



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Office of Water Management

Chesapeake Bay TMDL Progress & the New Chesapeake Bay Watershed Agreement

Citizens Advisory Council

October 15, 2013

Chesapeake Bay TMDL Progress

- **December 2010:** Chesapeake Bay TMDL published
- **January 2011:** Phase 1 Watershed Implementation Plan (WIP)
- **2011:** EPA Revises Watershed Model – Issue revised TMDL allocations
- **March 2012:** Phase 2 WIP – County Planning Targets
- **2 – Year Milestones**

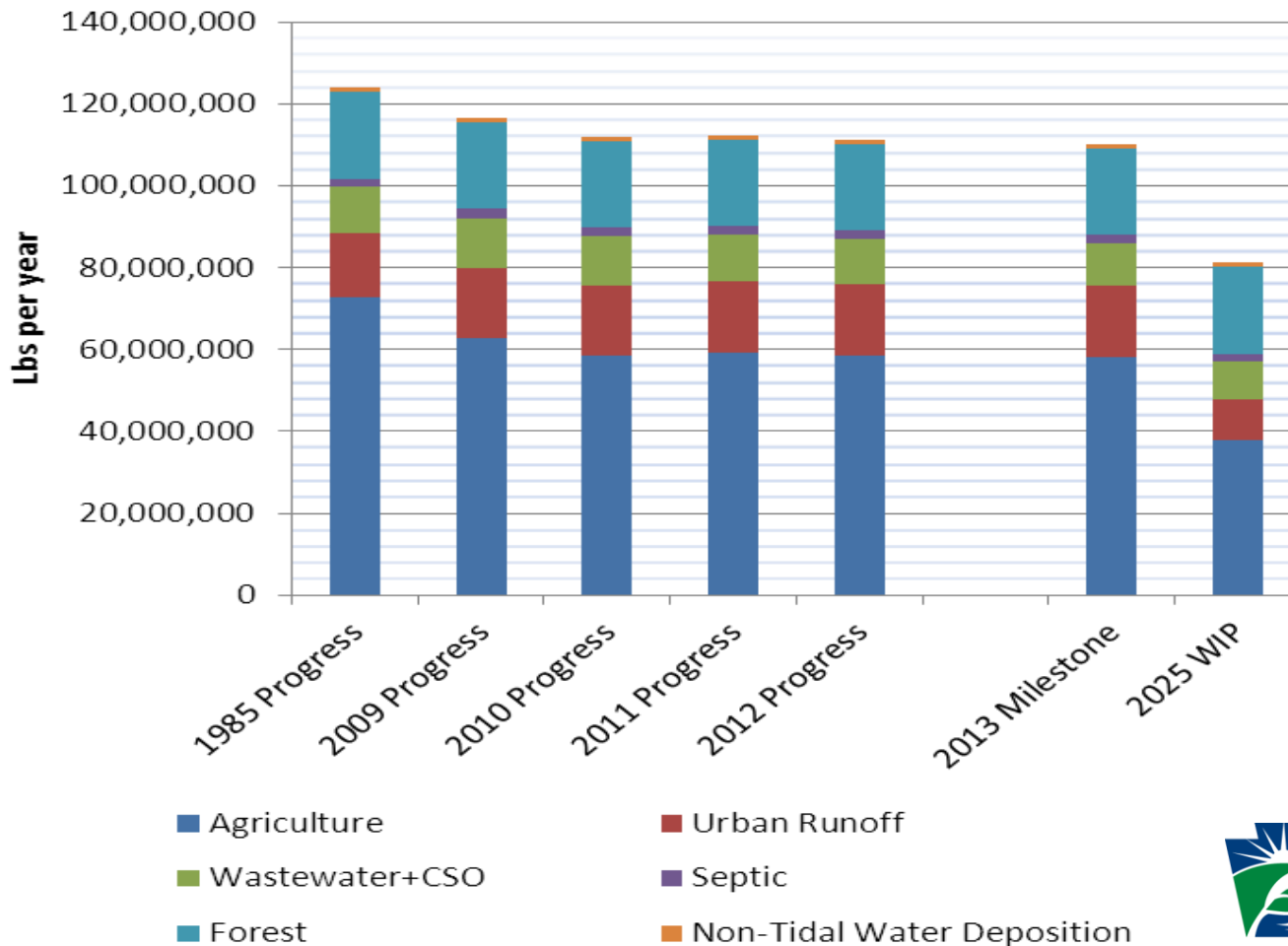
Chesapeake Bay TMDL Progress

- **2017 Evaluation:** Have practices and controls in place that are expected to achieve 60% of load reductions necessary to achieve applicable water quality standards compared to 2009 levels.
- **2018:** Phase 3 WIP
- **2025:** Have all practices and controls installed by 2025 to achieve the Bay's DO, water clarity/SAV, and chlorophyll-a standards.

Chesapeake Bay TMDL Progress

Where we are:

PA Delivered Total Nitrogen



Since 1985:

- Completed 28% of N reductions needed to meet the TMDL
- Additional 32.5 million pounds to be reduced by 2025
- Approximately 1 million pound reduction last year

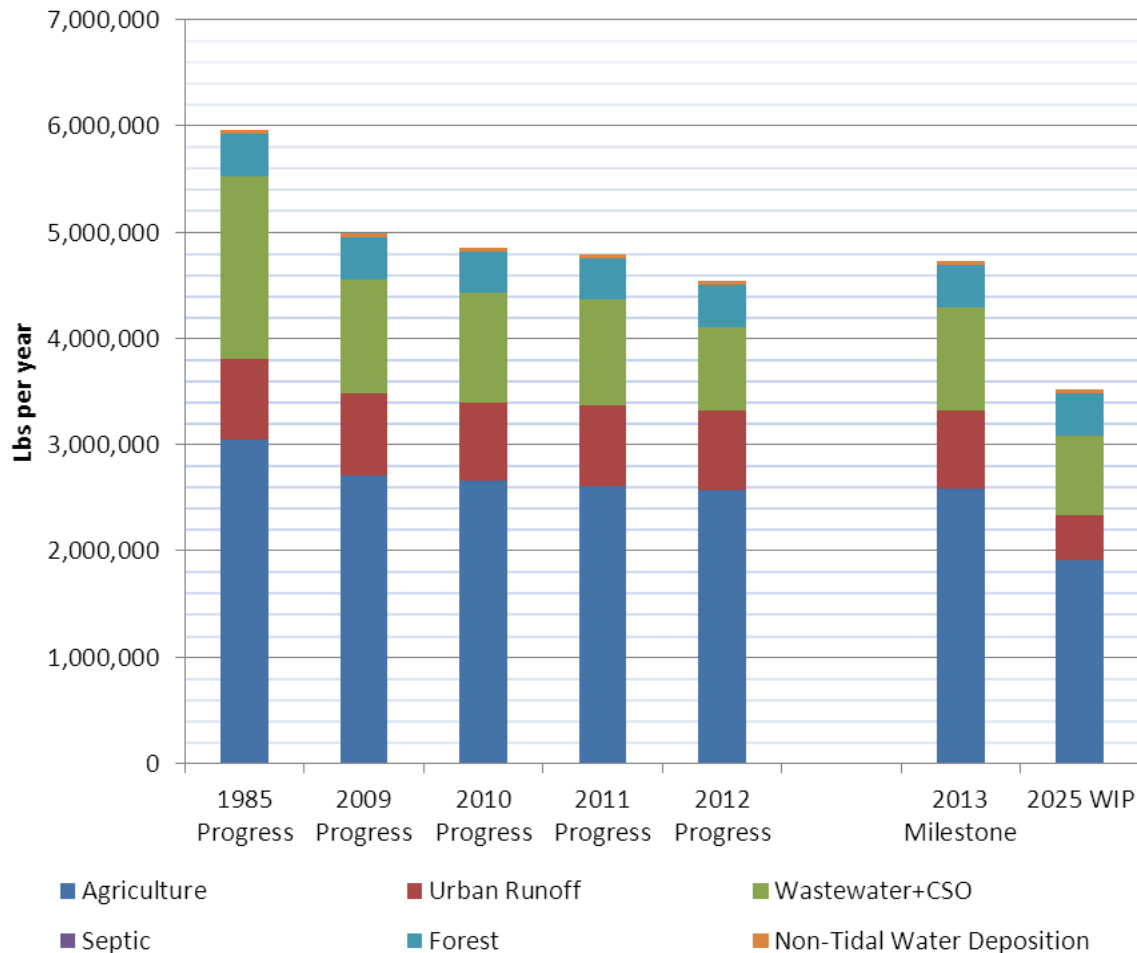
Chesapeake Bay TMDL Progress

Nitrogen Loads (Millions of Pounds/Yr)

	<u>1985</u>	<u>2011</u>	<u>2012</u>	<u>2017 Midpoint (60% of WIP)</u>	<u>Reductions by 2017</u>
Total	124.28 %	112.47 %	111.36 %	102.52 %	8.84
Agriculture	72.79 59%	59.27 53%	58.63 53%	52.688 51%	5.942
Urban Runoff	15.66 13%	17.46 16%	17.44 16%	14.55 14%	2.89
Wastewater & CSO	11.64 9%	11.48 10%	11.10 10%	10.928 11%	0.172
Septic	1.72 1%	2.14 2%	2.07 2%	2.094 2%	-0.024
Forests	22.47 18%	22.11 20%	21.08 19%	21.84 21%	-0.76

Chesapeake Bay TMDL Progress

PA Delivered Total Phosphorus



Since 1985:

- Completed 60% of P reductions needed to meet the TMDL
- Additional 940 thousand pounds needed by 2025.
- 2012 results meet 2013 milestone goal
- WWTP Phos. loads meet 2013 MS & 2017 midpoint loads

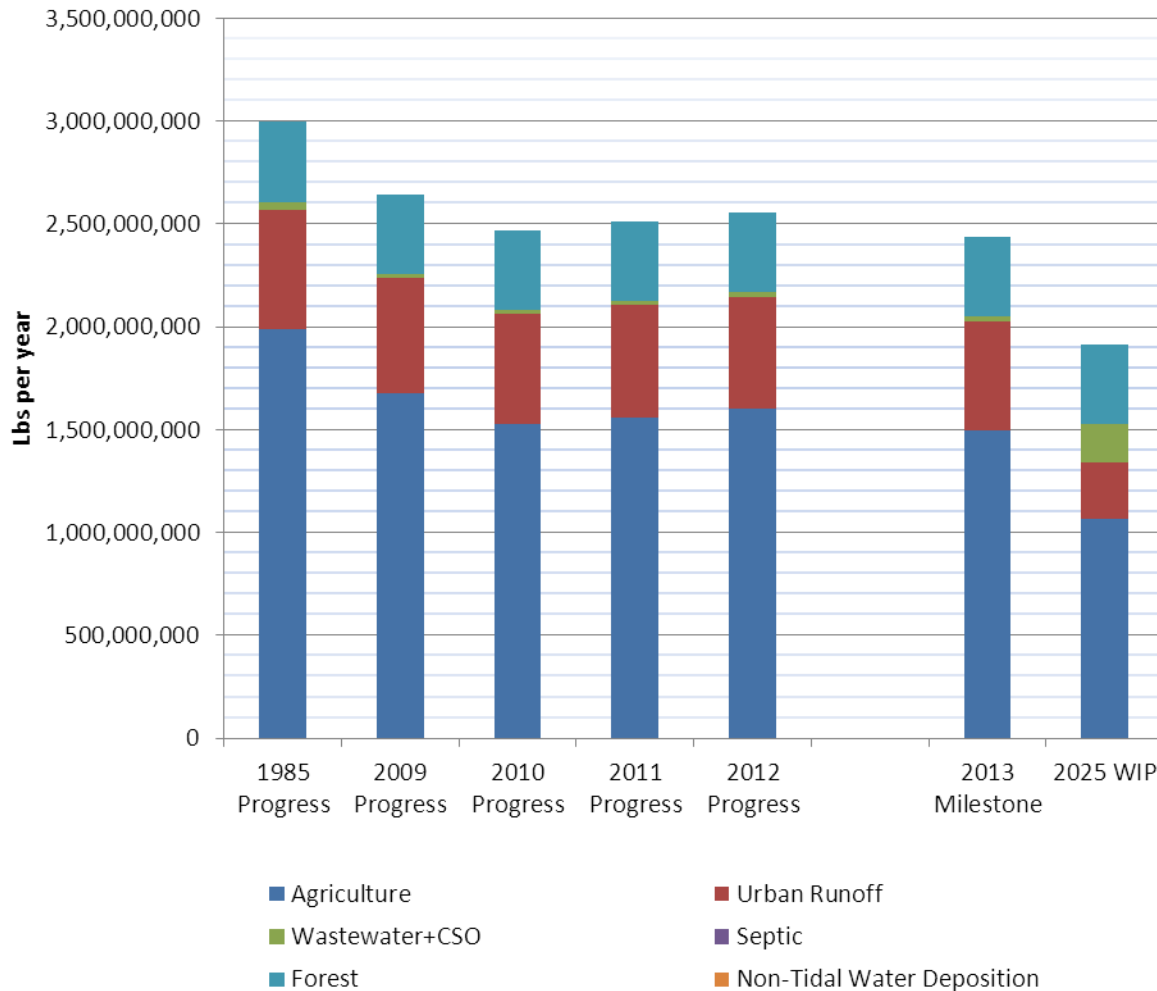
Chesapeake Bay TMDL Progress

Phosphorus Loads (Millions of Pounds/Yr)

	<u>1985</u>		<u>2011</u>		<u>2012</u>		<u>2017 Midpoint</u>		<u>Reductions by 2017</u>
Total	5.957	%	4.796	%	4.541	%	4.400	%	0.1414
Agriculture	3.045	51%	2.611	54%	2.572	57%	2.395	54%	0.1768
Urban Runoff	0.764	13%	0.756	16%	0.751	17%	0.630	14%	0.1212
Wastewater & CSO	1.715	29%	0.998	21%	0.787	17%	0.943	21%	-0.1556
Forests	0.432	7%	0.431	9%	0.394	9%	0.418	9%	-0.02368

Chesapeake Bay TMDL Progress

PA Delivered Total Suspended Solids



Since 1985:

- Completed 42% of TSS reductions needed to meet the TMDL
- Additional 609 million pounds to be reduced by 2025

Chesapeake Bay TMDL Progress

Total Suspended Solids (Millions of Pounds/Yr)

	<u>1985</u>		<u>2011</u>		<u>2012</u>		<u>2017 Midpoint</u>		<u>Reductions by 2017</u>
Total	2,998.8	%	2,512.8	%	2,553.6	%	2,353.1	%	200.5
Agriculture	1,990.4	66%	1,559.1	63%	1,602.8	63%	1,431.4	61%	171.44
Urban Runoff	580.6	19%	546.4	22%	539.1	21%	447.0	19%	92.08
Wastewater & CSO	35.1	1%	21.4	1%	25.9	1%	87.5	4%	-61.56
Forests	392.6	13%	385.9	16%	385.9	15%	387.2	16%	-1.32

Chesapeake Bay TMDL Progress

- **Sectors have made steady progress**
- **Newly issued WWTP permit limits have reduced point-source phosphorus loads to below 2017 midpoint loading rates**
- **More aggressive implementation will be needed in other areas to meet 2017 goals**



New Chesapeake Bay Watershed Agreement

▶ New Chesapeake Bay Watershed Agreement

Why Now?

- The Chesapeake 2000 Agreement is largely outdated.
- The Congressional General Accountability Office called for the “alignment” of the federal Executive Order Chesapeake Bay Strategy goals & the Chesapeake Bay Program Agreement goals.
- The Chesapeake Executive Council agreed to start the process in 2011.

New Chesapeake Bay Watershed Agreement

What's New?

- “Headwater” states (NY, DE, & WVA) are invited to sign for the first time.
- Agreement will be shorter & reflect the goals of the overall partnership.
- Focused measurable outcomes
- Management Strategies will be developed for outcomes.
- Jurisdictions have flexibility to choose which outcomes they will participate in.

New Chesapeake Bay Watershed Agreement

What's Happened So Far?

- The Draft Chesapeake Bay Watershed Agreement was released for early public comment on July 15 through August 15.
- Goals and outcomes were agreed to for Sustainable Fisheries, Vital Habitats, Water Quality, Healthy Watersheds, Land Conservation and Public Access.

<http://www.chesapeakebay.net/chesapeakebaywatershedagreement/page>

New Chesapeake Bay Watershed Agreement

Additional Issues for Consideration?

- Toxic contaminants
- Agricultural conservation
- Climate change
- Environmental literacy
- Forage fish
- Crab catch share
- Sound land use planning
- Stewardship
- Engaging local governments

New Chesapeake Bay Watershed Agreement

What Is To Come?

- August 15 – September 23: Review public comment & revise agreement
- September 23 – October 23: Release revised agreement, 30 day public comment period
- October 23 – November: Review public comment & revise agreement
- Mid – December: Chesapeake Executive Council meeting – sign agreement



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