



EPA Evaluation of Interim 2014-2015 Milestone Progress

Katherine Antos

**Implementation and Evaluation Team Leader
US EPA Chesapeake Bay Program Office**

**Chesapeake Bay Program Management Board
July 9, 2015**



Interim Evaluations Ask:

- Are jurisdictions and federal agencies on track to achieve:
 - 2014-2015 milestone commitments?
 - Practices in place by 2017 to achieve 60% of necessary reductions compared to 2009?
- Milestones comprise:
 - Numeric: translate practices into load reductions and compare to long-term trajectories
 - Programmatic: Actions to build capacity to achieve necessary implementation levels



Evaluation Team

- EPA State WIP leads
- Sector experts
 - Agriculture
 - Urban/Stormwater
 - Wastewater
 - Trading/Offsets/Growth
 - Modeling
- Bay Grant project officers
- Senior Managers

Oversight Status

Oversight Status takes into account numeric AND programmatic progress and commitments

Ongoing Oversight: Good strategy and progress is on track.

Enhanced Oversight: Concerns because:

- Progress not on track;
- Lacks capacity to achieve commitments;
- Commitments do not meet 2017 and 2025 goals; or
- Some combination of above.

Backstop Actions: Substantial problems:

- Progress not on track;
- Lacks capacity to achieve commitments; and
- Commitments do not meet 2017 and 2025 goals.

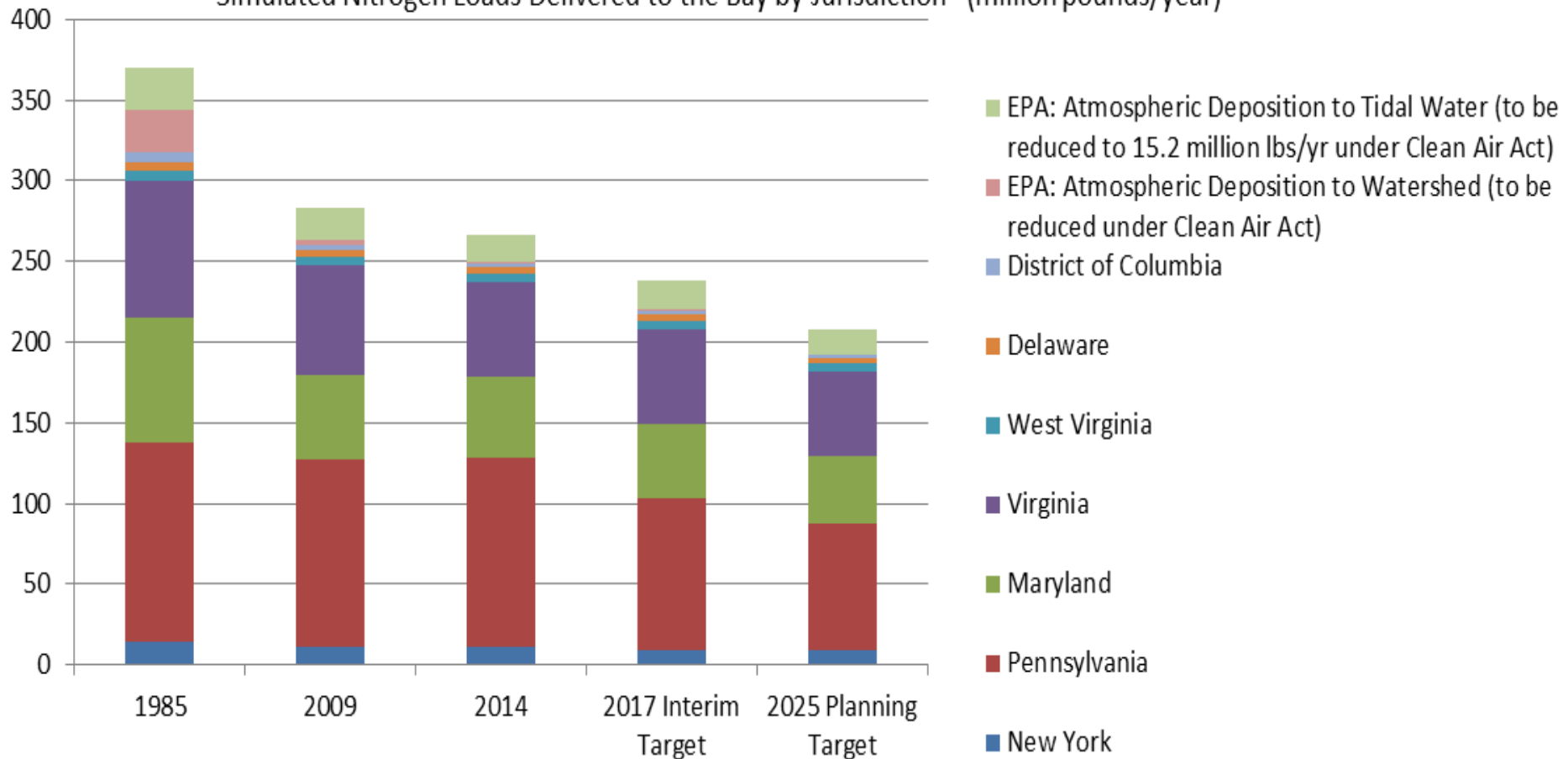
Oversight Status (June 2015)

	Agriculture:	Urban/Suburban:	Wastewater:	Trading/Offsets:
DE	Ongoing Oversight	Ongoing Oversight	Enhanced Oversight	Ongoing Oversight
DC	Not Applicable	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
MD	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
NY	Ongoing Oversight	Ongoing Oversight	Enhanced Oversight	Ongoing Oversight
PA	Backstop Actions Level	Backstop Actions Level	Ongoing Oversight	Enhanced Oversight
VA	Ongoing Oversight	Enhanced Oversight	Ongoing Oversight	Ongoing Oversight
WV	Enhanced Oversight	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight

Green fading to yellow indicates potential downgrade at end of 2014-2015 milestone period if specific actions are not taken

Nitrogen Progress and Goals by Jurisdiction

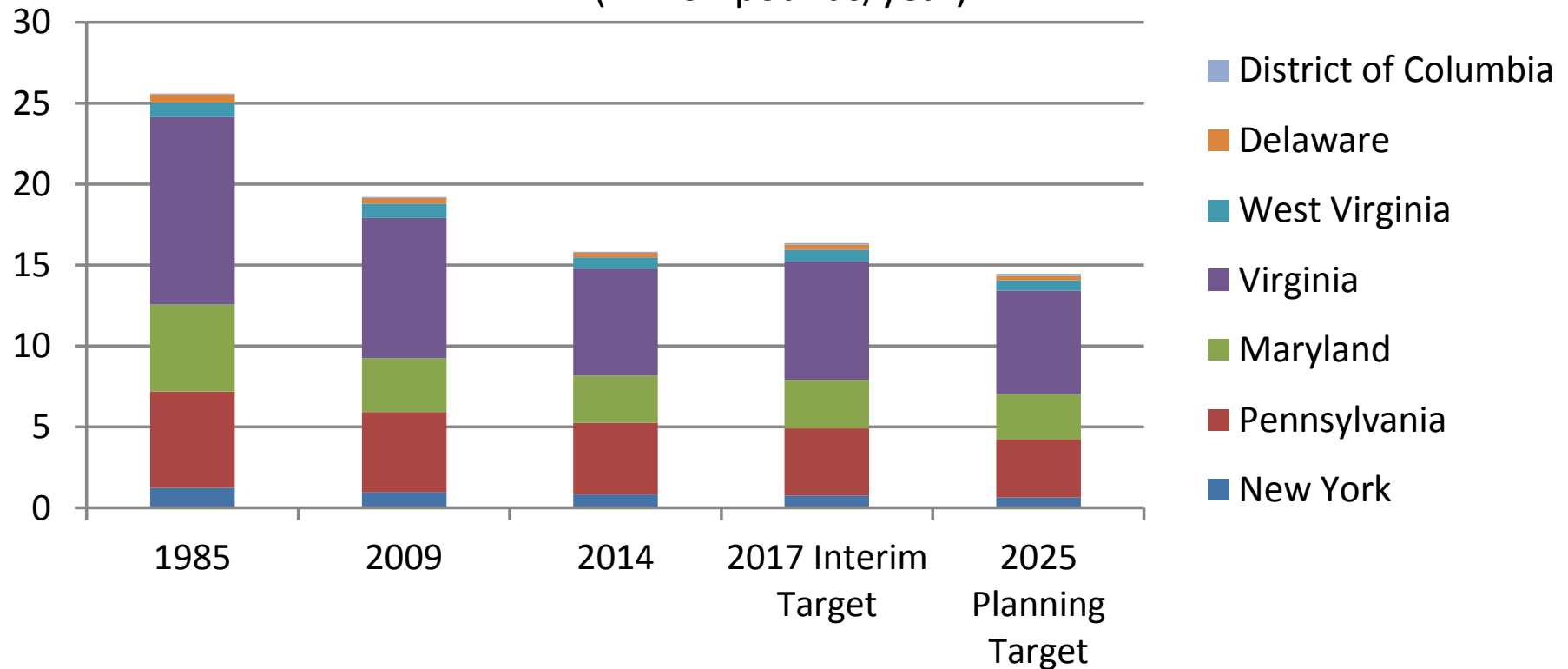
Simulated Nitrogen Loads Delivered to the Bay by Jurisdiction* (million pounds/year)



*Loads simulated using 5.3.2 version of Watershed Model and wastewater discharge data reported by Bay jurisdictions..

Phosphorus Progress and Goals by Jurisdiction

Simulated Phosphorus Loads Delivered to the Bay by Jurisdiction*
(million pounds/year)



*Loads simulated using 5.3.2 version of Watershed Model and wastewater discharge data reported by Bay jurisdictions.

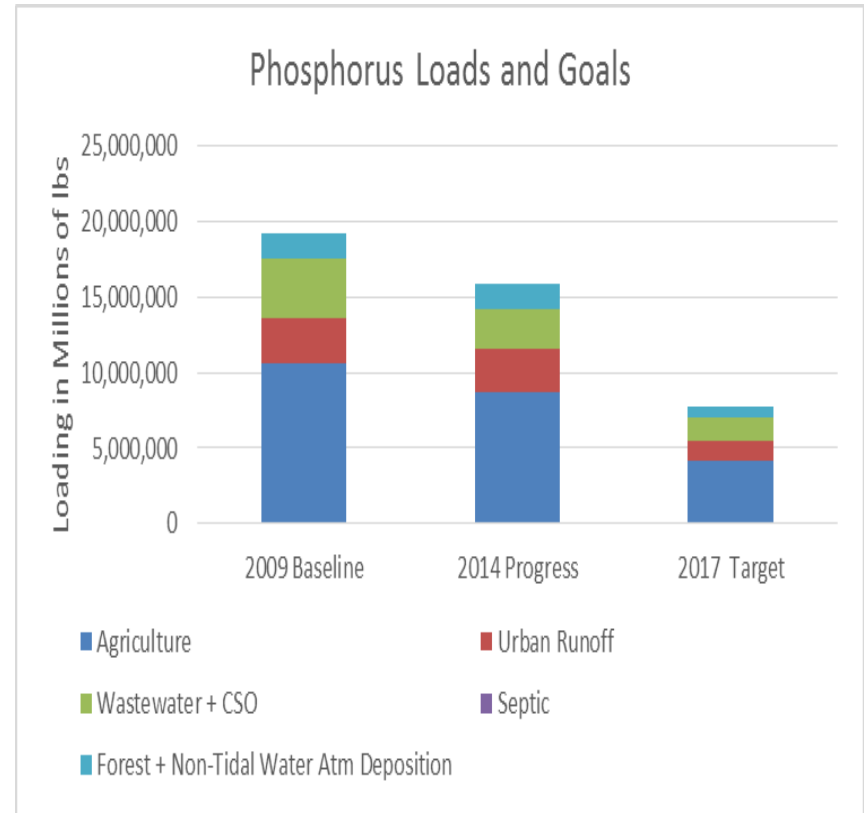
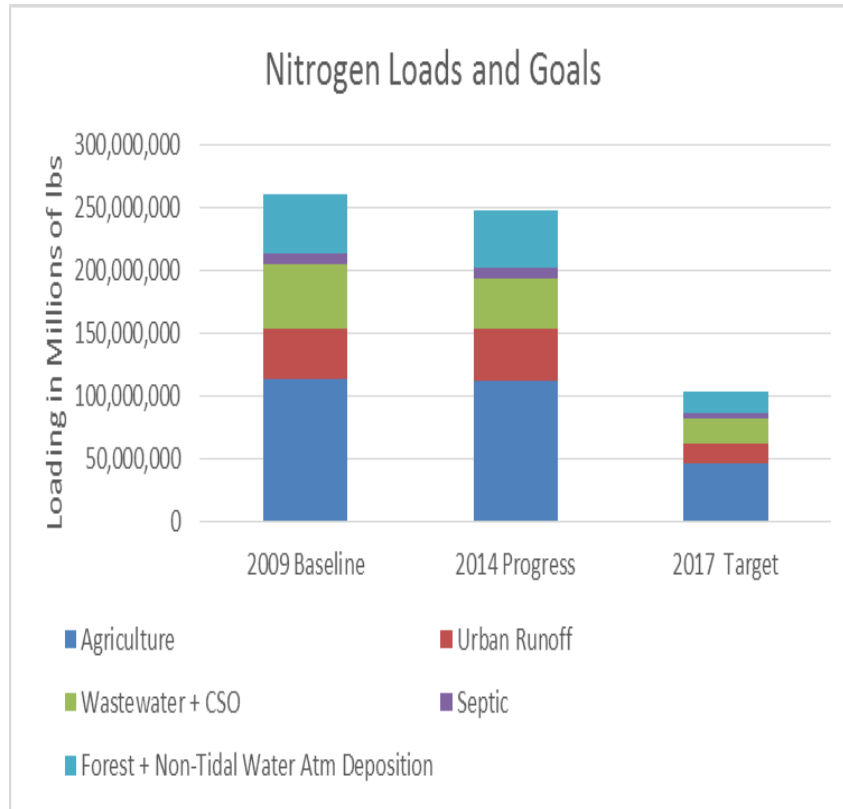
* Although the 2014 Reducing Pollution Indicator suggests jurisdictions are ahead of schedule in reducing phosphorus loads, other recent data suggest additional level of effort will be needed to manage phosphorus.

Numeric Progress by Jurisdiction

	Nitrogen	Phosphorus
Delaware	On Track	On Track
District of Columbia	On Track	On Track
Maryland	Off Track	On Track
New York	Off Track	On Track
Pennsylvania	Off Track	On Track
Virginia	On Track	On Track
West Virginia	On Track	On Track
Watershed	Off Track	On Track

* Although the 2014 Reducing Pollution Indicator suggests jurisdictions are ahead of schedule in reducing phosphorus loads, other recent data suggest additional level of effort will be needed to manage phosphorus.

Numeric Progress and Goals by Sector



* Although the 2014 Reducing Pollution Indicator suggests jurisdictions are ahead of schedule in reducing phosphorus loads, other recent data suggest additional level of effort will be needed to manage phosphorus.

Numeric Progress by Sector

	Nitrogen	Phosphorus
Agriculture	Off Track	On Track
Urban/Suburban	Off Track	Off Track
Wastewater/CSOs	On Track	On Track
Septic	Off Track	N/A
Watershed	Off Track	On Track

* Although the 2014 Reducing Pollution Indicator suggests jurisdictions are ahead of schedule in reducing phosphorus loads, other recent data suggest additional level of effort will be needed to manage phosphorus.

Common Issues, Future Expectations and Next Steps

- Meet historic data cleanup and verification deadlines in 2015
- Practices in place to achieve 60% of necessary reductions compared to 2009
- Programmatic progress demonstrating capacity for future reductions
- Respond to EPA program assessments
- Continue to identify new loads and offset within appropriate timeframe



Delaware

Achievements

- Increased funding for manure transport and working with industry to increase reporting
- Hosted several trainings on revised Sediment and Stormwater Regulations
- Developed Sediment and Stormwater Offset Program policies

Issues to Address and Future Expectations

- Issue remaining permits for significant wastewater plants
- Issue CAFO and Phase II MS4 permits
- Increase implementation of priority agricultural practices



District of Columbia

Achievements

- Met milestone for construction of Enhanced Nutrient Removal (ENR) facilities at Blue Plains
- Exceeded targets for tree planting and green roof installation
- Made significant progress on stream restoration

Issues to Address and Future Expectations

- Increase reductions from the urban sector to get on track to meet the targets for 2017 and 2025



Maryland

Achievements

- Phosphorus Management Tool regulations in effect to help ensure programs and capacity are in place to manage phosphorus from agricultural lands
- Issued remaining Phase I MS4 Permits and Construction General Permit
- Issued permits with ENR limits to 3 minor wastewater plants and provided grants for BNR and ENR upgrades

Issues to Address and Future Expectations

- Issue Phase II MS4 General Permits consistent with Bay TMDL
- Move forward with Accounting for Growth regulations or provide alternative commitment to account for growth



New York

Achievements

- Strong implementation increases in commodity cover crops and animal waste management systems ahead of schedule
- Drafted guidance document to identify and encourage use of low-cost green infrastructure
- Issued permits with nutrient limits to 29 of the 30 significant wastewater plants

Issues to Address and Future Expectations

- Issue CAFO and Phase II MS4 General Permits consistent with Bay TMDL
- Report urban/suburban stormwater BMPs beyond erosion and sediment control
- Explore optimization at significant wastewater plants



Pennsylvania

Achievements

- Performed 3 targeted watershed assessments to ensure compliance with state regulations
- Conducted 178 MS4 inspections and over 376 stormwater construction permit termination inspections in 2014

Issues to Address and Future Expectations

- Increase implementation of high priority agricultural and urban BMPs to get on track to meet nitrogen targets for 2017
- Develop and implement effective and robust compliance assurance strategy to ensure compliance with state programs
- Include specific reduction targets for discharges to the Chesapeake Bay in revised PAG-13 MS4 Permit
- Finalize the Nutrient Trading program strategy consistent with Chesapeake Bay TMDL



Virginia

Achievements

- Expects to have 274 Resource Management Plans (RMPs) developed by end of 2015, far exceeding milestone of 40 RMPs
- Has either issued, public noticed or submitted for EPA review all remaining, administratively continued Phase I MS4 permits
- Awarded \$45 million to localities for stormwater improvements from the state's Stormwater Local Assistance Fund grants since July 2013

Issues to Address and Future Expectations

- Meet 2015 milestone of evaluating over half of small Animal Feeding Operations by end of 2015
- Work with CBPO to project necessary pace of voluntary agriculture program implementation to stay on track with goals and set milestones accordingly
- Reissue remaining, administratively continued Phase I MS4 Permits and VDOT Permit
- Continue development of the online nutrient credit registry during 2015



West Virginia

Achievements

- Increasing number of Department of Agriculture and Conservation Agency nutrient management planners working in Potomac River watershed in order to meet WIP goals
- Working with communities to adopt model stormwater ordinance
- 4 significant wastewater plants upgraded or combined to meet TMDL allocations and remaining will achieve allocations by 2017

Issues to Address and Future Expectations

- Unclear from programmatic milestones how agricultural BMP implementation levels will continue to increase. Additional information is needed to provide assurance implementation will increase over time
- Given practices on construction and mined lands will likely receive less credit than West Virginia assumed in Phase II WIP, expect additional stormwater BMPs or alternative strategies to keep on track
- Demonstrate ability to hold line on urban runoff or enact contingencies

Federal Agencies

Federal Lands and Facilities

Chesapeake Bay Watershed



Achievements

- Several agencies coordinated to provide the Lower Susquehanna River Watershed Assessment
- EPA and DDOE continue to coordinate DC Stormwater MOU with Federal Agencies
- Federal Facilities Targets Action Team (FFTAT) has developed federal targets protocol

Issues to Address and Future Expectations

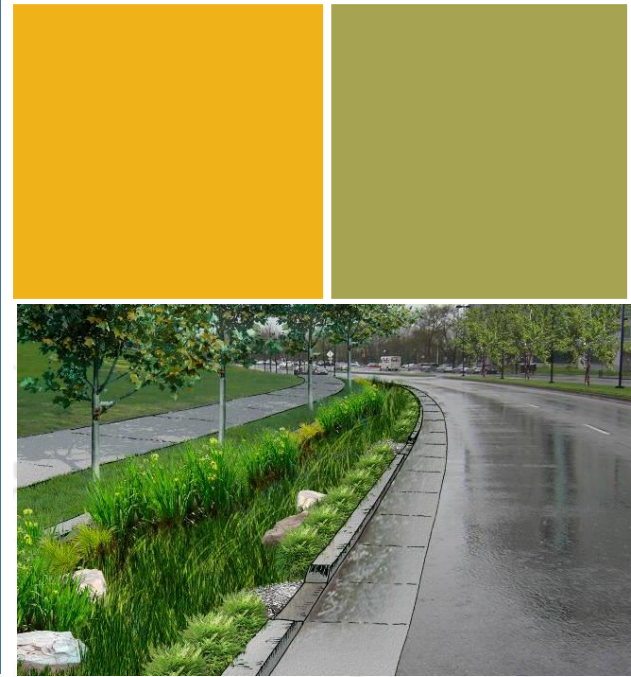
- Improve BMP progress reporting by federal facilities
- Establish milestones to achieve 2017 targets established by Bay jurisdictions using federal targets protocol by November 1, 2015



Next Steps

- Development of federal facility targets
- 2016-2017 milestones due January 15, 2016
- EPA will work with federal partners to provide leadership and coordinate with jurisdictions on WIP and milestone implementation
- Continue work on Midpoint Assessment, which will guide future WIPs, milestones and implementation from 2018 - 2025

For More Information



Bay TMDL, Watershed Implementation Plans, Milestones and EPA Evaluations

- www.epa.gov/chesapeakebaytmdl

Pollutant Load and BMP Progress and Targets

- www.chesapeakestat.com

Katherine Antos, Implementation and Evaluation Team Leader
U.S. Environmental Protection Agency Chesapeake Bay Program

- antos.katherine@epa.gov or trevena.suzanne@epa.gov