit was not reissued by Quarter 2 of 2024 and remains administratively extended since its expiration in October of 2020. Meeting this milestone is particularly important because there is a nutrient trading agreement between Seaford and Invista. The currently effective Seaford permit does not

have the accurate nutrient limit/load values listed on it, in light of the nutrient trading agreement. The draft permit has gone through public hearing. DNREC has drafted a technical response memorandum (TRM), and the permit is undergoing internal review. EPA expects the permit to contain language which captures the trade agreement with Invista once DNREC reissues it.

Key Areas to Address in the 2026-2027 Milestone Period and beyond

- EPA recommends Delaware report progress for the timely reissuance of wastewater NPDES permits in Delaware that address arrangements for alternative wasteload allocations between Seaford, Bridgeville, and Invista to adhere to wastewater NPDES permitting requirements.

Growth, Offsets, and Trading

Key Areas to Address in the 2026-2027 Milestone Period and beyond

- Continue to work with EPA in offsetting any new or increased nutrient and sediment loads in Delaware's portion of the Chesapeake Bay watershed.

Potential Federal Actions and Assistance

EPA remains prepared to assist each of the seven watershed jurisdictions in implementing the 2026-2027 milestones. EPA will work with each jurisdiction to develop specific oversight and assistance activities to provide prioritized support for implementation efforts, including funding, technical assistance and analysis, training, and regulatory reviews.

EPA plans to continue to commit staff, contractual and funding resources to support the seven watershed jurisdictions in implementing the 2026-2027 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 Bay jurisdictions' implementation capacity under various staffing, funding, regulatory and programmatic scenarios; local planning outreach; legislative and regulatory gap analysis; and monitoring trend analyses.

In addition, EPA will continue to work with federal partners to provide leadership and coordinate with Bay jurisdictions on WIP and two-year milestone implementation to reduce pollutants from federal lands. EPA will continue its commitment to track annual progress of the Bay jurisdictions 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.chesapeakebay.net/news/pressrelease/chesapeake-bay-watershed-jurisdictions-continue-working-toward-nitrogen-and-phosphorus-goals-with-sediment-goal-already-achieved>]