



2025 CHESAPEAKE BAY WATER QUALITY PROGRESS

MILESTONE EVALUATIONS AND 2025 ASSESSMENT

OCTOBER 6, 2026

AGENDA



Overview: What was developed and Why

- Modeled Load Reduction Indicator (MLRI)
- Milestone Evaluations
- 2025 Assessment

Findings



Elements of Chesapeake Bay Water Quality Progress

The 3 ways that EPA measured progress in meeting Chesapeake Bay water quality goals:

- 1) Modeled Load Reduction Indicator (MLRI) – Annual numeric progress snapshot watershed-wide and for each jurisdiction
- 2) Milestone Evaluations – Biennial EPA assessment of short-term water quality progress covers numeric progress and Milestone Partner progress in meeting two-year milestone commitments
- 3) 2025 Assessment – One time EPA assessment of long-term water quality progress.



What is the Accountability Framework?

Framework developed to support the Chesapeake Bay Program partnership in achieving Bay restoration goals for water quality.

Note that the WQS underlying the water quality goal are meant to protect aquatic life

Framework articulated in letters to the Principals' Staff Committee (PSC) in [2008](#) and [2009](#)

Includes:

1. Jurisdictions' Watershed Implementation Plans (WIPs)
2. Jurisdictions' Two-Year Milestones
3. EPA's commitment to track, record, and evaluate/assess progress
4. EPA's commitment to take appropriate [federal actions](#), as necessary, if the jurisdictions do not develop sufficient WIPs, effectively implement their WIPs, or fulfill their two-year milestones.



Why? EPA's Oversight & Assistance Role

All 3 of these documents are developed pursuant to EPA's tracking and oversight role under the [CBP partnership's accountability framework](#) :

- **MLRI** – EPA on behalf of the partnership develops annual numeric progress to track progress in meeting water quality goals and is provided on ChesapeakeBay.net
- **Milestone Evaluations** –EPA's biennial evaluations to assess short-term progress and are shared as routine oversight and provided on EPA.gov
- **2025 Assessment** – EPA's one time oversight assessment with a focus on progress since 2009, like the [2017 midpoint assessment](#) provided on EPA.gov

2025 Assessment is also an EPA commitment in the [2023 Chesapeake Bay Settlement Agreement](#)



2025 Progress Summary

Interim Targets w/ CEC - 2025 Progress Summary

*This includes atmospheric reductions to the tidal waters and the watershed

<i>Jurisdiction</i>	<i>N</i>	<i>P</i>	<i>S</i>
Delaware	0%	99%	100%
District of Columbia	100%	100%	100%
Maryland	99%	100%	100%
New York	62%	74%	52%
Pennsylvania	15%	47%	48%
Virginia	84%	89%	100%
West Virginia	100%	100%	100%
Watershed*	57%	90%	100%
Conowingo**	3%	1%	0%

****Goal of 25% by 2025**

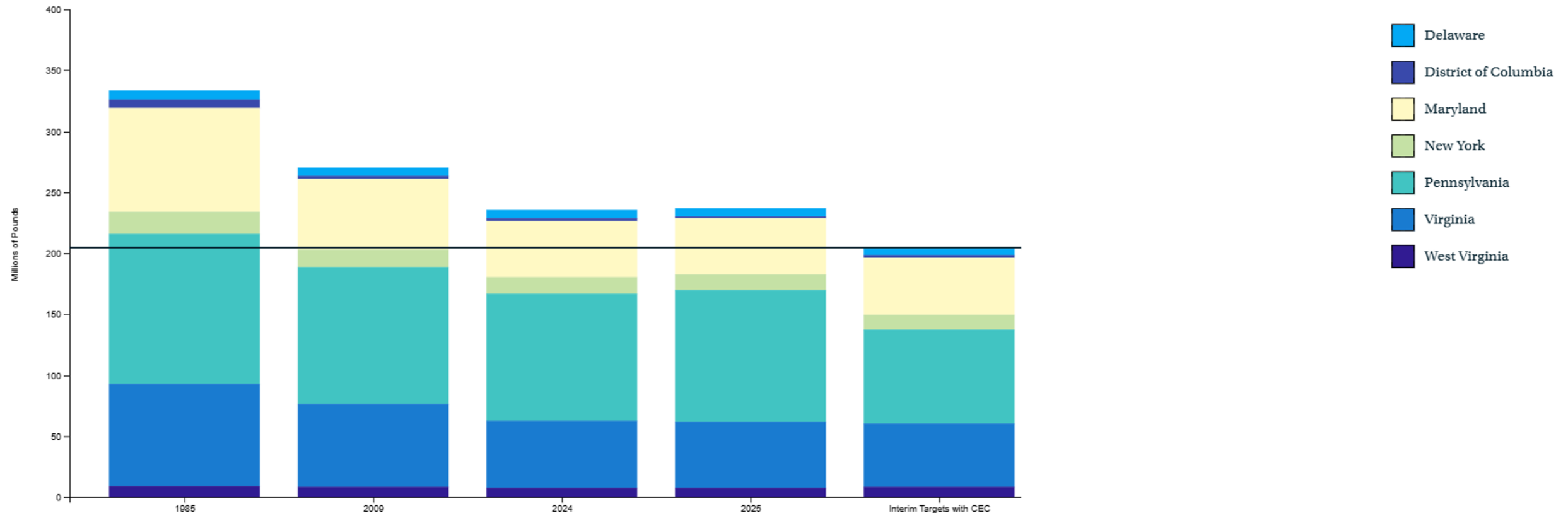


2025 Modeled Nitrogen by Jurisdiction

Modeled Nitrogen Loads to the Chesapeake Bay by Jurisdiction (1985-2025) 📊

Loads simulated using Phase 6 Watershed Model and wastewater discharge data reported by jurisdictions. Atmospheric deposition simulated using Chesapeake Bay Airshed Model. 2025 Interim Targets established for development of Phase III Watershed Implementation Plans. See how these data are used in .

[VIEW CHART](#) [VIEW TABLE](#)



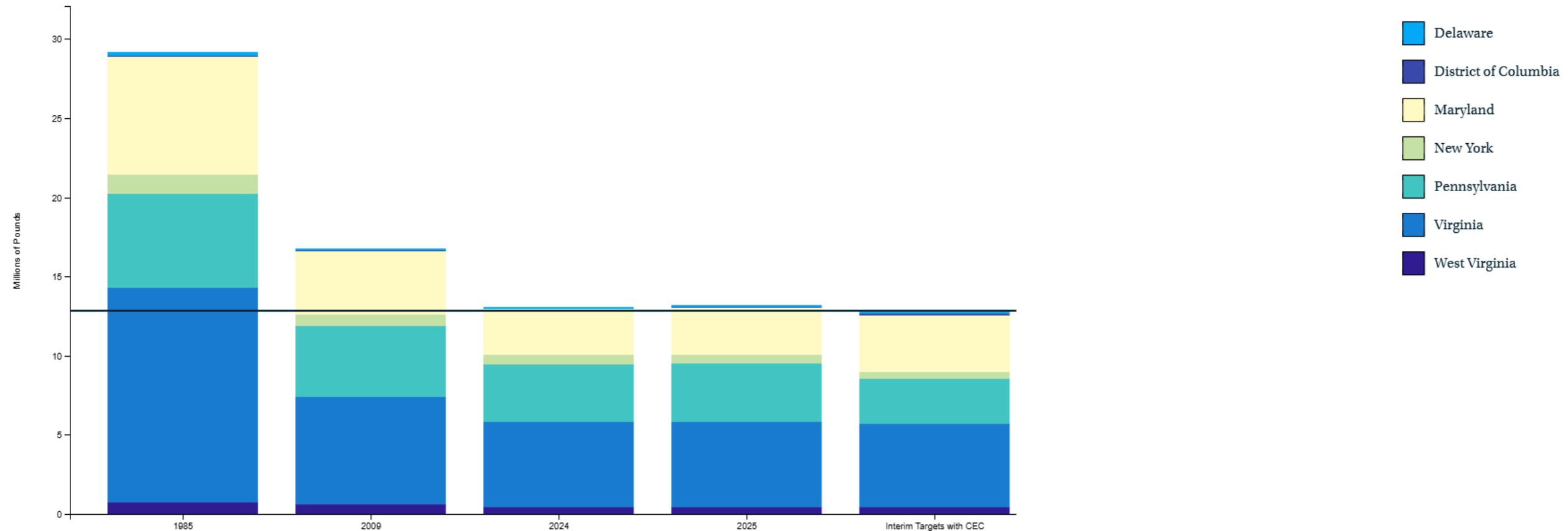


2025 Modeled Phosphorus by Jurisdiction

Modeled Phosphorus Loads to the Chesapeake Bay by Jurisdiction (1985-2025) 📊

Loads simulated using Phase 6 Watershed Model. 2025 Interim Targets established for development of Phase III Watershed Implementation Plans. See how these data are used in .

[VIEW CHART](#) [VIEW TABLE](#)



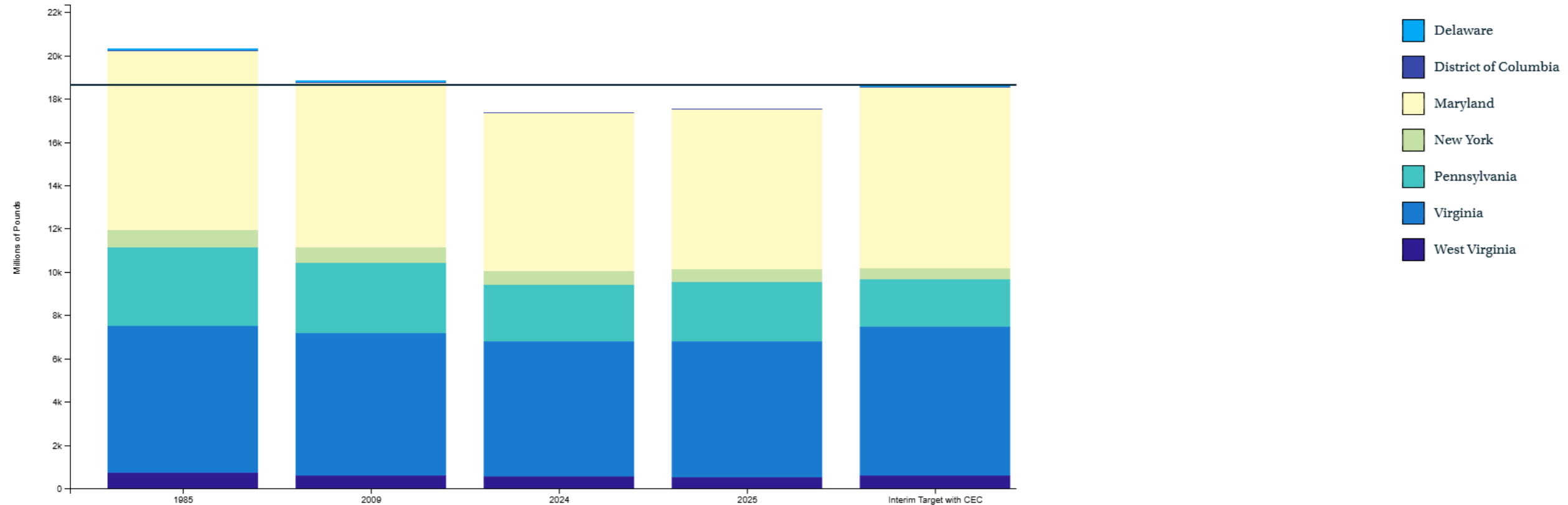


2025 Modeled Sediment by Jurisdiction

Modeled Sediment Loads to the Chesapeake Bay by Jurisdiction (1985-2025) 🗨️

Loads simulated using Phase 6 Watershed Model. 2025 Interim Targets established for development of Phase III Watershed Implementation Plans. See how these data are used in .

[VIEW CHART](#) [VIEW TABLE](#)

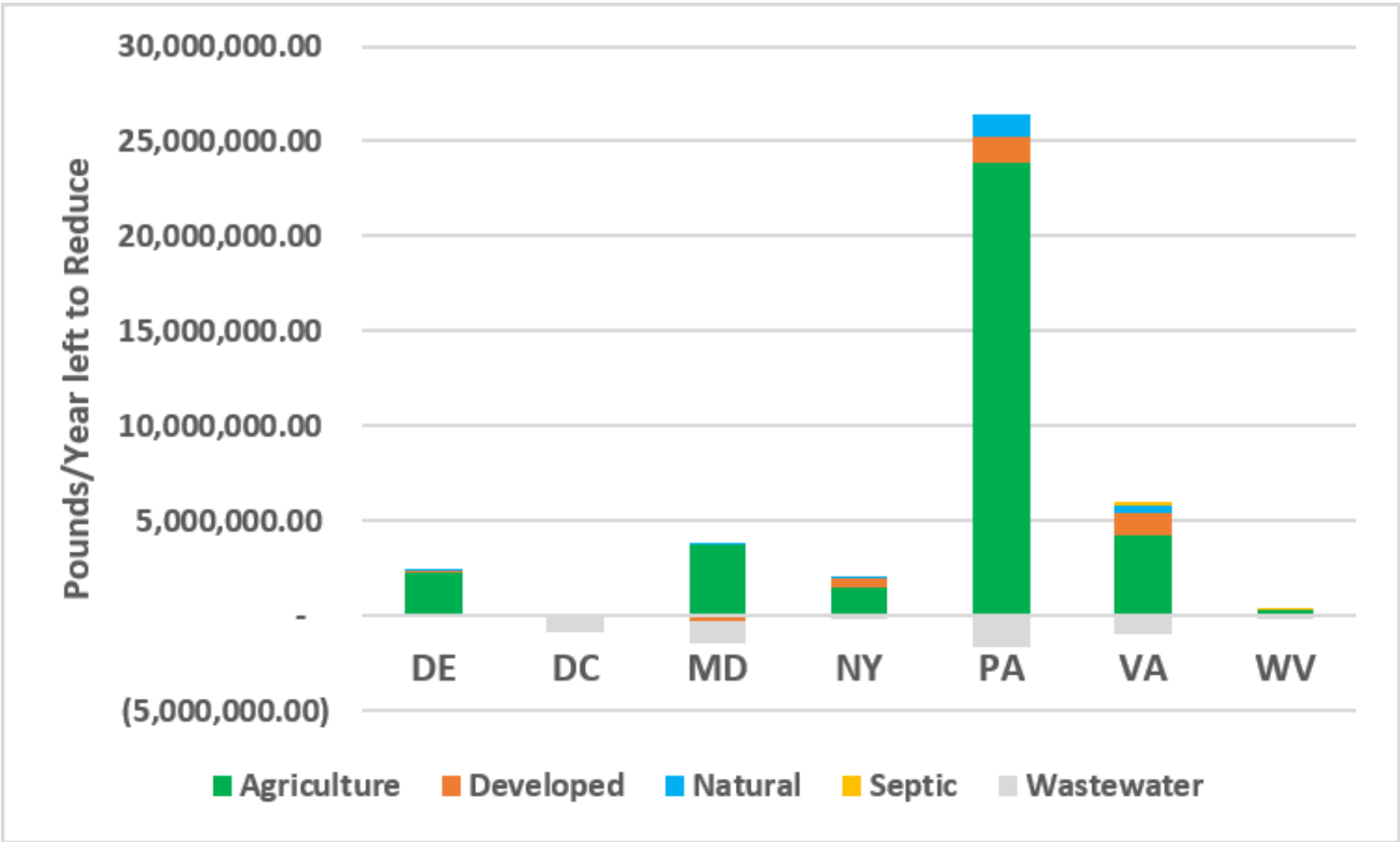




2025 Progress Summary

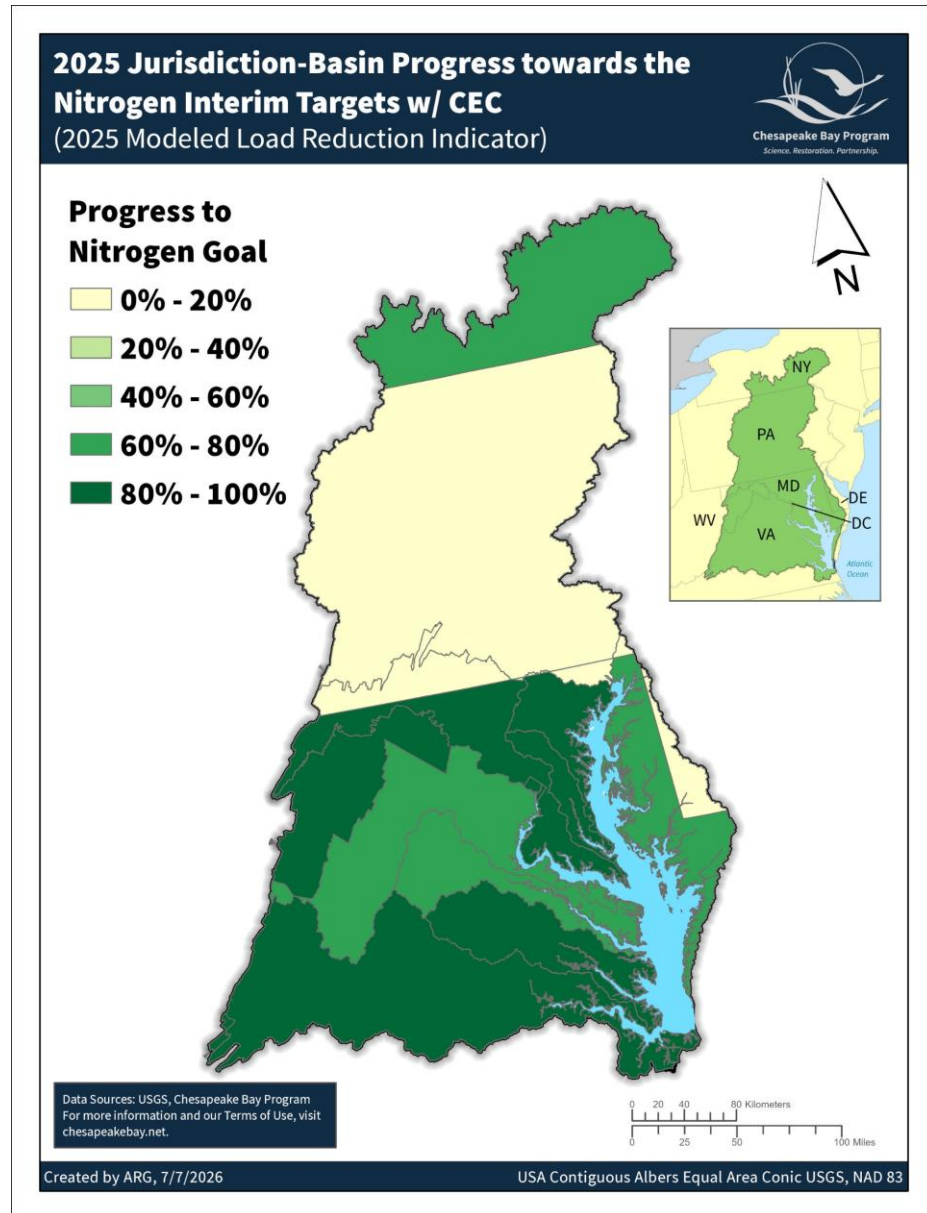
Nitrogen Reductions Needed to achieve the Phase III WIP Commitments*

Where are future reductions planned?



*Sector targets are based on commitments in Phase III WIPs, which differ from the values used for the Interim Targets w/ CEC.

STATE-BASIN PROGRESS TOWARDS NITROGEN GOAL





Milestone Evaluation

Evaluation of 2025 numeric progress and 24-25 programmatic progress, 26-27 programmatic commitments

- **Strengths**

- Continue to invest in staffing capacity and BMP implementation
- Several jurisdictions are meeting or close to meeting water quality targets

- **Areas to Address**

- Have not met nitrogen and phosphorus water quality targets watershed-wide
- Need all partners to continue to accelerate implementation in the agriculture (except DC) and developed (urban/suburban stormwater) sectors
- Need to offset for growth in nitrogen, phosphorus, and sediment loads as it occurs



Milestone Evaluation

Milestone Partner Feedback (1 of 3)

- **District** – Met all targets, continues significant investments in wastewater infrastructure. Ongoing need to reduce loads from the developed sector.
- **Delaware** – Met S target and nearly met P target. Shows 0% progress in meeting N target. Committed to increase implementation in the agriculture sector. Needs to improve BMP verification.
- **Maryland** – Met P and S targets and nearly met N target. Continued investment in forest buffers and wastewater upgrades. Ongoing need to reduce loads from ag and developed sector.



Milestone Evaluation

Milestone Partner Feedback (2 of 3)

- **New York** – Continues to pursue funding for ag BMPs and to track wastewater to monitor growth. Not meeting N,P, or S targets. Ongoing need to reduce loads from ag and developed sector.
- **Pennsylvania** – Investing in staff capacity, building partner network, and reducing administrative barriers to implementation. Not meeting N,P, or S targets. Ongoing need to reduce loads from ag and developed sector.
- **Virginia** – Met S target and on track to meet N & P targets. Appropriated record funding levels for ag BMPs. Need to meet N & P targets and reduce loads from ag and developed sector.



Milestone Evaluation

Milestone Partner Feedback (3 of 3)

- **West Virginia** – Met all targets. Continues to invest in ag BMPs like nutrient management. Needs a verification program and to continue to reduce loads from the ag and developed sectors.
- **Conowingo** – Pioneered use of pay-for-performance financing for BMPs. Working across state boundaries. Not meeting its targets and needs significant ramp up to meet goals. See additional slide.
- **Federal** – Most programmatic commitments met. Needs to continue to align funding and support for state and local ag programs.



Milestone Evaluation

Conowingo

- EPA committed to conduct an assessment in 2026 related to progress in implementing the phased approach for the Conowingo WIP and if the loads should remain in the CWIP or be divided among the 3 Susquehanna states (NY, MD, PA).
- **EPA recommended extending the phased approach another 2 years and expects the targets of meeting 25% of the N and P, targets be met by 12/31/27.**
- EPA will reassess the CWIP phased implementation in 2028.



Summary Points

- Emphasizes progress to date: meeting 57% N, 90% P and 100% S targets
- Shift from only wastewater in the early years to wastewater and ag contributing the most to reductions from 2017-2025
- Identified achievements across jurisdictions and ongoing challenges identified
- Recognizes more work is needed to improve water quality and the collective effort of the CBP partnership to demonstrate accomplishments and that meaningful progress is possible

QUESTIONS ON PROGRESS?

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Background Information

Milestone Partners

- 7 Bay Jurisdictions (Delaware, the District, Maryland, New York, Pennsylvania, Virginia, West Virginia)
- Conowingo WIP Steering Committee (New York, Maryland, Pennsylvania)
- Federal Agencies (Federal Management Committee)

Acronyms

- BMP – Best Management Practice
- CBP – Chesapeake Bay Program
- CBPO – Chesapeake Bay Program Office
- CEC – Changing Environmental Conditions
- CWIP – Conowingo Watershed Implementation Plan
- MLRI – Modeled Load Reduction Indicator (Annual numeric progress)
- N – Nitrogen
- P – Phosphorus
- S – Sediment
- WIP – Watershed Implementation Plan