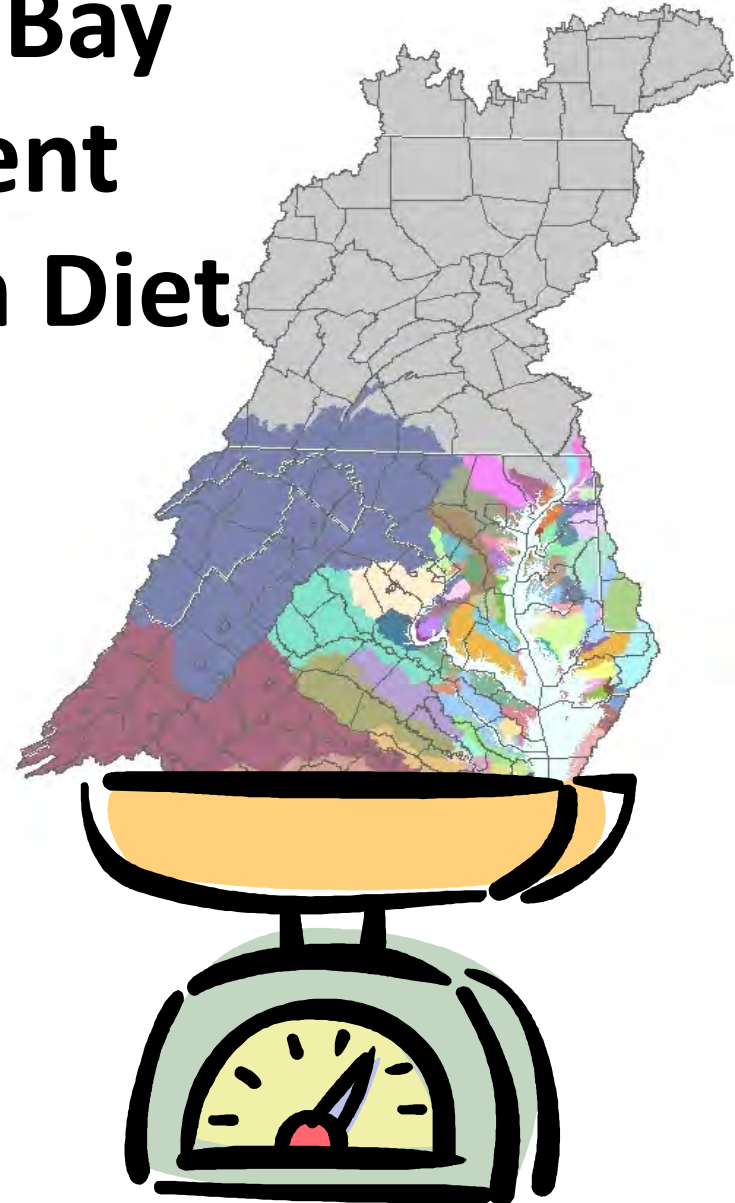


Improving Chesapeake Bay Water Quality: A Nutrient and Sediment Pollution Diet

Katherine Antos
Implementation and Evaluation Team Leader
U.S. EPA Chesapeake Bay Program Office

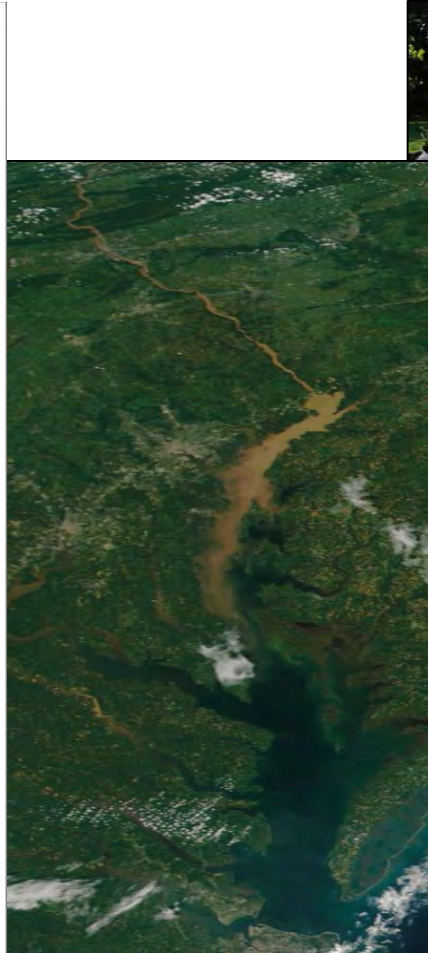
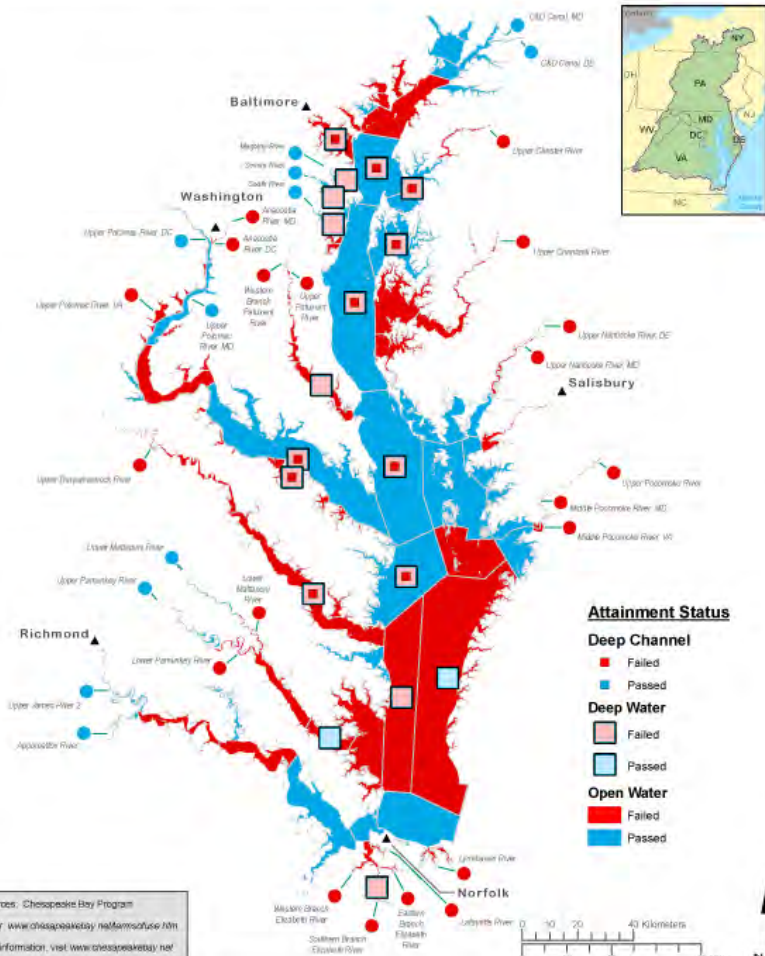
Restore America's Estuaries
November 3, 2014



The Challenge

Chesapeake Bay Waters Meeting Water Quality Goals for the Open Water, Deep Water, and Deep Channel Uses

2010-2012



Solution: Pollution Diet with Accountability

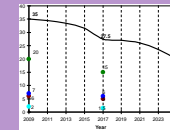
1. Watershed Implementation Plans identify nutrient and sediment targets that meet water quality standards.



2. Chesapeake Bay TMDL establishes allocations for point and non-point sources to meet water quality standards



3. 2-Year Milestones



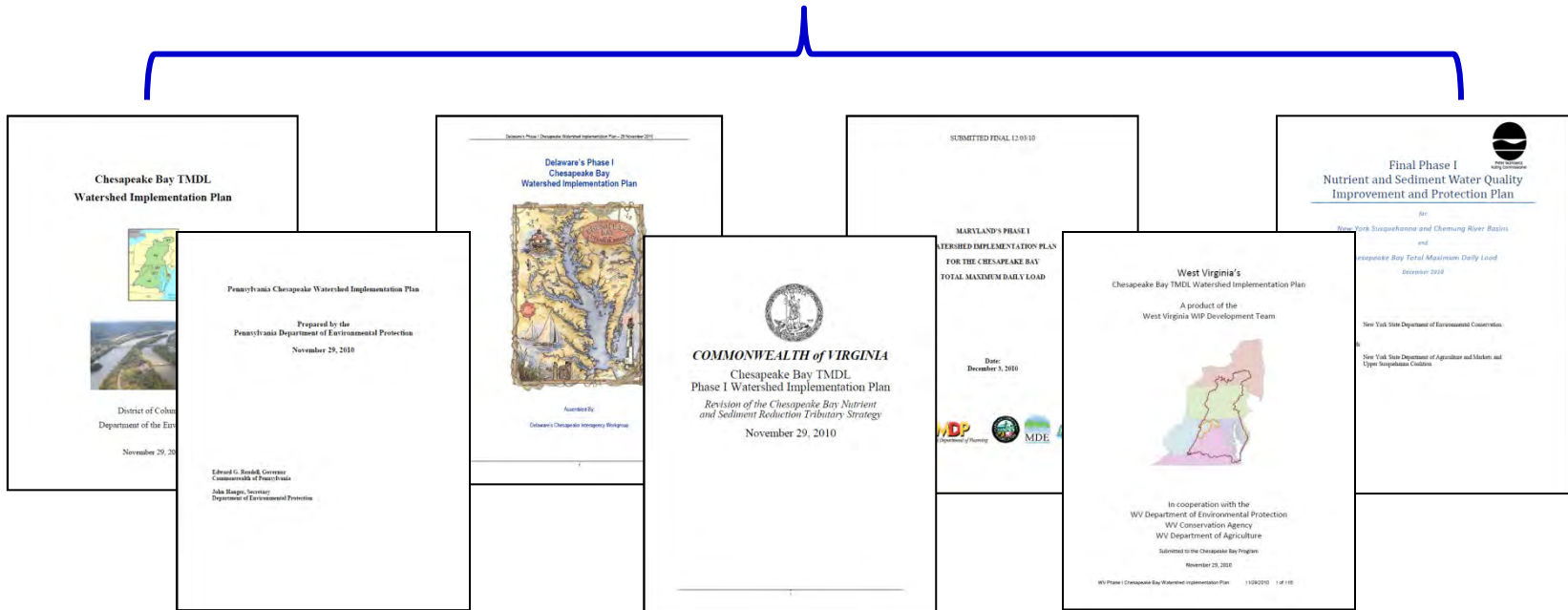
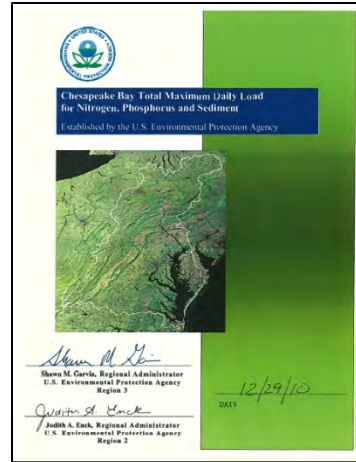
with programmatic and pollutant reduction commitments

4. Federal Actions



if insufficient Watershed Implementation Plans or 2-year milestones

Chesapeake Bay Clean Water Blueprint Based on 7 Jurisdictions' Strategies



Milestones Evaluation

- 2012-13: Did jurisdictions and federal agencies achieve their 2012-13 commitments set 2 years ago?
- 2014-15: Are commitments strong enough to keep jurisdictions and federal agencies on track to have:
 - All practices in place by 2025 to achieve clean water in Bay
 - 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

Overall Programmatic Progress and Goals

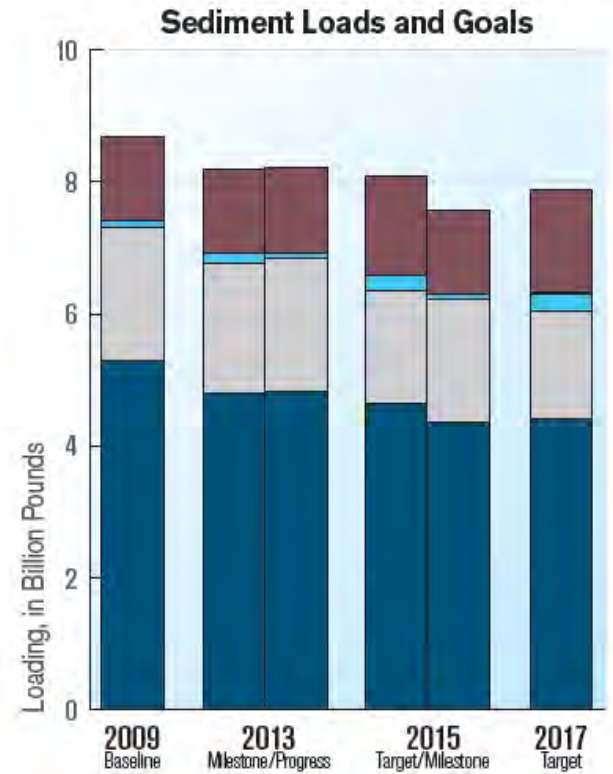
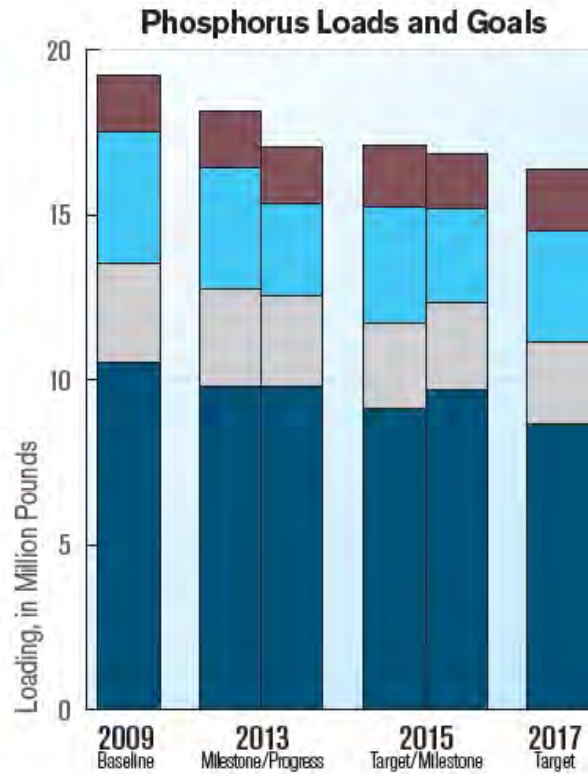
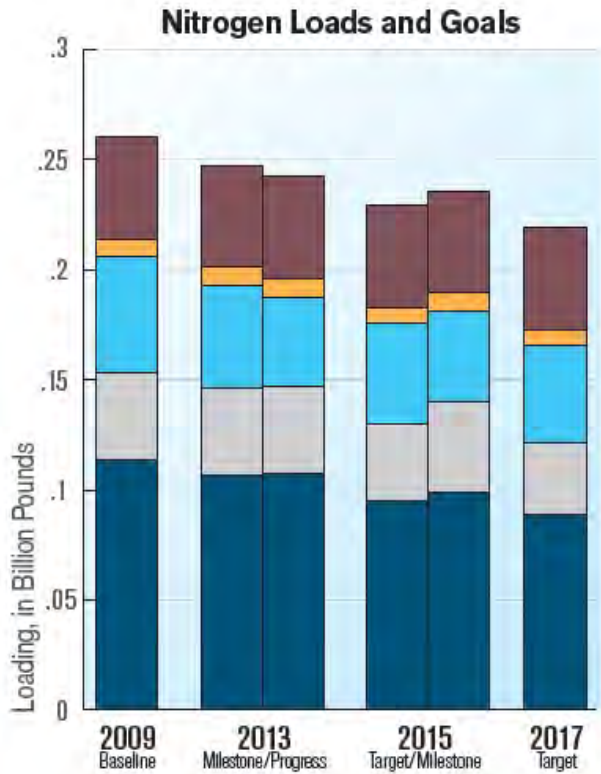
- 2012-13: Majority of programmatic milestones achieved
 - Some important milestones missed, such as permit reissuance
- 2014-15: Trajectory and pace of implementation to meet 2017 goals gets steeper in many instances. Some good commitments, but more needed to build necessary capacity
- Enhanced implementation rates and new, innovative tools are needed to meet the challenges ahead of us



Annual Rate of Pollution Reduction

	1985-2013 Annual Average Reductions (million lbs/year)	2013-2025 Average to Meet 2025 Goal (million lbs/year)
Nitrogen	3.8 million lbs/year	4.6 million lbs/year
Phosphorus	0.3 million lbs/year	0.2 million lbs/year
Sediment	93.6 million lbs/year	69.8 million lbs/year

Overall Numeric Progress and Goals



** Forest includes other sources

Note: 2013 milestones and 2013 progress are based on 2010 conditions. For additional information on pollution reduction progress, commitments, and BMP see <http://stat.chesapeakebay.net/milestones>

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.

2014 Oversight Status

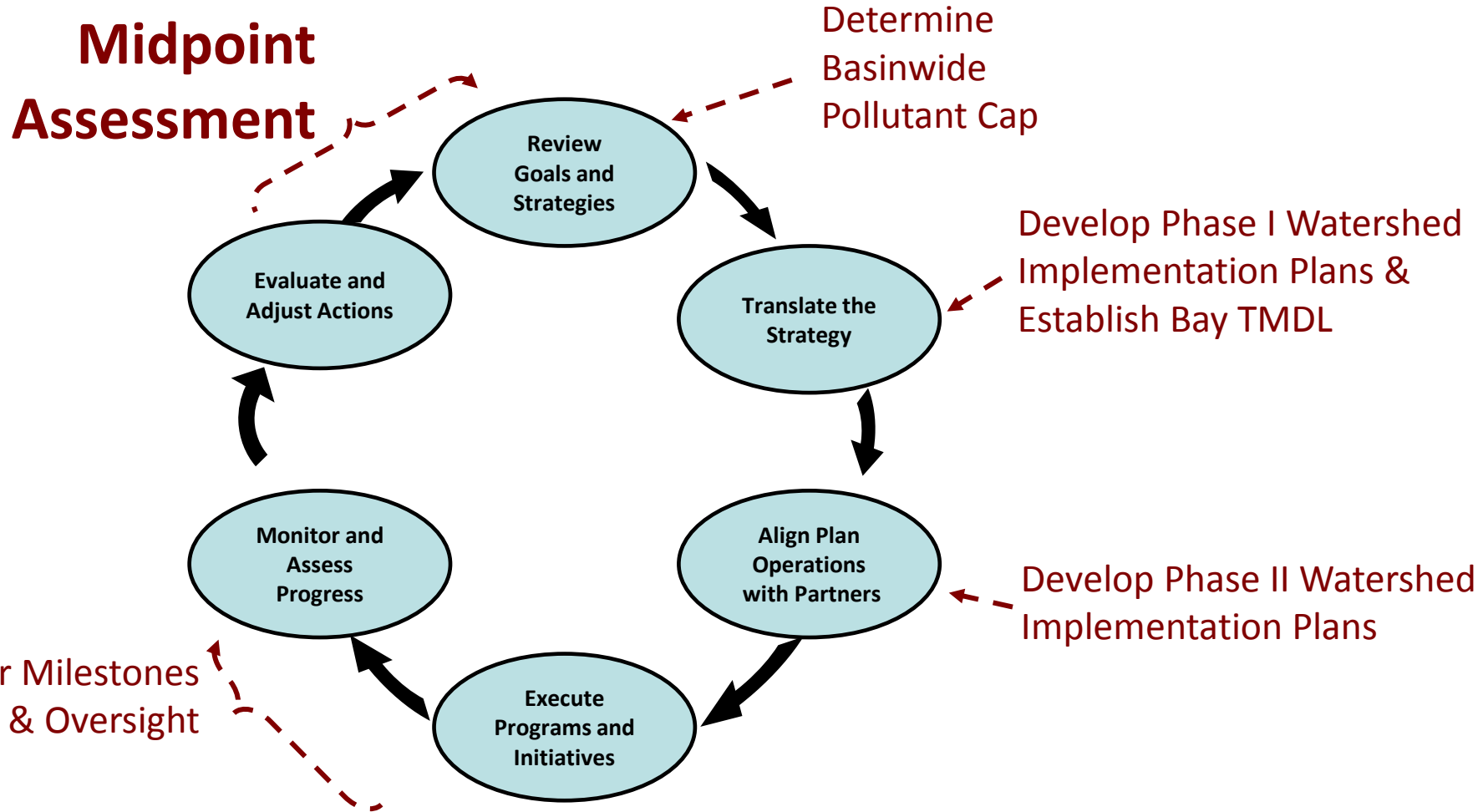
	Agriculture:	Urban/Suburban:	Wastewater:	Trading/Offsets:
DE	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
DC	Not Applicable	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
MD	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
NY	Ongoing Oversight	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

Federal Agencies



- Single largest landholder in watershed
- Executive Order 13508 calls on federal agencies to lead by example
- Improve BMP progress reporting by federal facilities
- EPA working with federal agencies and jurisdictions to improve coordination

6-Step Adaptive Management Cycle



For More Information



Programmatic Milestones and EPA Evaluations

- www.epa.gov/chesapeakebaytmdl

Pollutant Load and BMP Progress and Targets

- <http://stat.chesapeakebay.net/>

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