

Taking Management Responsibility: Department of Defense Phase III WIP Support and Implementation



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DoD Chesapeake Bay Program

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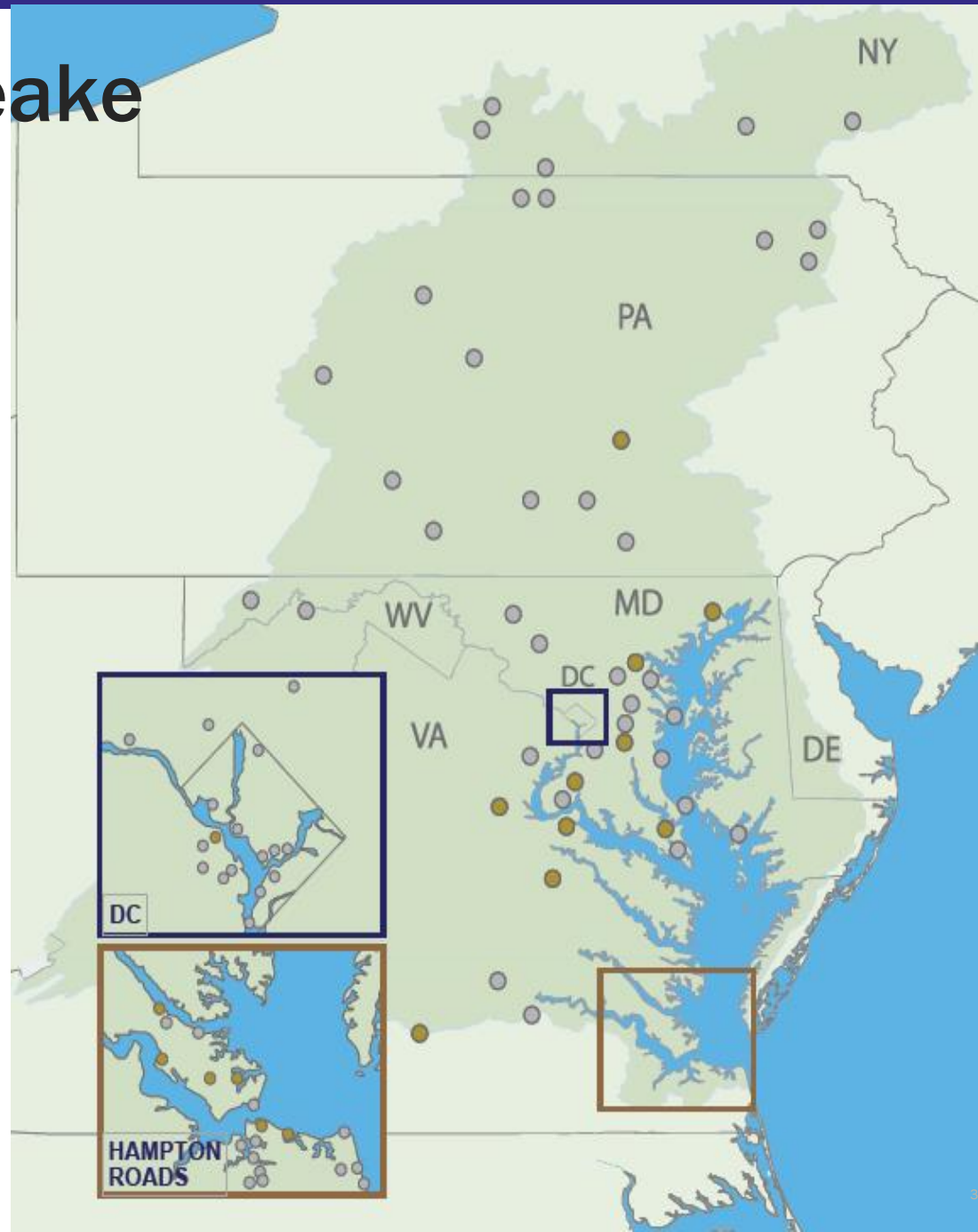
Overview

- DoD in the Chesapeake Watershed
- DoD Role and Commitments for Phase III Watershed Implementation Plans (WIPs)
- Translating EPA Expectations into Actions
- Takeaways



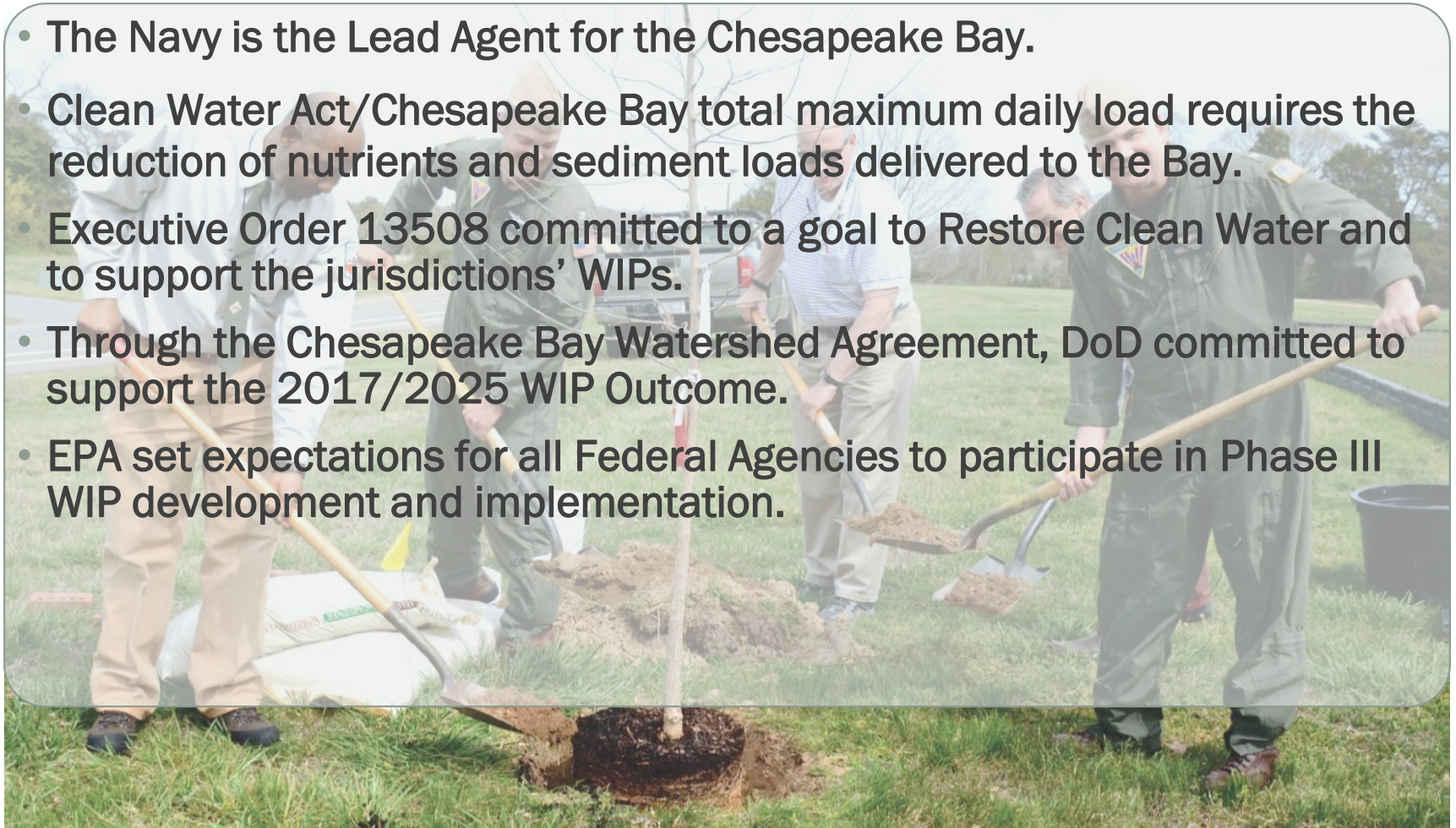
DoD in the Chesapeake

- Manage 400,000 acres and 130 installations/annexes
- 2nd Largest federal landholder
- Comprise about 1% of the watershed



DoD's Role & Commitment

- The Navy is the Lead Agent for the Chesapeake Bay.
- Clean Water Act/Chesapeake Bay total maximum daily load requires the reduction of nutrients and sediment loads delivered to the Bay.
- Executive Order 13508 committed to a goal to Restore Clean Water and to support the jurisdictions' WIPs.
- Through the Chesapeake Bay Watershed Agreement, DoD committed to support the 2017/2025 WIP Outcome.
- EPA set expectations for all Federal Agencies to participate in Phase III WIP development and implementation.

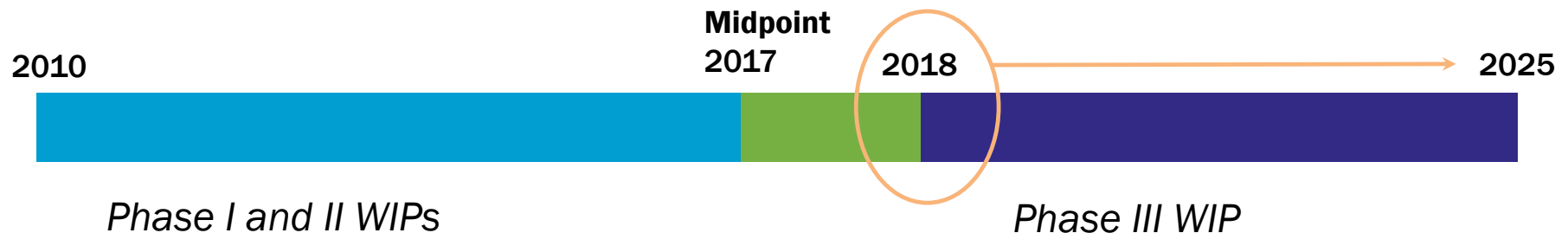




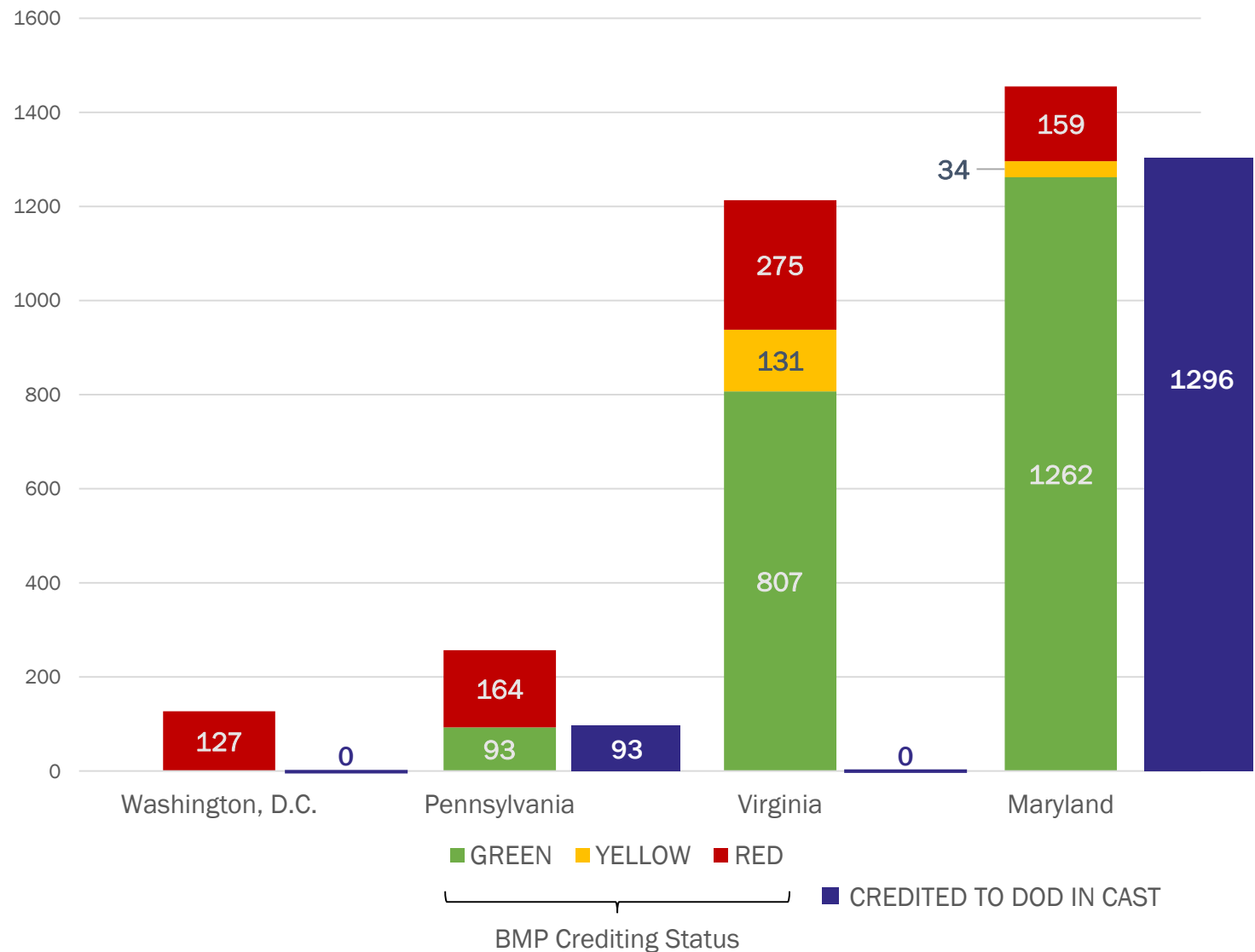
Translating Commitments and
Expectations into Actions

Translating Commitments and Expectations to Actions

- 1 Tracking BMP credit and nutrient and sediment reductions
- 2 Supporting Phase III WIP development
- 3 Developing 2025 plans with data provided by installations
- 4 Identifying the “gap” in the 2025 scenario and developing 2025 DoD WIP3 approach



ACTION: 2017 BMP Crediting Reports



Take-away:
DoD BMPs are underrepresented in the Bay Model.

Therefore, the Partnership's Progress scenario is not a good representation of DoD progress.

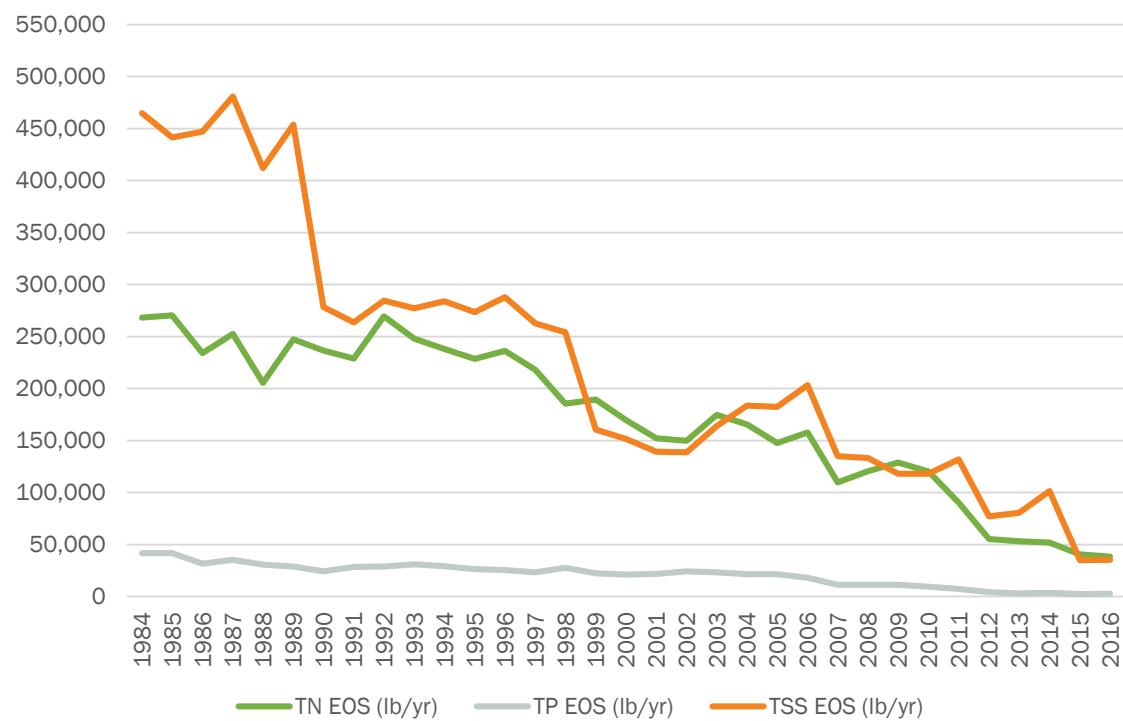
ACTION: Assess Nutrient and Sediment Reductions

Urban/Developed sector: In Virginia and Pennsylvania, DoD did not meet TN or TSS goals. In Washington, D.C., installations did not meet TSS. DoD met all TP goals.

Did DoD meet 2017 federal facility targets?			
Jurisdiction	TN	TP	TSS
Maryland	✓	✓	✓
Virginia	✗	✓	✗
Pennsylvania	✗	✓	✗
Washington D.C.	✗	✓	✓

ACTION: Assess Nutrient and Sediment Reductions

Wastewater sector: Overall, DoD’s 11 WWTPs in the Bay watershed reduced pollutant loads by 81,720 lbs TN/yr, 6,665 lbs TP/yr, and 82,968 lbs TSS/yr (92 percent reduction) since 2010.



Annual EOS Load Reduction from WWTPs (%), 1984-2016			
Jurisdiction	TP	TP	TSS
Maryland	84%	97%	70%
Virginia	88%	81%	95%
Pennsylvania	85%	97%	98%
DoD Watershed Wide-reductions	86%	94%	92%



2025 Implementation Plans

ACTION: Identify gaps and develop 2025 “Fill Gap” alternatives

Total Nitrogen Loads (lb/yr)					
Jurisdiction	Scale	2018 DoD Progress Load	2025 DoD Planned Implementation Load	Draft 2025 FPG Load	Remaining Reduction to FPG
Maryland	EOS	351,583	348,209	329,371	18,838
Virginia	EOT	524,595	526,004	482,641	43,363
Pennsylvania	EOS	450,798	450,060	361,171	88,889
Washington, D.C.	EOT	12,140	12,118	11,538	580

Total Phosphorus Loads (lb/yr)					
Jurisdiction	Scale	2018 DoD Progress Load	2025 DoD Planned Implementation Load	Draft 2025 FPG Load	Remaining Reduction to FPG
Maryland	EOS	38,045	36,649	39,241	0
Virginia	EOT	81,888	81,700	79,227	2,473
Pennsylvania	EOS	36,521	36,416	26,727	9.689
Washington, D.C.	EOT	1,108	1,105	941	164

ACTION: Fill Gap Approaches



**Urban
Nutrient
Management**



**Stream
Restoration**



**Natural
Resource
Projects**



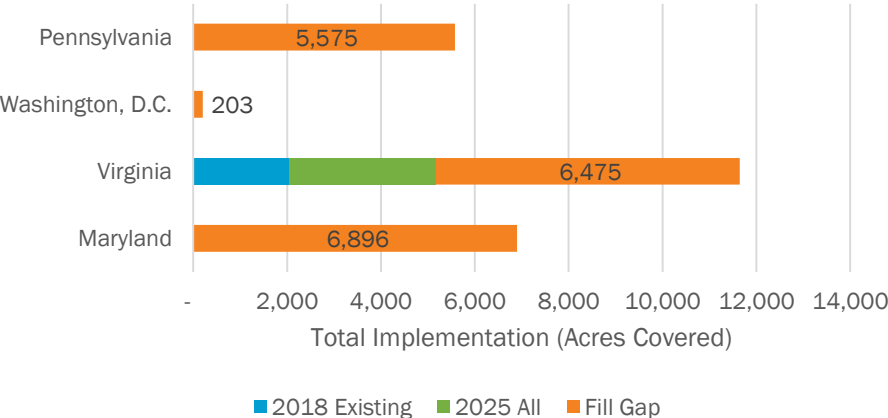
**Runoff
Reduction
BMPs**



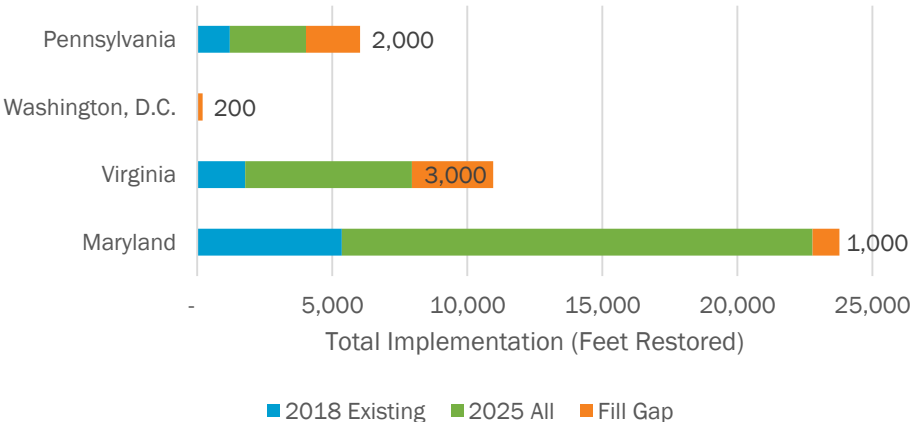
**Tree planting
and other land
use changes**

ACTION: 2025 Fill Gap Approaches

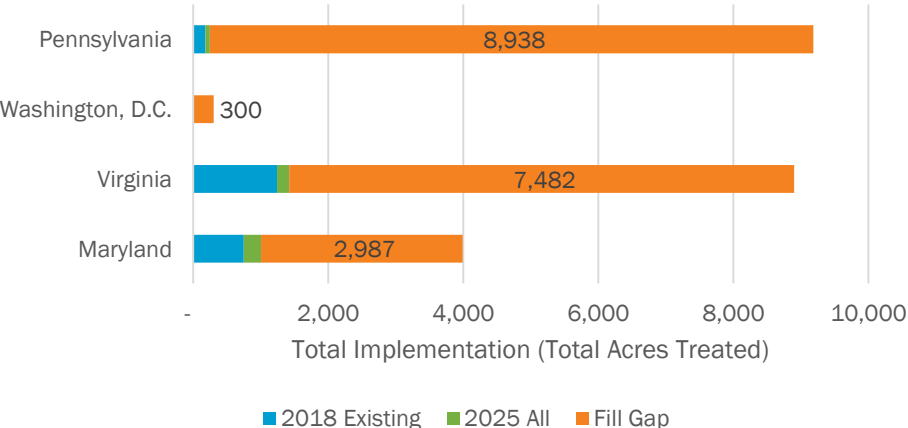
2025 Urban Nutrient Management



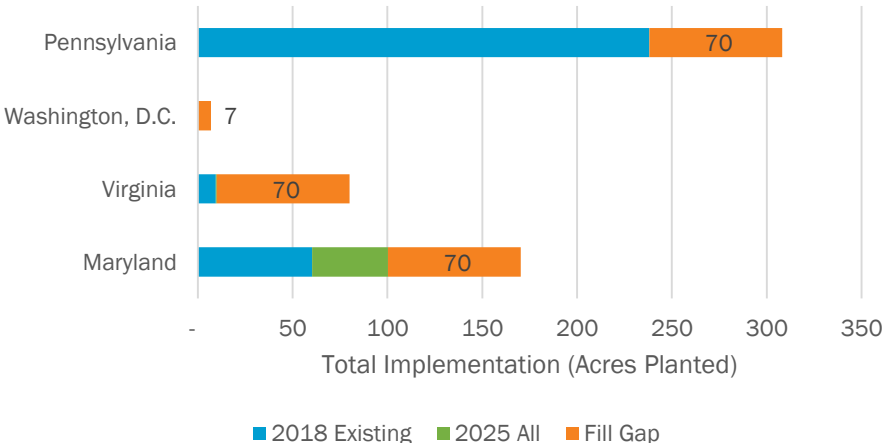
2025 Stream Restoration Implementation



2025 Runoff Reduction BMP Implementation



2025 Tree Planting Implementation



Focus Areas and Looking Ahead

- Continue reporting, tracking, planning, and assessing nutrient and sediment load reductions
- Compliance first and build bridge with integrating natural resources management projects that support CB TMDL goals
- Ensure parity across the jurisdictions among federal and non-federal stakeholders
- Advocate for the developed sector for BMPs that focus on greater TN efficiencies
- Sustain BMP investments through Inspections and Maintenance
- Complete “fill-gap” and submit for final Phase III WIPs



Questions



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