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Office of Water Programs

Pennsylvania's Phase III Watershed Implementation Plan: What are the Expectations?

Phase 3 WIP Steering Committee

April 3, 2017

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Chesapeake Bay Program
Science. Restoration. Partnership.

Agenda

- Progress Made and the Job Ahead of Us
  - Need Your Engagement to Move Forward
- Midpoint Assessment
  - Allocations
  - Issues
  - Schedule
- EPA Expectations
- Phase 3 WIP Game Plan

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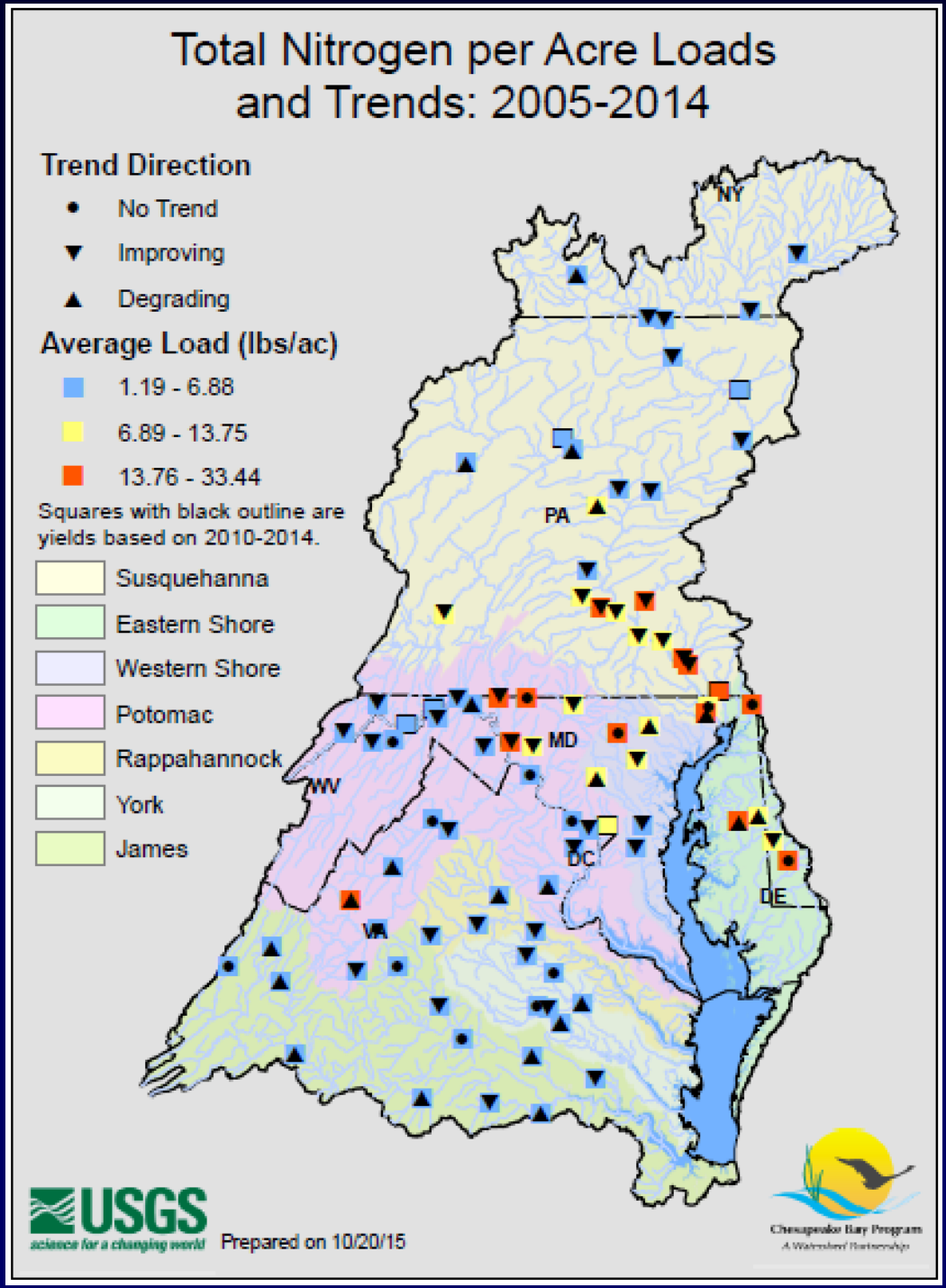
Total Nitrogen per Acre Loads and Trends: 2005-2014

Chesapeake Watershed

- Improving Trends: 54%
- Degrading Trends: 27%
- No Trend: 19%

PA: Majority improving

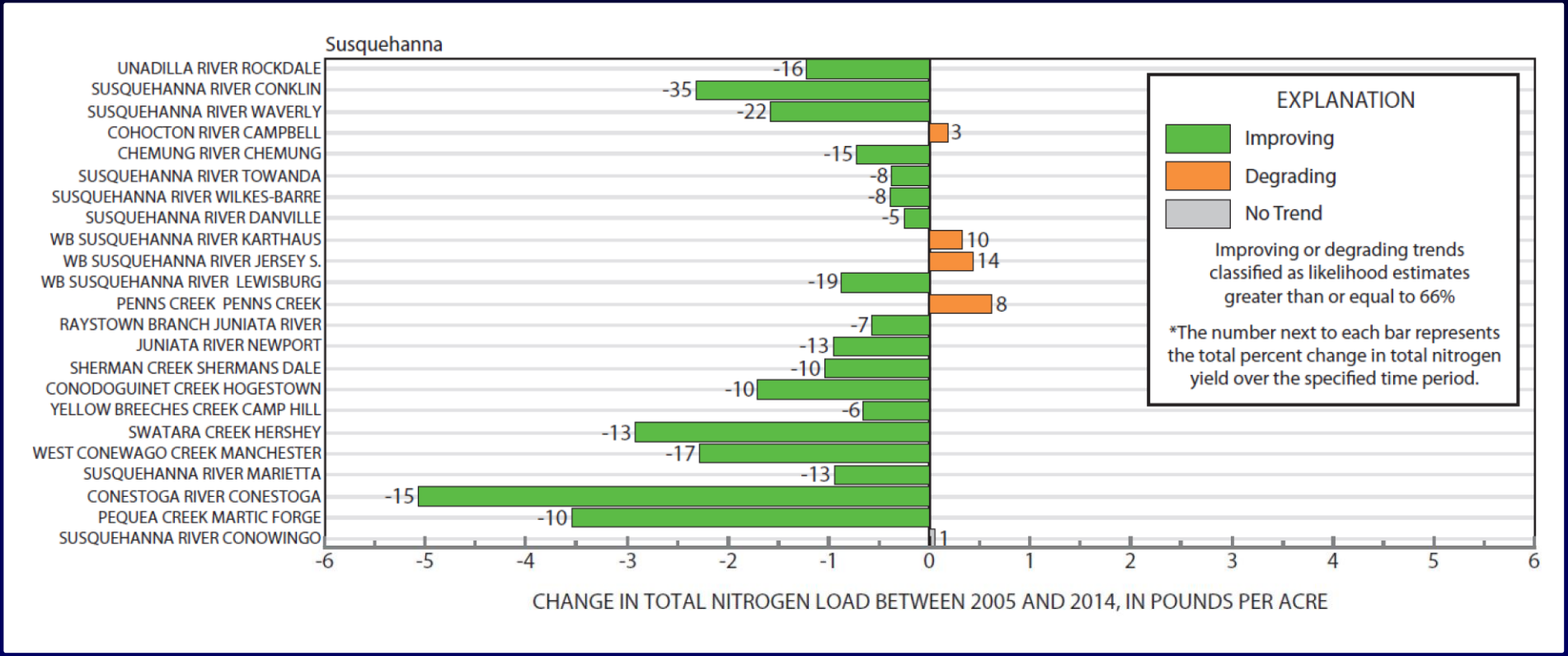
- Improving: 14
- Degrading: 3
- No change: 1



USGS

Changes in Nitrogen per Acre Loads: 2005-2014

Susquehanna Watershed



USGS

Total Phosphorus per Acre Loads and Trends: 2005-2014

Loads per acre

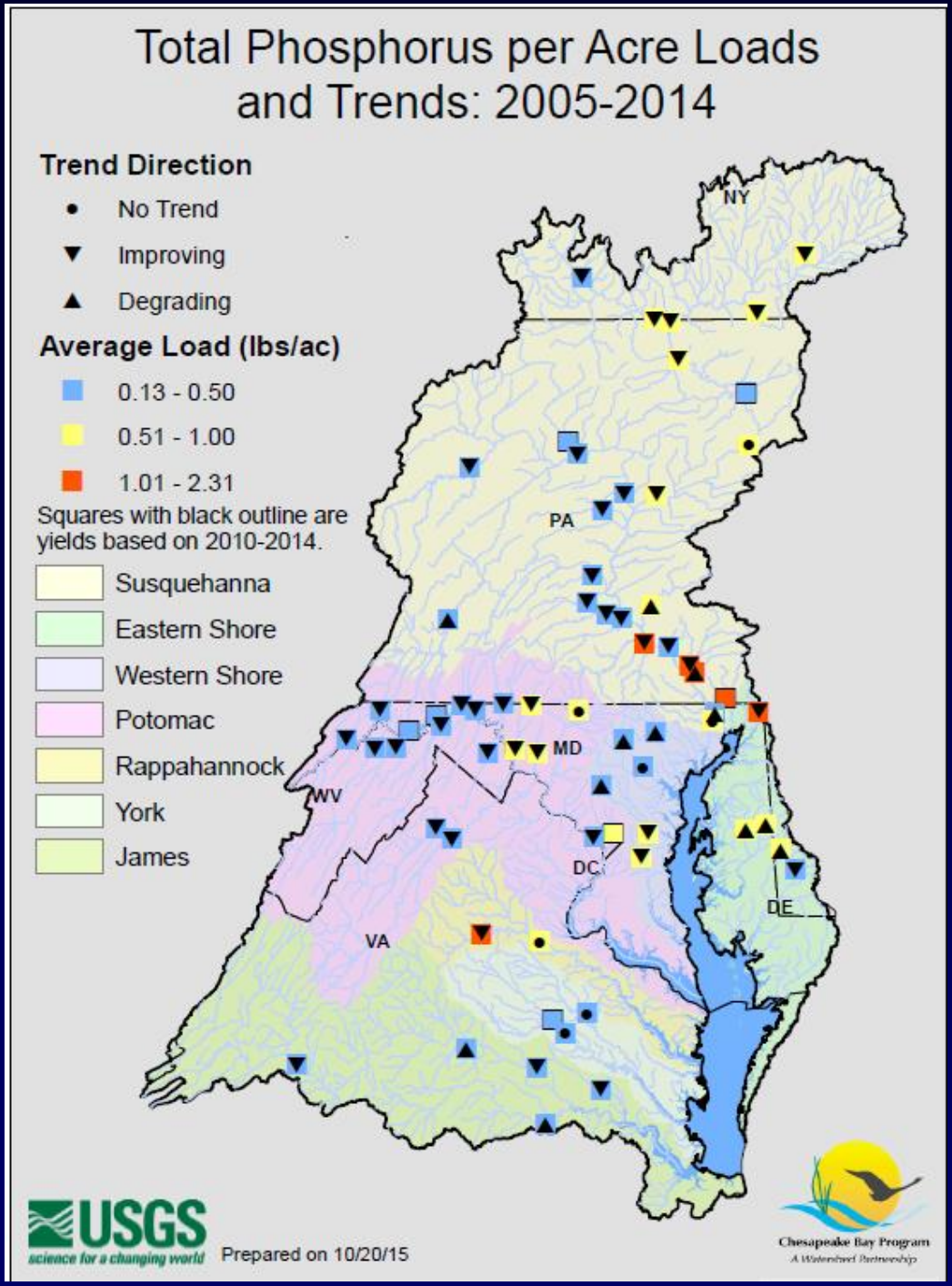
- Above average in PA
- Eastern part of basin

Bay Watershed trends:

- Improving Trends : 68%
- Degrading Trends : 20%
- No Trend : 12%

PA trends: Majority improving

- Improving: 14
- Degrading: 3
- No change: 1



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Changes in Phosphorus per Acre Loads: 2005-2014

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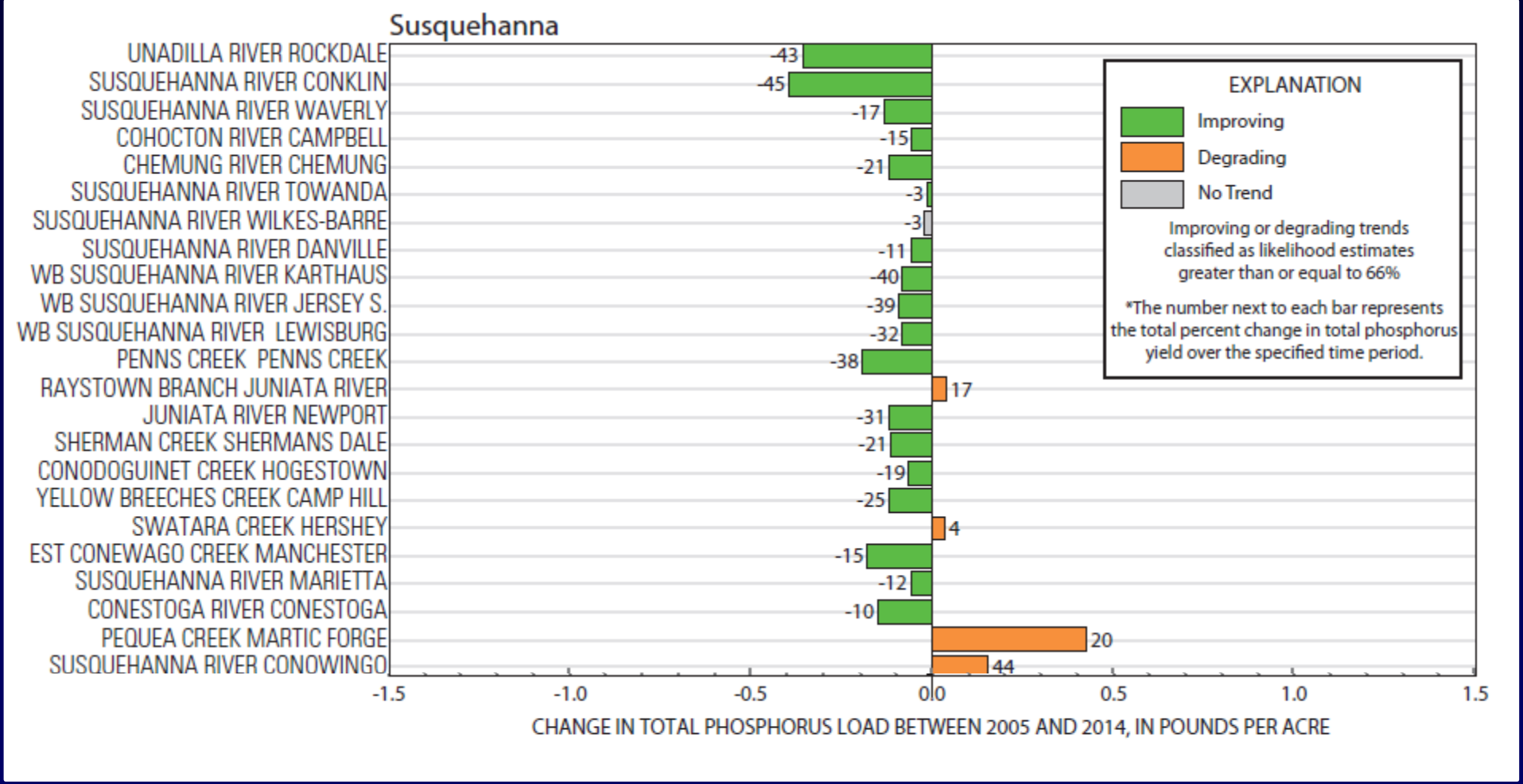
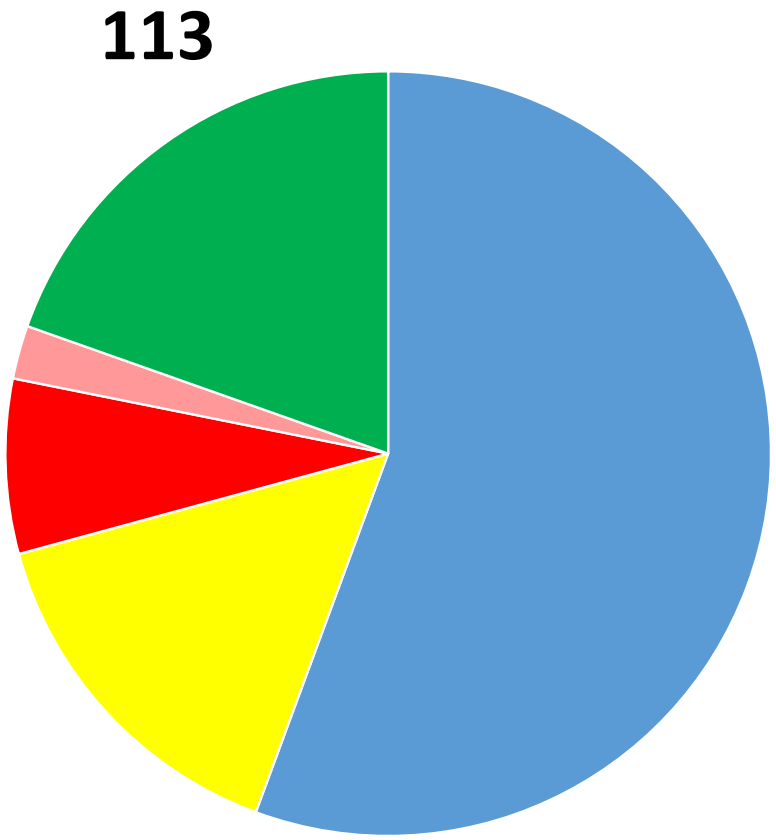


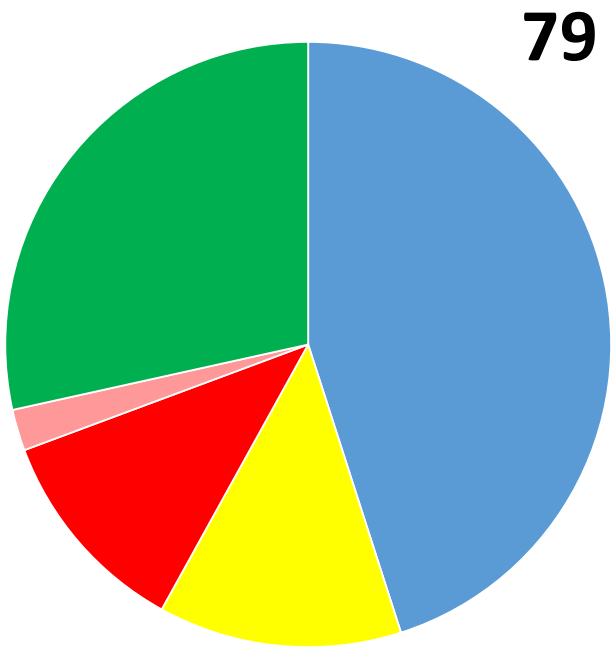
USGS

Pennsylvania Nitrogen Loads: 2015-2025

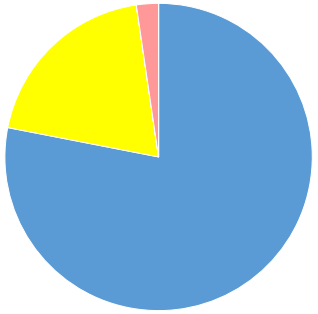
Agriculture | Urban Runoff | Wastewater+CSO | Septic | Forest+



2015



2025

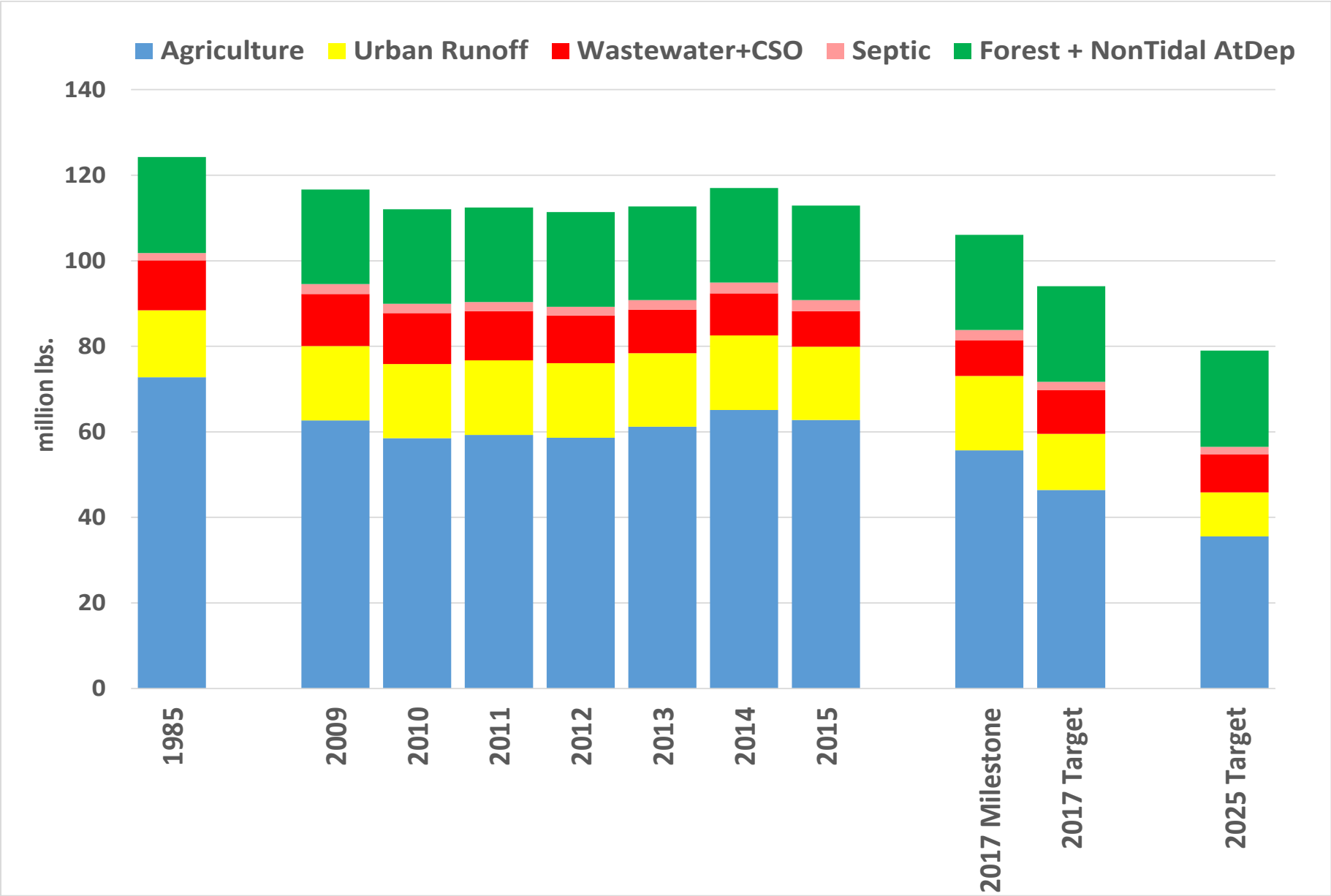


Where <u>will</u> the remaining nitrogen reductions* come from?

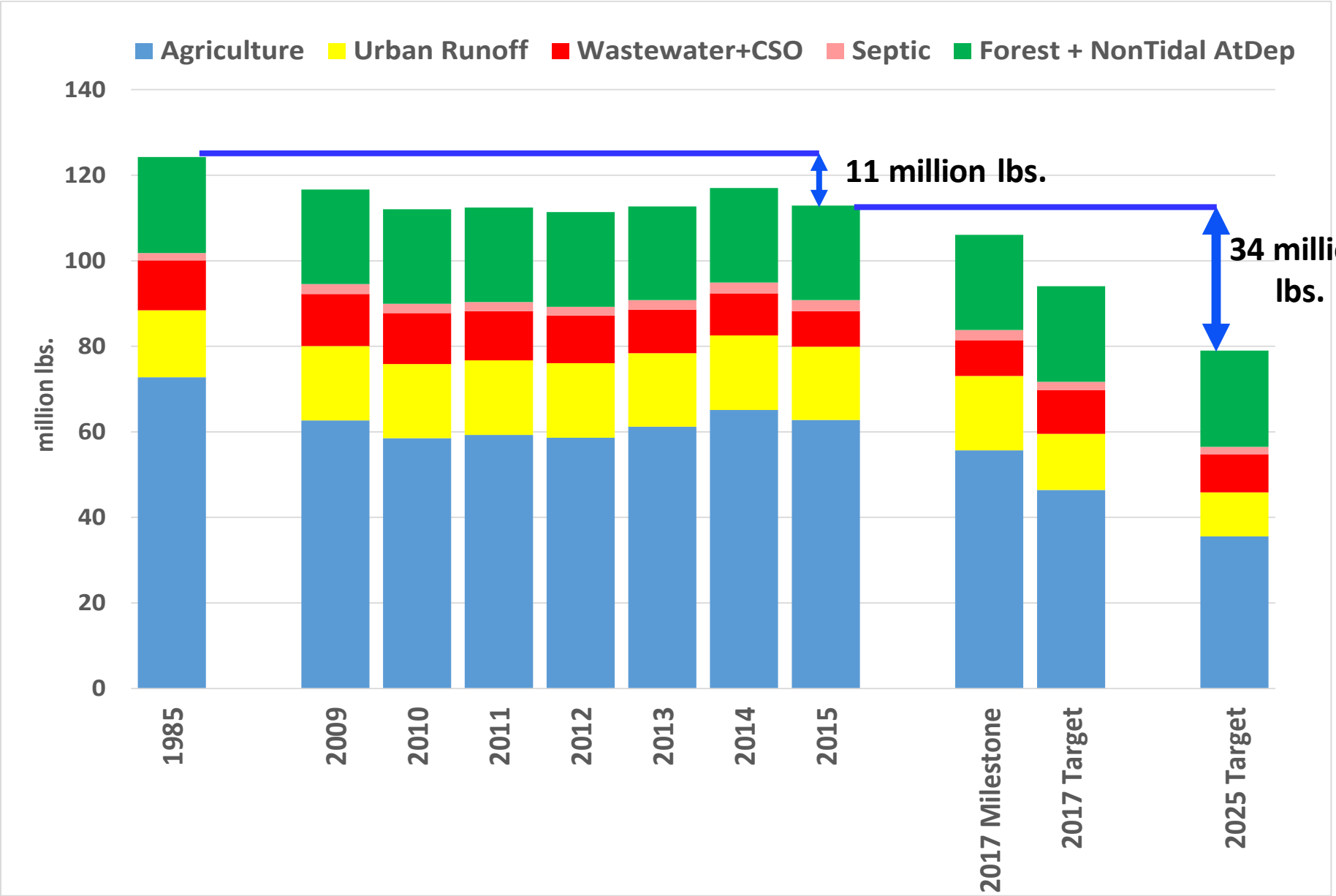
78% Agriculture
20% Urban
2% Septic Systems

*Based on the jurisdictions' Phase II WIPs.

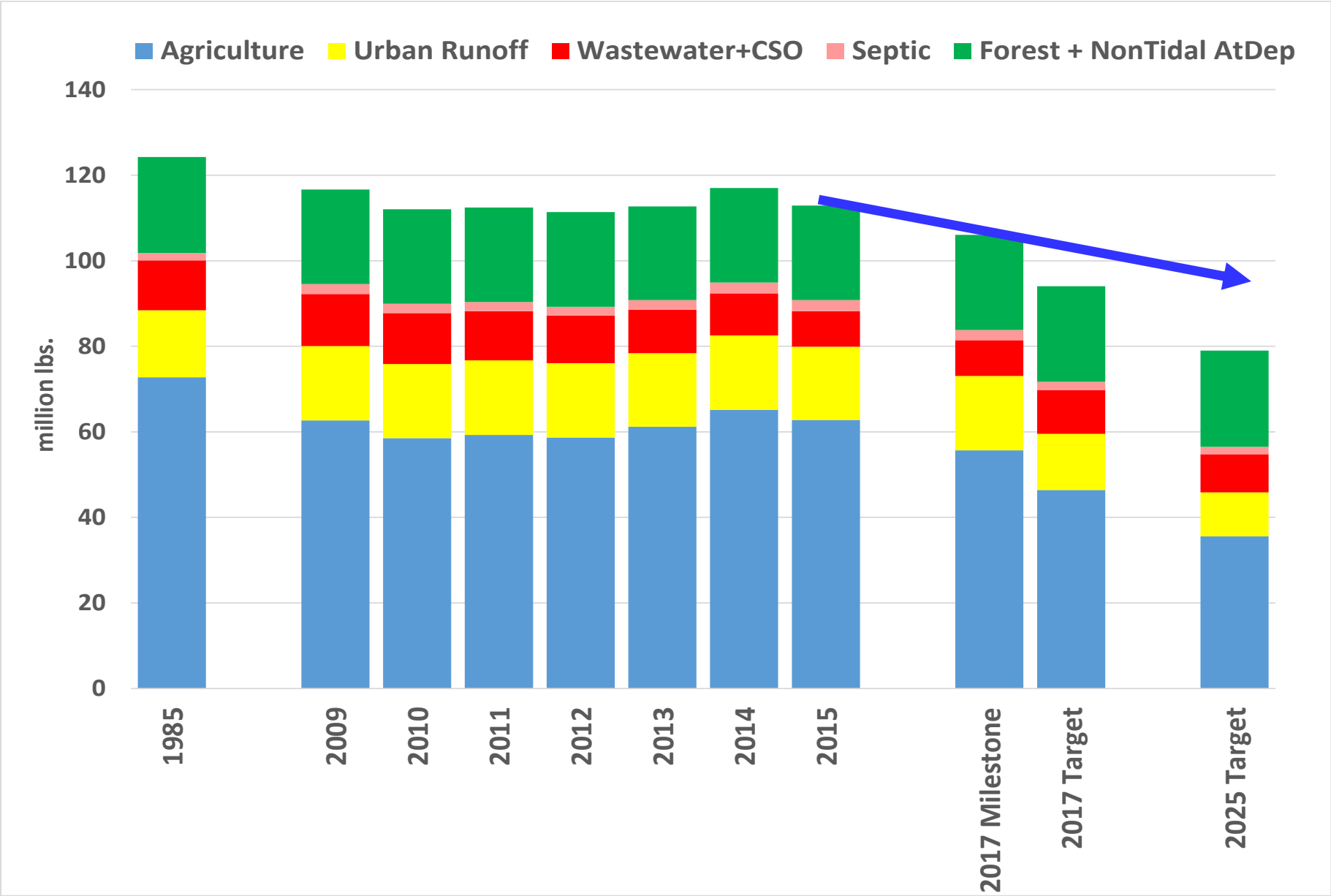
Pennsylvania Nitrogen Loads and Goals: 1985-2025



Pennsylvania Nitrogen Loads and Goals: 1985-2025

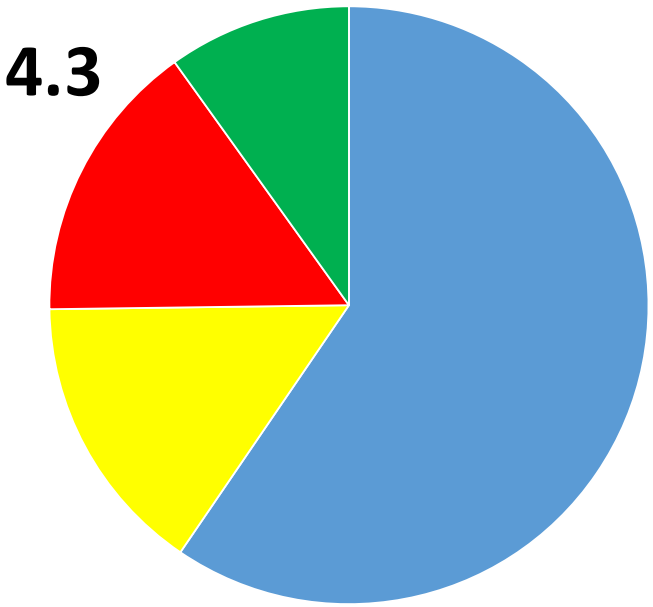


Pennsylvania Nitrogen Loads and Goals: 1985-2025

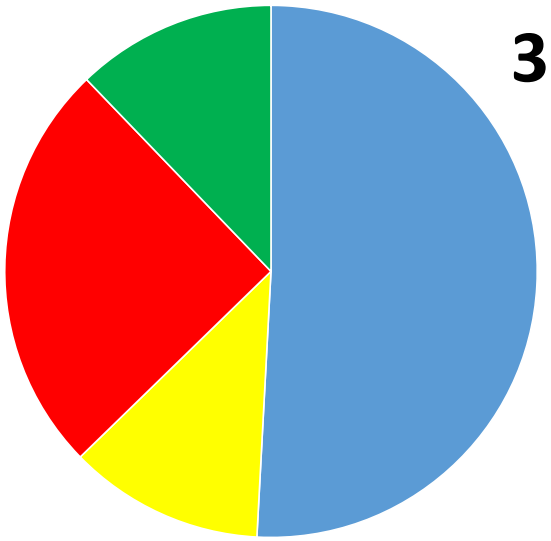


Pennsylvania Phosphorus Loads: 2015-2025

Agriculture | Urban Runoff | Wastewater+CSO | Forest+

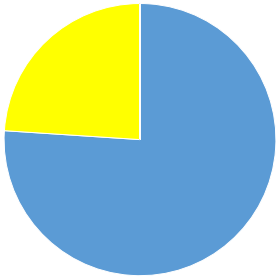


2015



2025

Where <u>will</u> the remaining phosphorus reductions* come from?



76% Agriculture
24% Urban

*Based on the jurisdictions' Phase II WIPs.

Pennsylvania's Source Sector Challenges

- Needs to reduce 19 million lbs. nitrogen by 2017 and a total of 34 million lbs. by 2025
- **Responsible for 69 percent of remaining basinwide nitrogen load reductions by 2025**
- **Agriculture will likely be responsible for much <u>more</u> than 80 percent of these nitrogen reductions by 2025**
- The technical assistance/compliance infrastructure, cost share funding are <u>not</u> in place to deliver on these needed reductions

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EPA Baywide Expectations—Top 4

- Programmatic and numeric implementation commitments for 2018-2025
- Strategies for engagement of local, regional and federal partners in implementation
- Account for changed conditions: climate change, Conowingo Dam infill, growth
- Develop, implement local planning goals below the state-major basin scales

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EPA Pennsylvania Expectations

EPA will be providing a set of Pennsylvania Specific Phase III Watershed Implementation Plans Expectations with Pennsylvania Agency Secretaries

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Mid-point Assessment

- Data Collection & Analysis
  - Water Quality Monitoring and Trend Analysis
  - Conowingo Dam
  - Climate Change
  - Sector Growth
- Policy and Methodology Decisions – Planning Targets
  - By state, basin
  - Equity vs Cost-effectiveness
- Model Calibration
  - Expert Panel Reports – BMP Efficiencies
  - Historical Data Cleanup

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Midpoint Assessment Schedule

Dates in BLUE may change

- June-July: 2017: Partnership's review of models
- October 2017: Draft Phase III WIP planning targets
  - Resolution of Issues around Conowingo, Climate Change, Sector Growth
- October -Dec 2017: Partnership review of targets
- Dec 2017: Final Phase III WIP planning targets
- Aug 2018: Draft Phase III WIPs shared for partner, stakeholder review
- Dec 2018: Final Phase III WIPs due

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Phase 3 Watershed Implementation Plan

- Stakeholder Input and Outreach
  - Steering Committee/Workgroups
  - Website
  - Communications Strategy Being Developed:
    - One-Day Kick-Off Conference, Listening Sessions, Public Comment
- Planning Targets & Implementation
  - Sector Specific
  - Local Area Goals
  - Priority Areas/Watersheds
- Measurable Outputs, Milestones
- Emphasis on Local Water Quality, Local Goals, Local Benefits

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Local Planning Goals

- Jurisdictional Boundaries (County, Township, Borough, Conservation District)
- Federal or State Facilities
- Regional Entity Boundaries (River Basin Commission, Planning Commission)
- Watershed or sub-watershed
- “Segment-shed” as defined in the TMDL
- Area with a defined need for pollutant reduction (ex. MS4s)
- Targeted area with high pollutant loadings

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Phase 3 WIP Schedule

Dates in BLUE may change

- April, May, 2017 – Form Steering Committee and Workgroups
- **June 5, 2017** – Phase 3 WIP Kick-Off Conference, Radisson Harrisburg
- June 2017 – Follow-up Written Comment Response to Conference
- July 2017 through October 2017
  - Bay Program Partnership Works Through Issues
  - Workgroups Formed, Convened
  - Comments Compiled, Additional Information and Data Compiled
- October 2017 through March 2018
  - Workgroups and Steering Committee develop the WIP
  - Additional Outreach Around Development of Local Planning Goals/Sector Specific Plans
- June 2018 – Public Comment Period of Draft Phase 3 WIP
- August 2018 – Submit to EPA for Partnership Review
- October, November 2018 – Revise in Response to Partnership Review
- December 2018 – Submit Final Phase 3 WIP

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Other Resources

- Chesapeake Bay Program Website
  - http://www.chesapeakebay.net
- Chesapeake Bay Assessment Scenario Tool - CAST
  - http://www.casttool.org – County level scenario calculator
- Chesapeake Bay Facility Assessment Scenario Tool - BayFAST
  - http://www.bayfast.org – Facility level scenario calculator
- Phase 6 Model Data Visualization Tool – New Beta 4 Run
  - https://mpa.chesapeakebay.net/Phase6DataVisualization.html

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DEP Chesapeake Bay Website:

http://www.dep.pa.gov/Business/Water/Pages/Chesapeake-Bay-Office.aspx#.VrkUGvMo7ct