

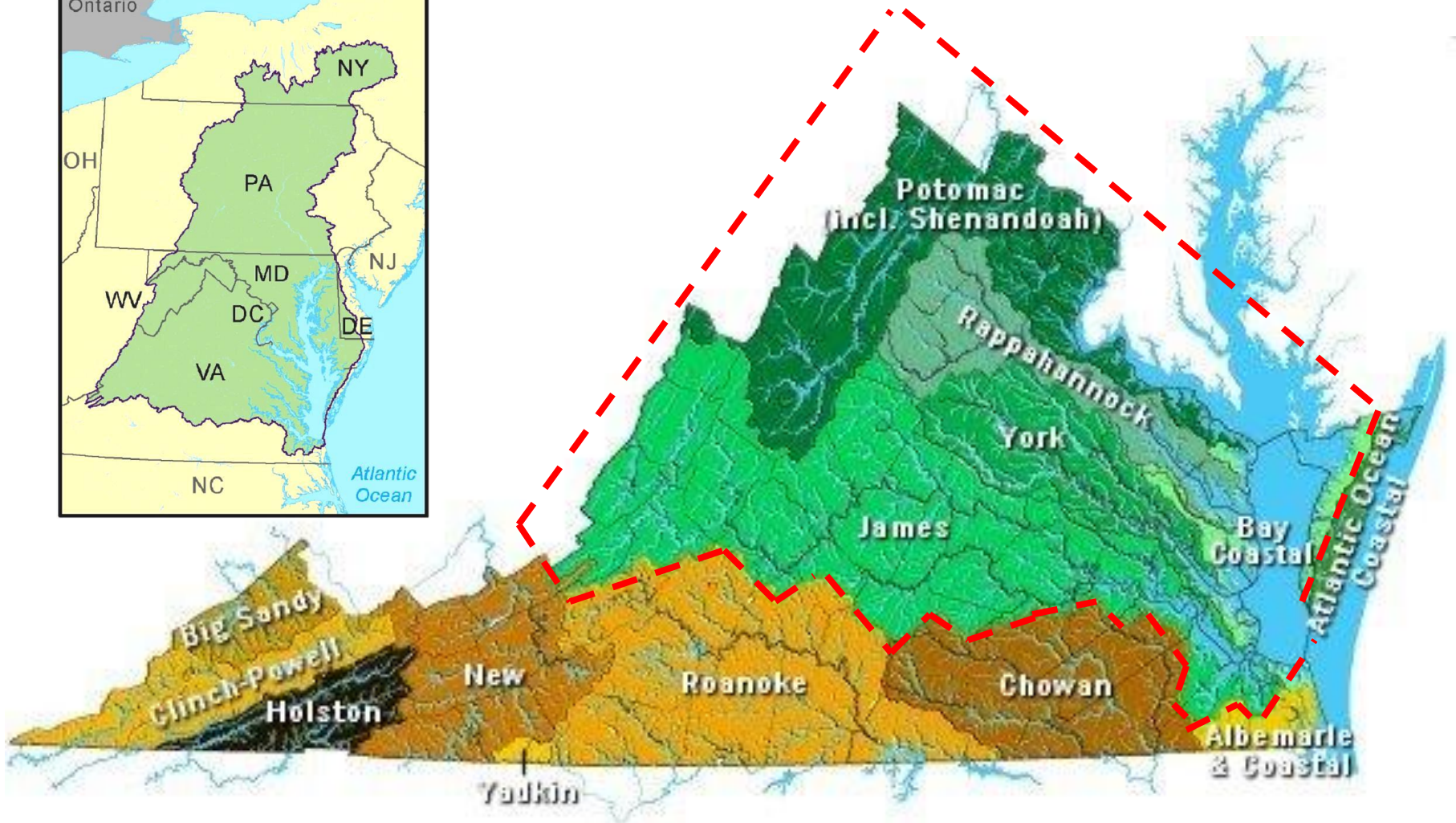
The Chesapeake Bay TMDL Midpoint Assessment – What's Changing, What's New, What to Expect in 2017 and 2018

Russ Baxter, Deputy Secretary of Natural
Resources

VACO Regional Meeting
Isle of Wight, August 29, 2017



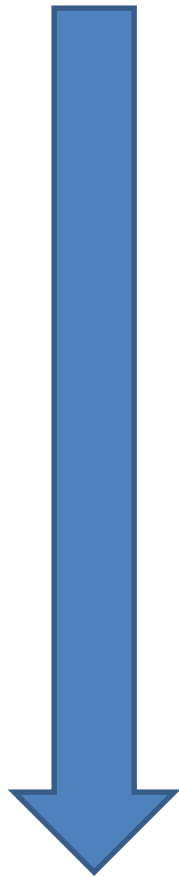
Virginia's Chesapeake Bay Watershed



SUCCESSES—SEEING REAL BAY AND WATERSHED RESPONSES



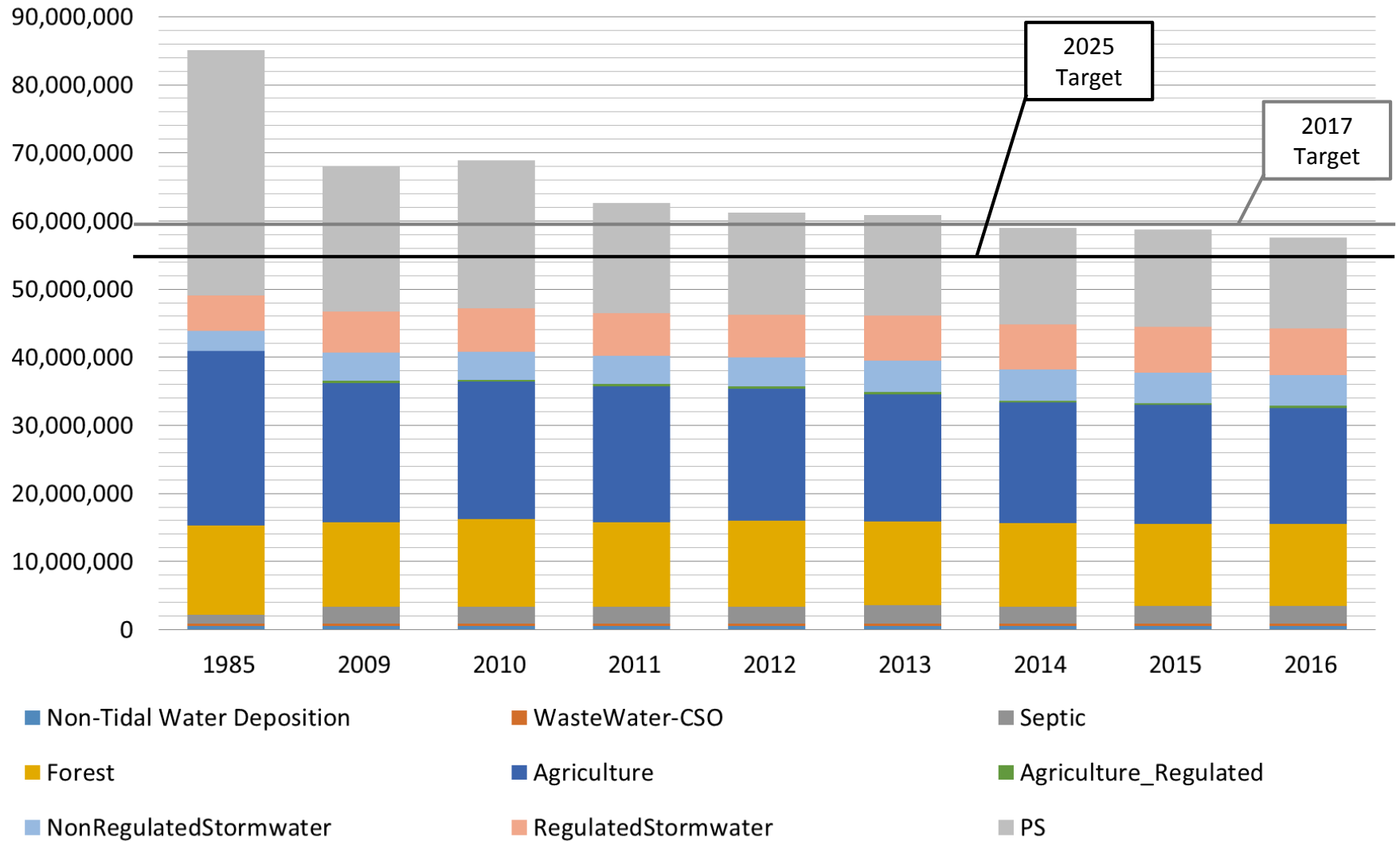
Chesapeake Bay TMDL and the Midpoint Assessment



- 2010: Bay TMDL Established
Phase I WIP
Phase II WIP
- 2017: **Midpoint Assessment**
60% of needed reductions
- 2018: Phase III WIP
- 2025: 100% of needed reductions

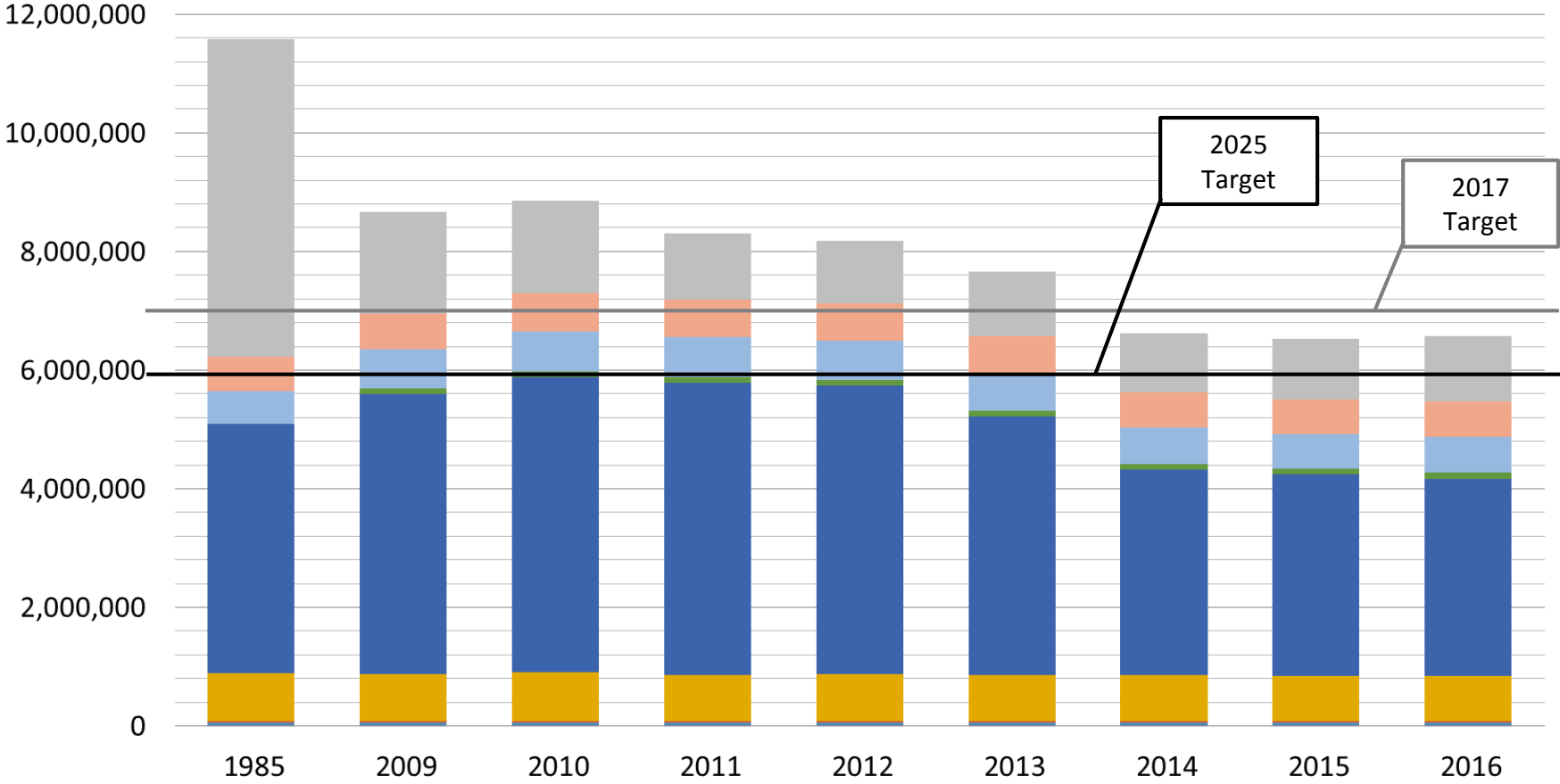
Virginia Delivered Nitrogen Loads

CBWM v.5.3.2



Virginia Delivered Phosphorus Loads

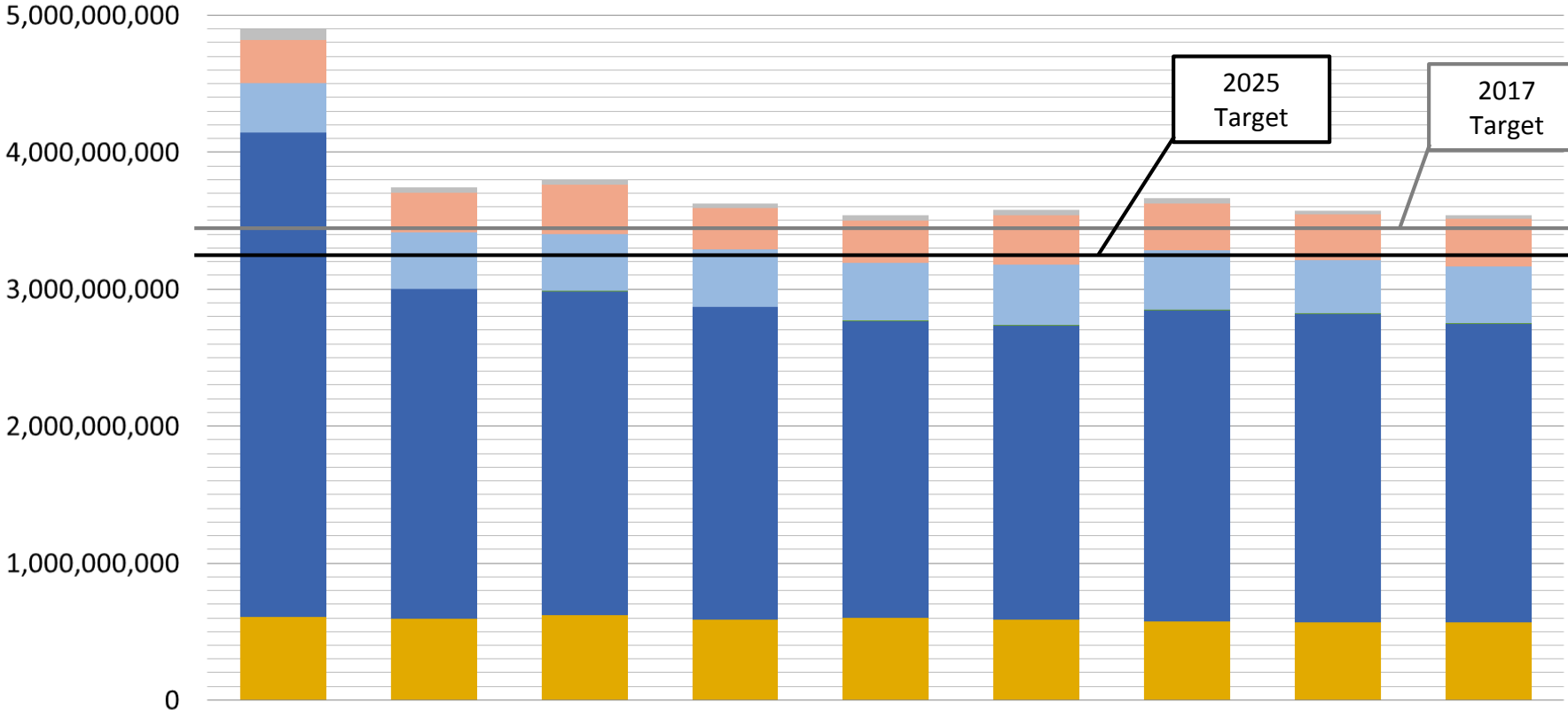
CBWM v.5.3.2



- Non-Tidal Water Deposition
- Forest
- NonRegulatedStormwater
- WasteWater-CSO
- Agriculture
- RegulatedStormwater
- Septic
- Agriculture_Regulated
- PS

Virginia Delivered Sediment Loads

CBWM v.5.3.2



- Non-Tidal Water Deposition
- Forest
- NonRegulatedStormwater
- WasteWater-CSO
- Agriculture
- RegulatedStormwater
- Septic
- Agriculture_Regulated
- PS

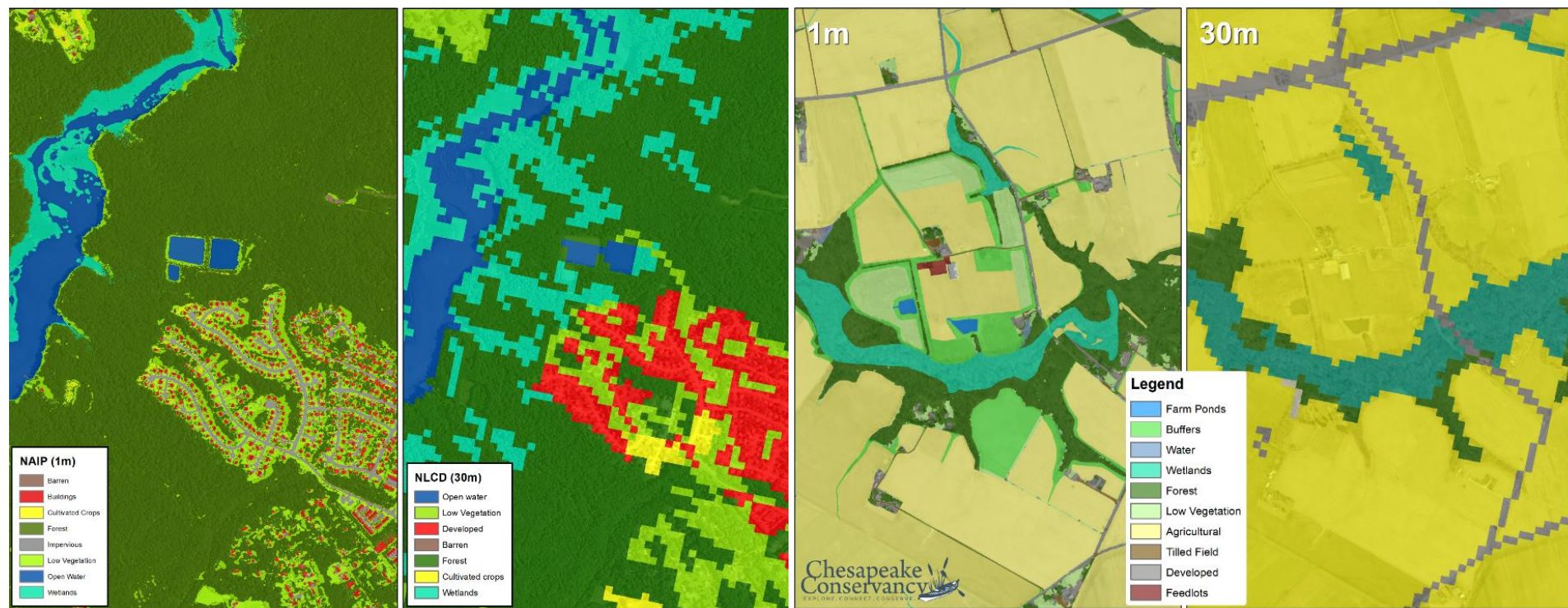
Chesapeake Bay Watershed Land Cover and Land Use Data Spatial Resolution Improved

1 Meter

30 Meter

1 Meter

30 Meter

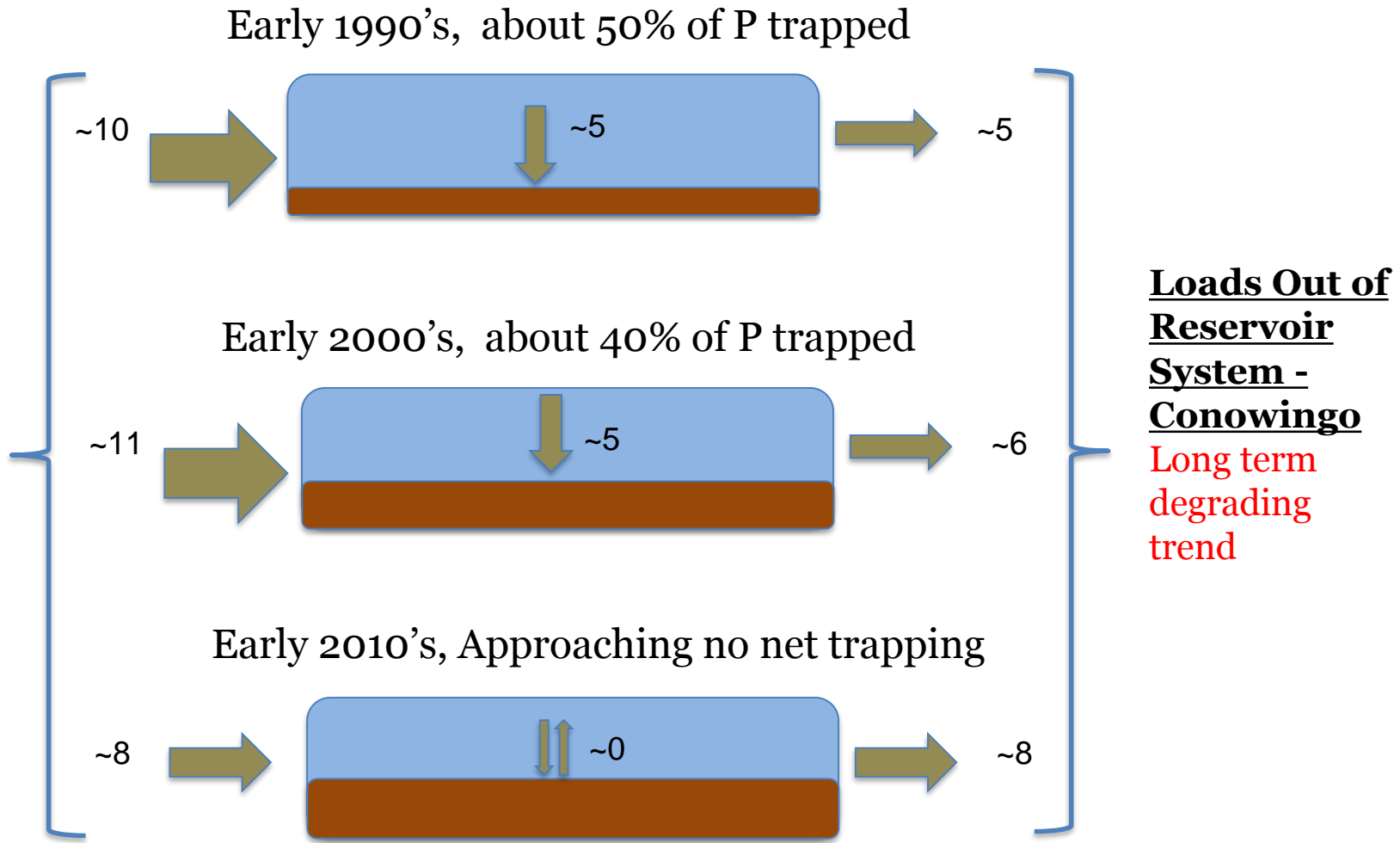


Urban/Suburban Settings

Rural Settings

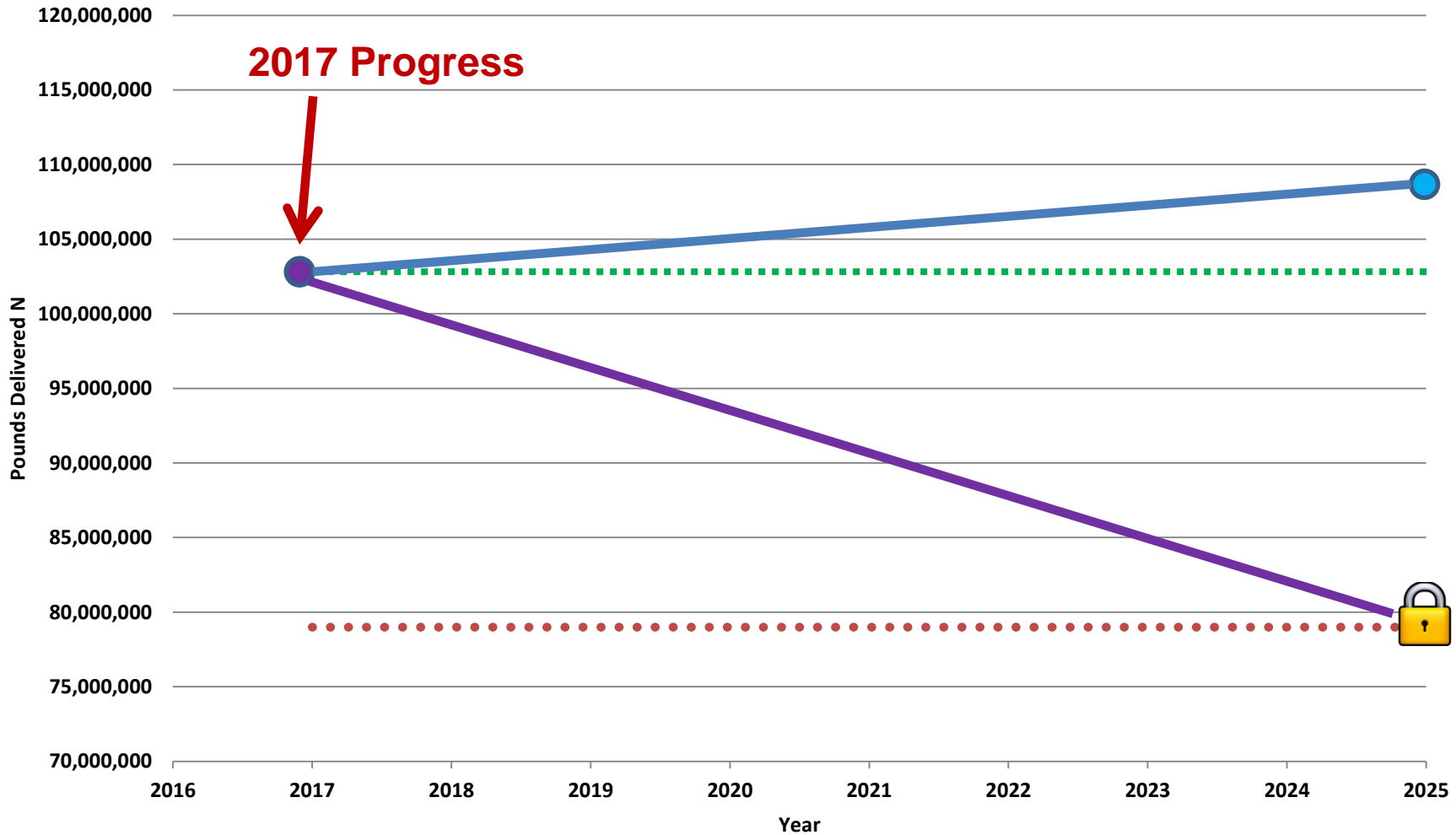
1 meter resolution land cover data for entire Bay watershed and all of Virginia supplemented by local government's submission of local land cover, land use, planning and zoning data

Susquehanna River Dam and Reservoir System Has Lost its Former Trapping Capacity



Source: Data from USGS (2016), http://cbrim.er.usgs.gov/loads_query.html
loads are approximate and in units of million lbs/year using estimates for 1992, 2002, and 2012

Phase III WIPs Need to Account for and Offset Growth in Pollutant Loads



What's New in BMPs

“Best Management Practices”

- Many new or updated BMPs for the Partnership's Phase 6 Chesapeake Bay Watershed Model
- Over 400 different BMPs have been approved by the CBP partnership for crediting load reductions
- States' historical records of BMPs cleaned-up for new calibration
- BMP verification requirements will be enforced starting in 2018
 - Credit Duration
 - Inspection/Maintenance

Phase III WIP 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

Commitment to Local Engagement



PHASE III WIP GENERAL INFORMATION FACT SHEET LOCAL GOVERNMENTS' ROLE IN THE CHESAPEAKE BAY CLEANUP EFFORT

On Dec. 29, 2010, the U.S. Environmental Protection Agency (EPA) established the Chesapeake Bay Total Maximum Daily Load (TMDL), a historic and comprehensive cleanup plan with accountability features to guide federal, state and local actions as they clean up the Chesapeake Bay and the streams, creeks and rivers that feed into it. Specifically, the TMDL calls for a 25% reduction in nitrogen, 24% reduction in phosphorus and 20% reduction in sediment delivered to the bay. The TMDL was required under the federal Clean Water Act and responded to consent decrees in Virginia and the District of Columbia from the late 1990s.

Local governments throughout the Chesapeake Bay watershed, along with federal and state government, nonprofit organizations, private businesses and citizens, are making significant progress restoring and protecting the health of local waterways and the bay. By taking actions such as upgrading wastewater treatment plants, reducing stormwater runoff and restoring streambanks to reduce erosion, local governments are ensuring that waterways are less polluted, communities can attract new businesses, home values increase and drinking water quality is protected. Although this progress is commendable, many waterways throughout the region remain impaired. Stakeholders must continue working to meet the pollution-reduction targets established in the Chesapeake Bay TMDL.

How Are We Doing?

Bay Program partners are conducting a "Midpoint Assessment" to evaluate progress toward the 2017 goal of having practices in place to meet 60% of the overall nitrogen, phosphorus and sediment reductions required in the TMDL. As part of this assessment, the suite of computer analysis models that informs ongoing restoration actions, commonly referred to as the Chesapeake Watershed Model or "Model," is being enhanced. The revised model will allow reporting of newly approved pollution-reduction practices, and now includes updated land use and land cover data that more accurately represent what's happening on the ground. Finally, the Model has been calibrated using almost three decades' worth (1985 to 2013) of water quality monitoring data from a watershed-wide network of more than 200 monitoring stations (tidal and nontidal).

What Do Local Governments Need to Do?

● **THE CHESAPEAKE BAY WATERSHED:**
Spans **64,000 square miles** and includes the **District of Columbia** and portions of **New York, Pennsylvania, Delaware, Maryland, Virginia** and **West Virginia**.

● **POPULATION:**
18 million residents
(2010 Census)

● **UNITS OF LOCAL GOVERNMENT:**
+/- 1,800



Partnership Approved Local Planning Goals Task Force Recommendations

- Local planning goals support Bay TMDL implementation objectives
- How “local” could be defined
- How local planning goals could be expressed



Phase III WIP Schedule

- Local review of the Phase 6 model land use data → **October-Nov 2016**
- Release of **final Phase 6 model** → **September 2017**
- EPA releases draft Phase III WIP Planning Targets → **Late October 2017**
- EPA releases **final expectations** for Phase III WIPs → **November 2017**
- EPA releases final Phase III WIP Planning Targets → **March 2018**
- **Draft Phase III WIPs** due to EPA → **December 2018**
- EPA feedback and public comment on draft Phase III WIPs → **February 2019**
- **Final Phase III WIPs** due to EPA → **April 2019**

Local Role in Phase III WIP

State “Asks”

“Identify, verify, report, and develop”

1. Engage in WIP Planning effort – participate at meetings
2. **Identify, verify** and **report** implemented practices - BMP warehouse, Construction General Permit data base, DCR
3. Meet permitting and program requirements
4. Identify what pollutant reductions are already being achieved/planned for in various programs
5. **Develop** local water quality strategies that yield multiple benefits
6. Take advantage of funding opportunities

Contact Info

- Russ Baxter, russ.baxter@governor.virginia.gov
804-786-0044
- Jutta Schneider, jutta.schneider@deq.virginia.gov
804-698-4099
- Melanie Davenport, melanie.davenport@deq.virginia.gov
804-698-4038
- Joan Salvati, joan.salvati@deq.virginia.gov
804-698-4230
- James Davis-Martin, james.davis-martin@deq.virginia.gov
804-698-4298