Maryland
Department of the Environment

Maryland Phase III Chesapeake Bay Watershed Implementation Plan

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Agricultural Leadership Round Table
July 25, 2018

Outline

1. *How is the Bay Responding to our efforts?*
2. *What programs have brought us this far?*
3. *What are the remaining reductions needed and what is the gap?*
4. *How will Maryland develop the Phase III WIP and close any remaining pollution reduction gaps?*

How is the Bay Responding to our efforts?

Living Resources are Recovering

Indicators for a healthy Bay and to important to Maryland's economy

Bay Grasses

Submerged aquatic vegetation recovery is linked to nutrient reductions.

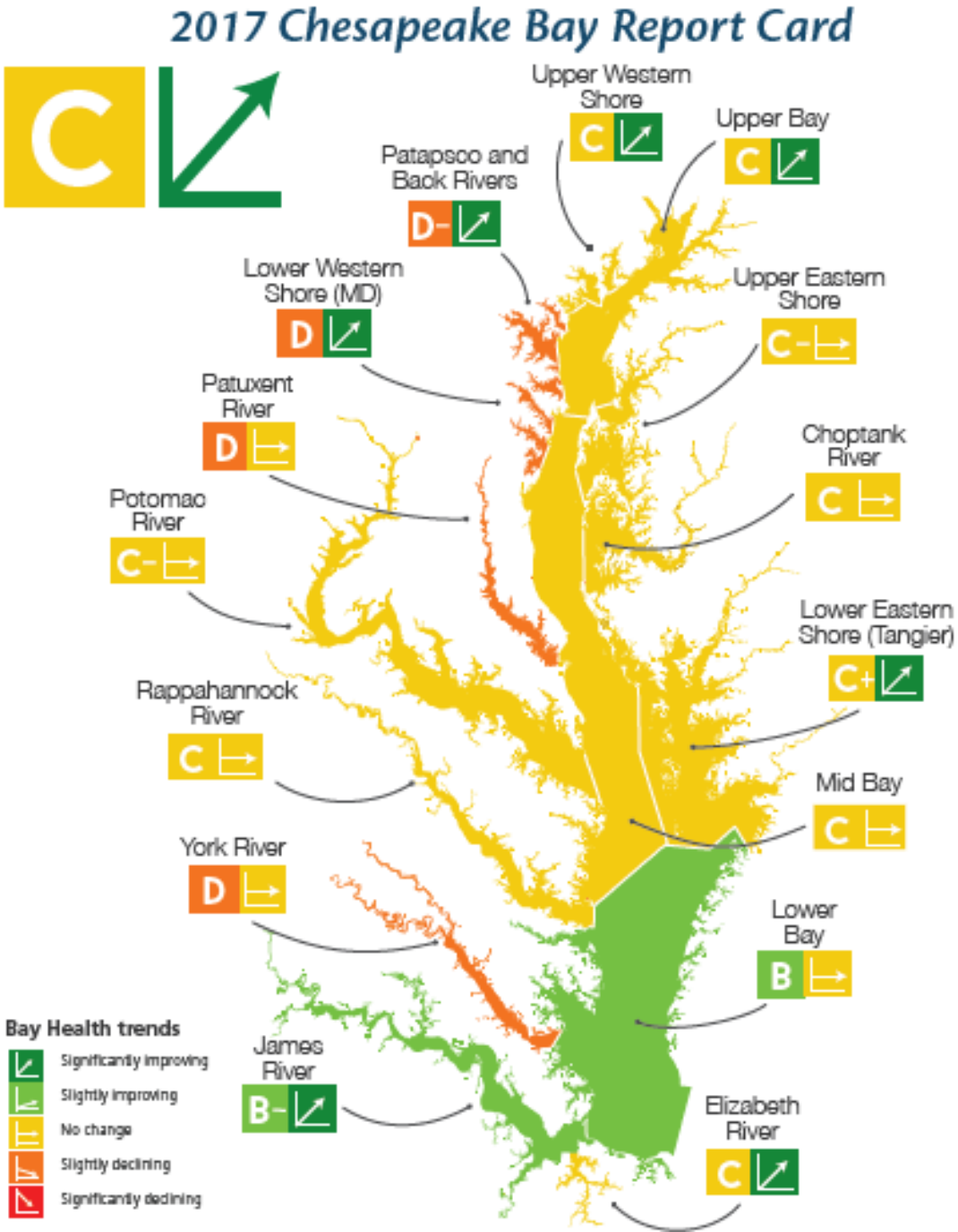
Blue Crabs

Blue crab populations respond to fisheries management, habitat restoration, and SAV recovery.

Oysters

Harris Creek, MD is the first fully restored oyster reef in Chesapeake Bay.

- Measured signs of improvement
- Cleaner water = Healthy Bay = Healthier Economy
- More to do!



What programs have brought us this far?

Wastewater

- Dedicated Fund
- 67 Majors to ENR
- Economies of Scale
- Incentives
- Minors
- Septic Upgrades & Connections

Agriculture

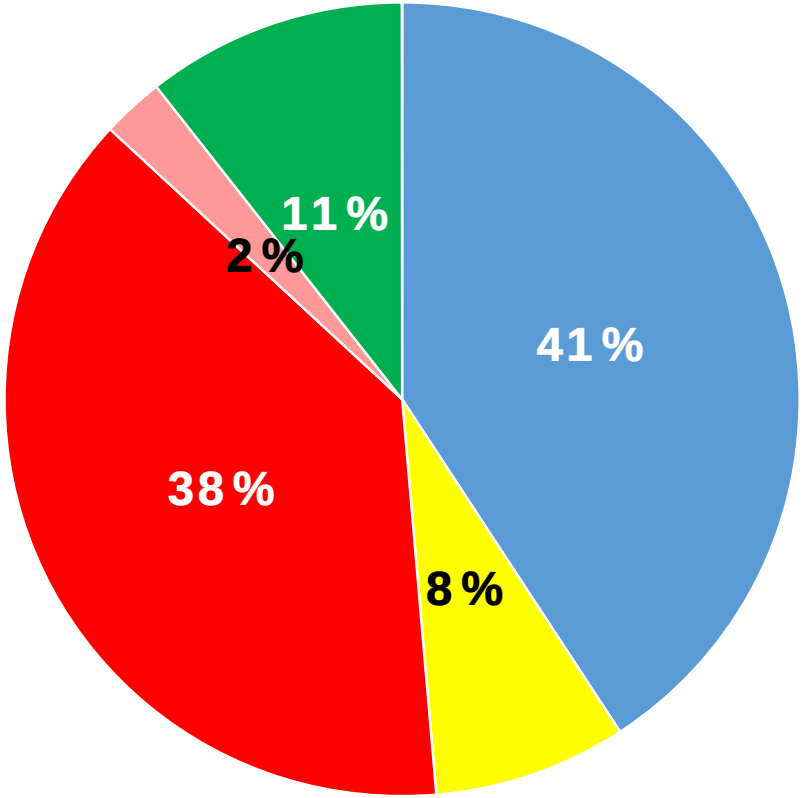
- Cost Share
- Nutrient Management
- PMT
- Cover Crops
- CREP
- New technologies
- Locally Developed SCD Plans

Urban Stormwater

- New development stormwater standards
- MS4 Phase I
  - Local Restoration
  - Financial Assurance
  - P3
  - Compliance
  - Funding

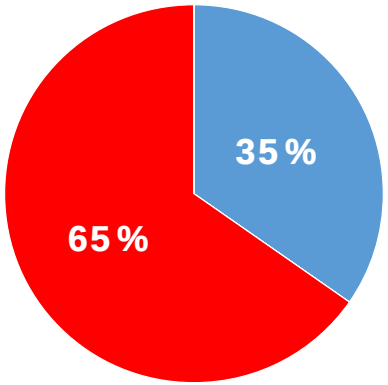
Maryland Nitrogen Loads (1985 – 2017)

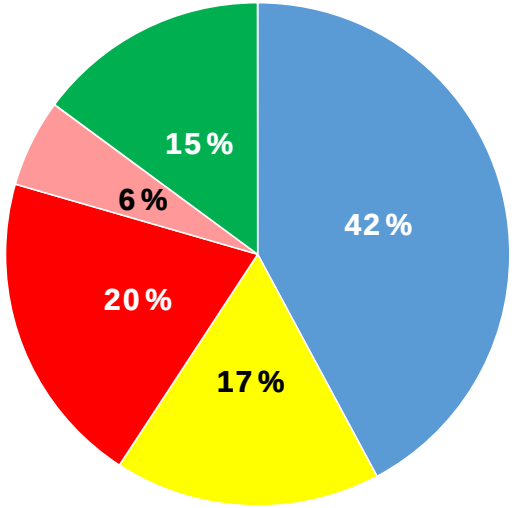
Maryland has made the most progress in reducing nitrogen since 1985 compared to the other 6 Bay jurisdictions



1985 (84.1 M lbs/yr)

Where did the Nitrogen reductions come from?





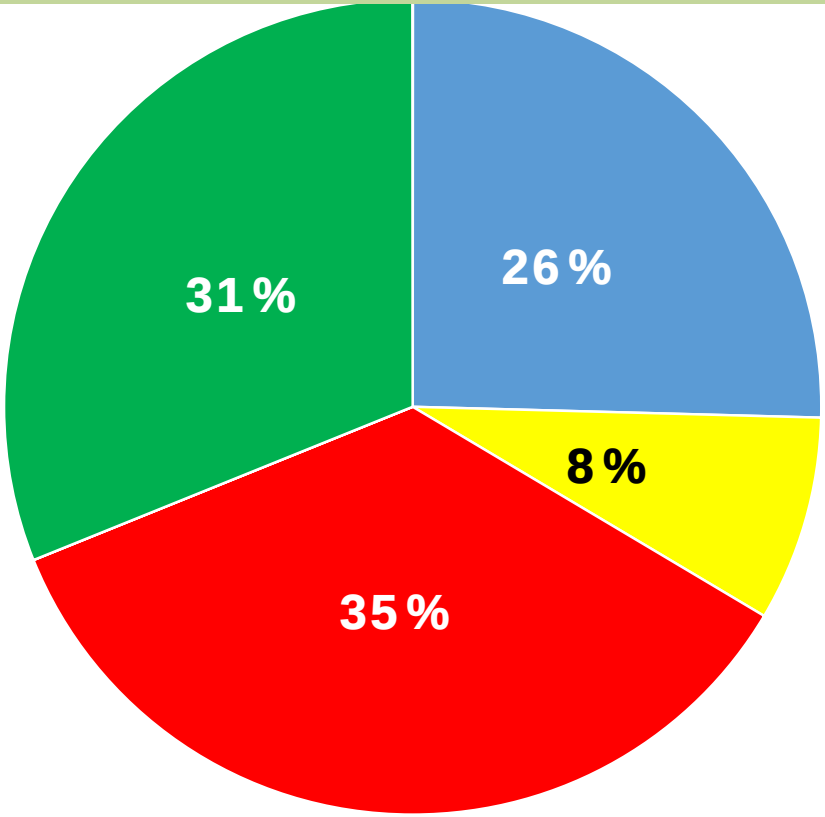
2017 (54.2 M lbs/yr)

Agriculture Developed Wastewater Septic Natural

Source: USEPA Chesapeake bay Program

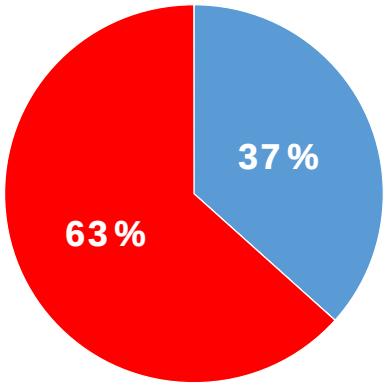
Maryland Phosphorus Loads (1985 – 2017)

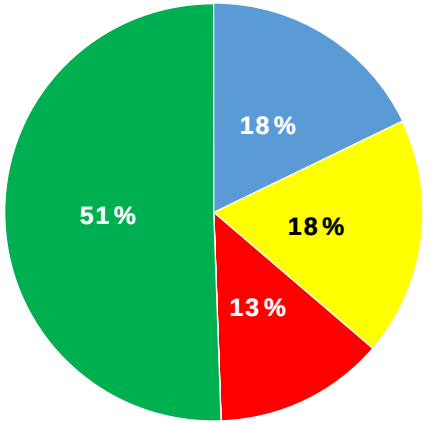
While Maryland has almost met its 2025 phosphorus reduction goals, managing phosphorus is still critically important for restoring local waters



1985 (7.42 M lbs/yr)

Where did the Phosphorus reductions come from?





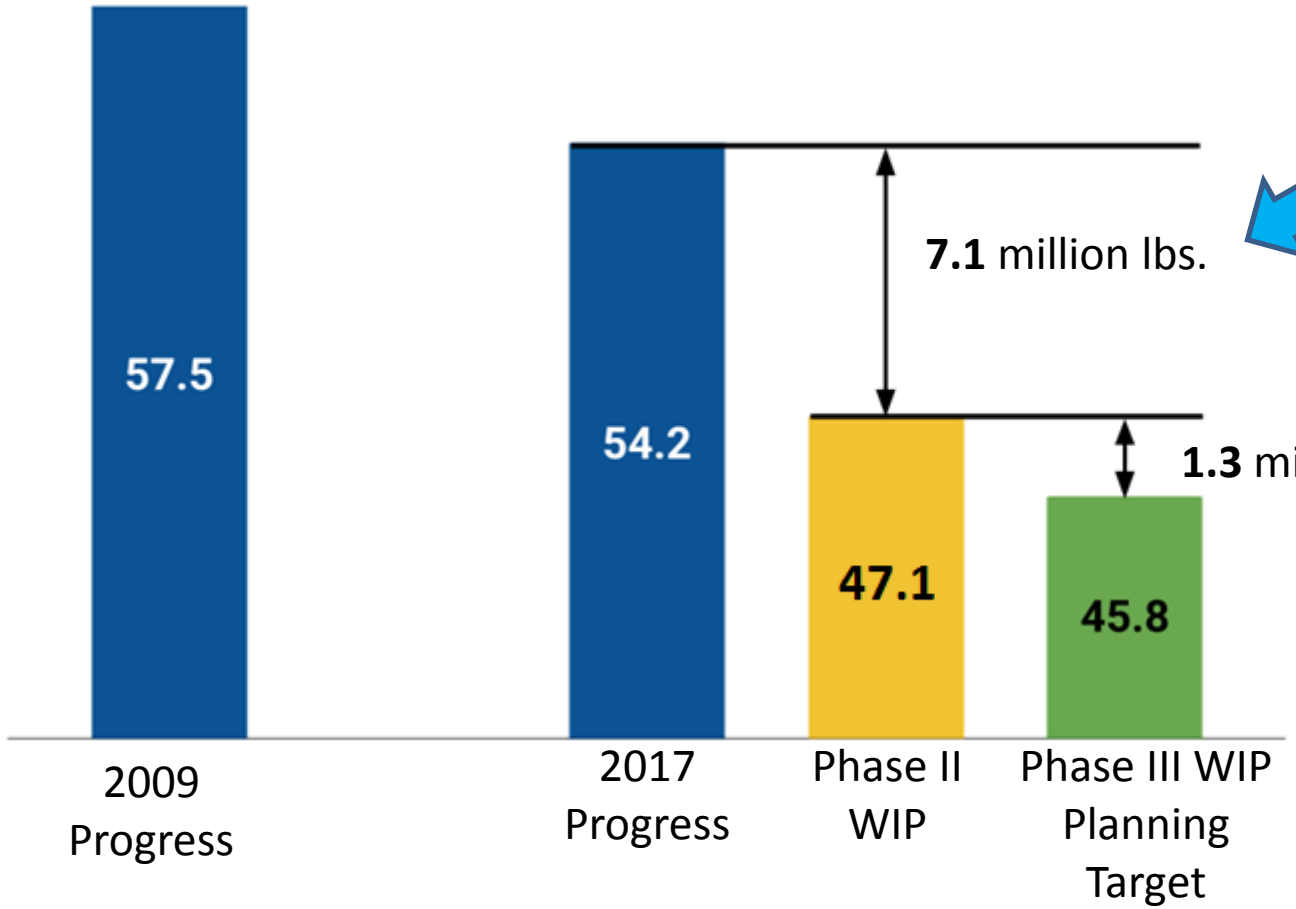
2017 (3.67 M lbs/yr)

Agriculture Developed Wastewater Natural

Source: USEPA Chesapeake Bay Program

What are the remaining reductions needed and what is the gap?

Where the Phase II WIP Level of Effort will Get Them in Terms of Nitrogen Load Reductions



Phase II WIP

Remaining Reductions to Achieve Phase III WIP Planning Target

About another ~1 – 1.5 million lbs to Offset Future Growth

Source: USEPA Chesapeake bay Program

How will Maryland develop the Phase III WIP and close any remaining pollution reduction gaps?

Set Working Targets, Evaluate Current Strategies, Identify Challenges and Opportunities

Factor In

Wastewater

WWTPs
- Majors
- Minors
- Water reuse

Septic systems
- Upgrades
- Connections
- Stewardship

Urban Stormwater

- Phase I MS4
- Phase II MS4
- Non-MS4

Agriculture

- Revisit Current Plan

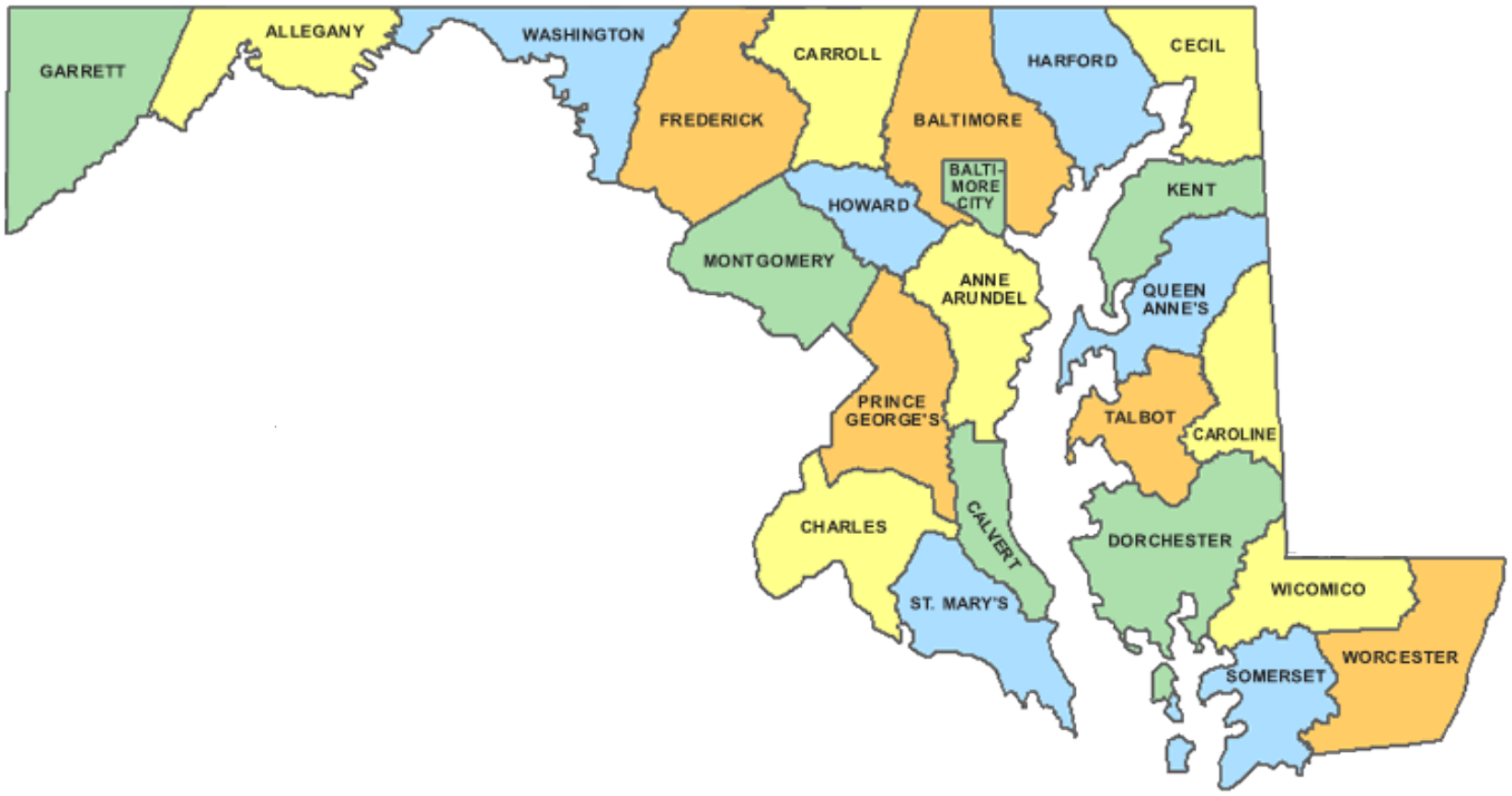
New Tools

- Clean Water Commerce
- Pay for performance
- Nutrient Trading
- Targeting

Future Conditions

- Climate Resiliency and Adaptation
- Aligning for Growth
- Crediting Conservation

Local Goals, Local Input & Local Benefits



Phase III WIP Timeline

✓Dec 2017:	States receives Draft Phase III Planning Targets
✓June 20, 2018	EPA releases Phase III WIP Expectations
✓July 19, 2018:	States receives Final Phase III Planning Targets
❑July 2018:	Begin local engagement using Final planning targets
❑August :	State establishes Sector Working Targets
❑Aug. – Dec. 2018:	WIP Development
❑November 2018:	Regional meetings
❑February 2019:	Gov Bay Cabinet receives Draft Phase III WIP
❑April 12, 2019:	Draft Phase III WIPs released for public review
❑June 7, 2019:	End of public review period
❑August 9, 2019:	Final Phase III WIPs