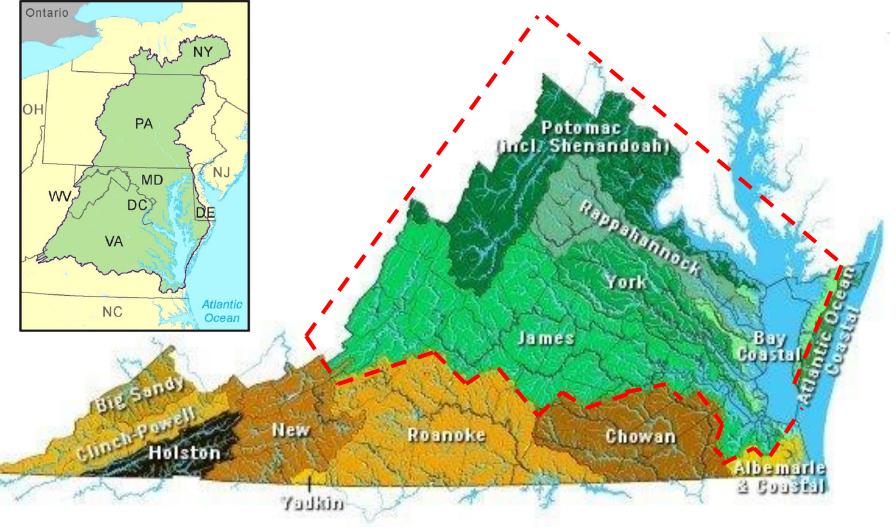


### The Chesapeake Bay TMDL Midpoint Assessment – What's Changing, What's New, What to Expect in 2017 and 2018

Russ Baxter, Deputy Secretary of Natural Resources Go Green – August 2, 2017



# Virginia's Chesapeake Bay Watershed



### SUCCESSES—SEEING REAL BAY AND WATERSHED RESPONSES



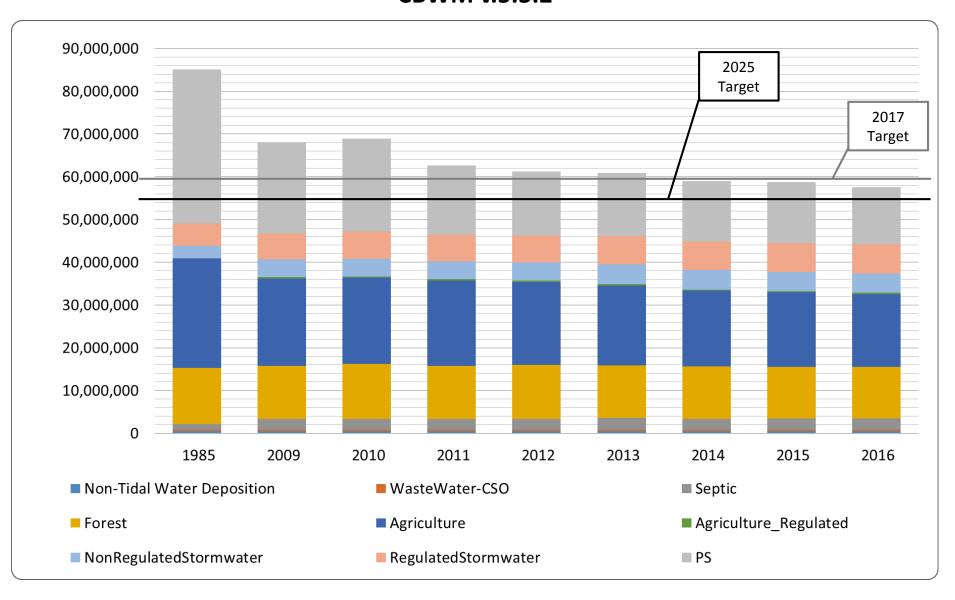




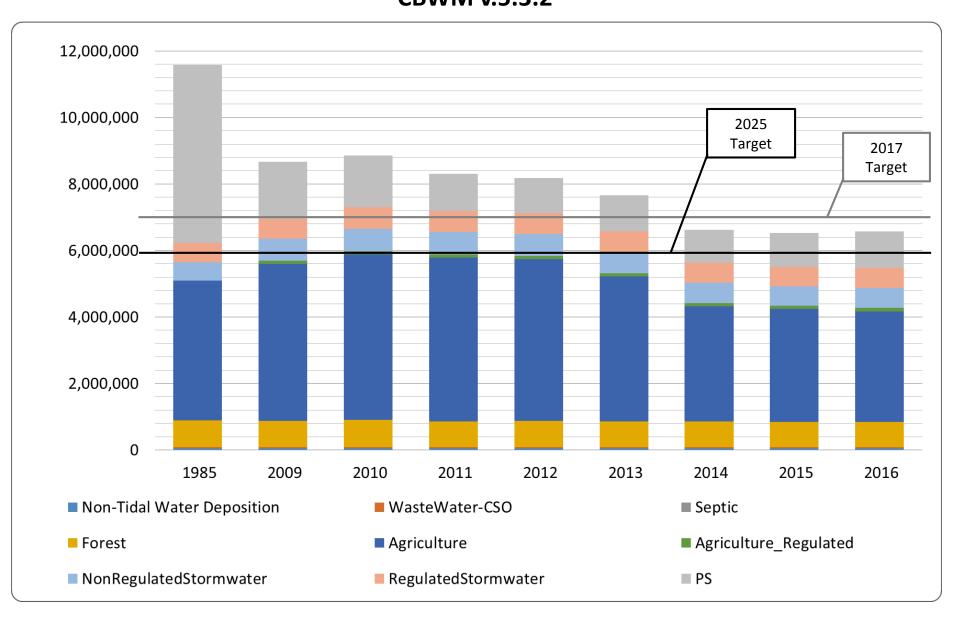
## Chesapeake Bay TMDL and the Midpoint Assessment

- 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

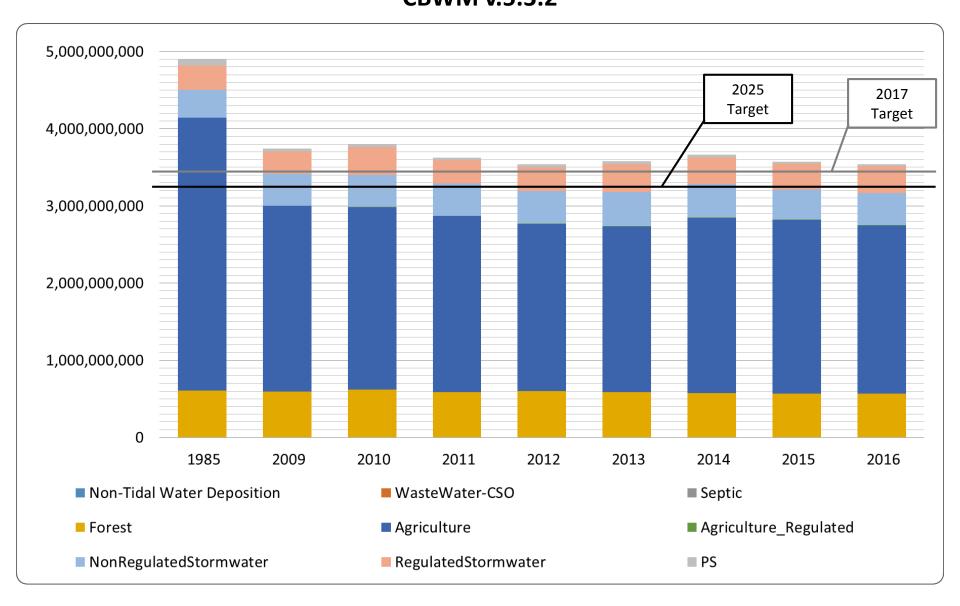
### Virginia Delivered Nitrogen Loads CBWM v.5.3.2



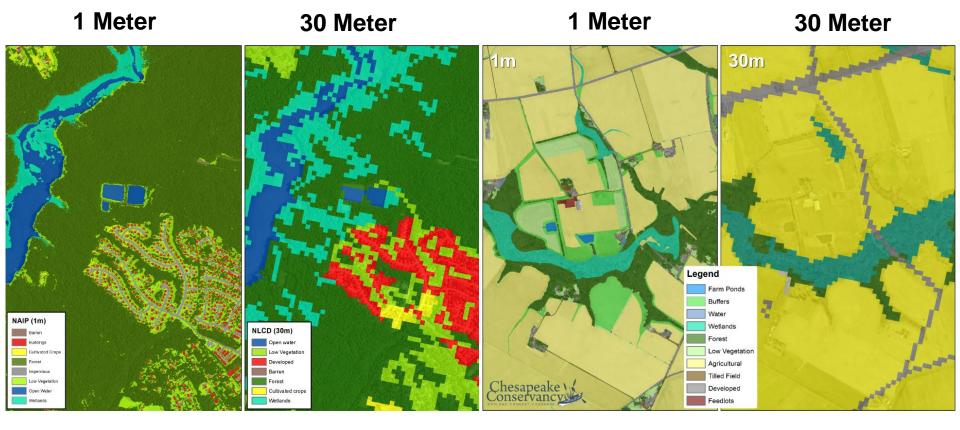
### Virginia Delivered Phosphorus Loads CBWM v.5.3.2



#### Virginia Delivered Sediment Loads CBWM v.5.3.2



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

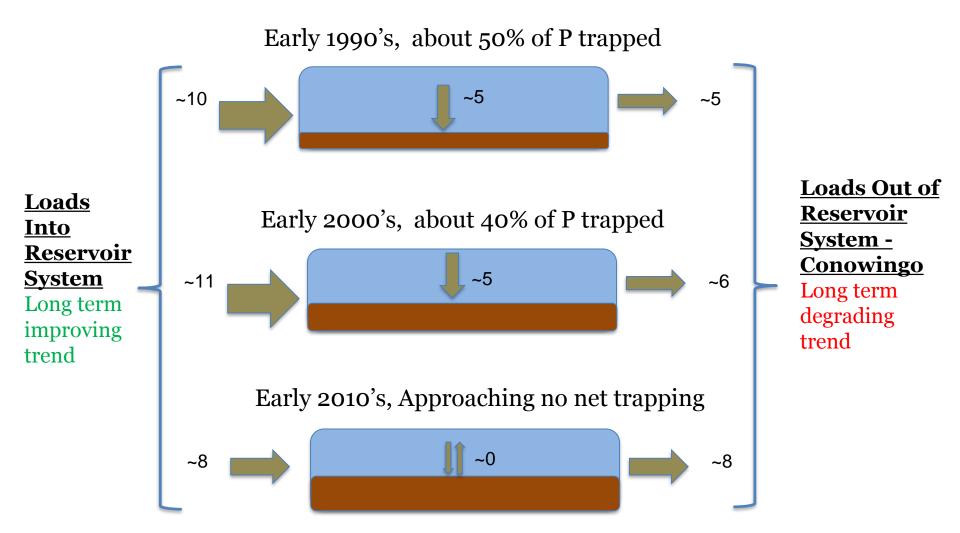


**Urban/Suburban Settings** 

**Rural Settings** 

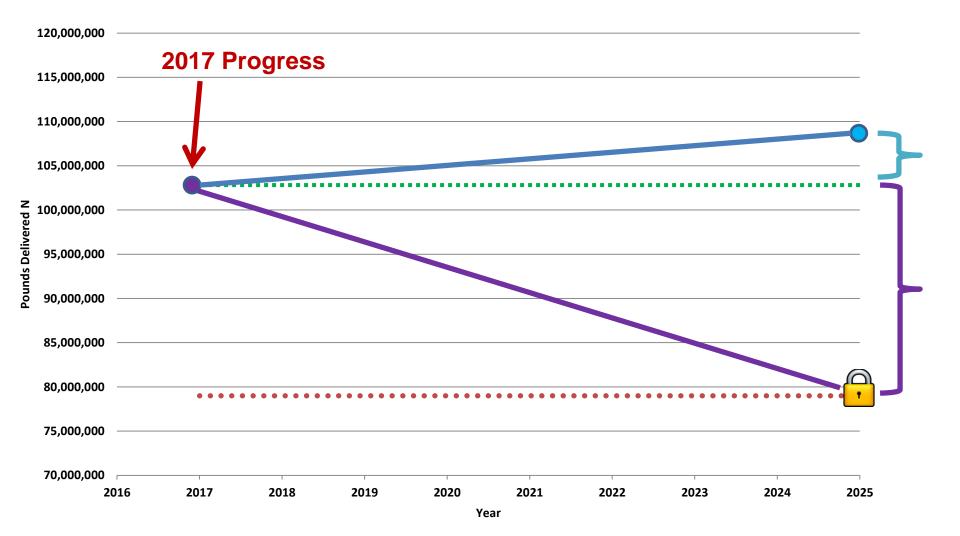
1 meter resolution land cover data for entire Bay watershed and all of Virginia supplemented by local government's submission of local land cover, land use, planning and zoning data

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



Source: Data from USGS (2016), <u>http://cbrim.er.usgs.gov/loads\_query.html</u> 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)

#### OVERNMENT:

+/- 1,800



http://www.chesapeakebay.net/groups/group/local\_government\_engagement\_initiative

# Partnership Approved Local Planning Goals Task Force Recommendations

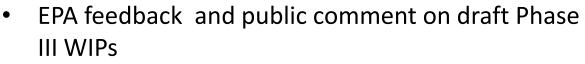
- Local planning goals support Bay TMDL implementation objectives
- How "local" could be defined

 How local planning goals could be expressed



## Phase III WIP Schedule

- Local review of the Phase 6 model land use data
- Release of final Phase 6 model
- EPA releases draft Phase III WIP Planning Targets
- EPA releases final expectations for Phase III WIPs
- EPA releases final Phase III WIP Planning Targets
- Draft Phase III WIPs due to EPA



Final Phase III WIPs due to EPA



## 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, <u>russ.baxter@governor.virginia.gov</u> 804-786-0044
- Jutta Schneider, jutta.schneider@deq.virginia.gov 804-698-4099
- Melanie Davenport, <u>melanie.davenport@deq.virginia.gov</u> 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