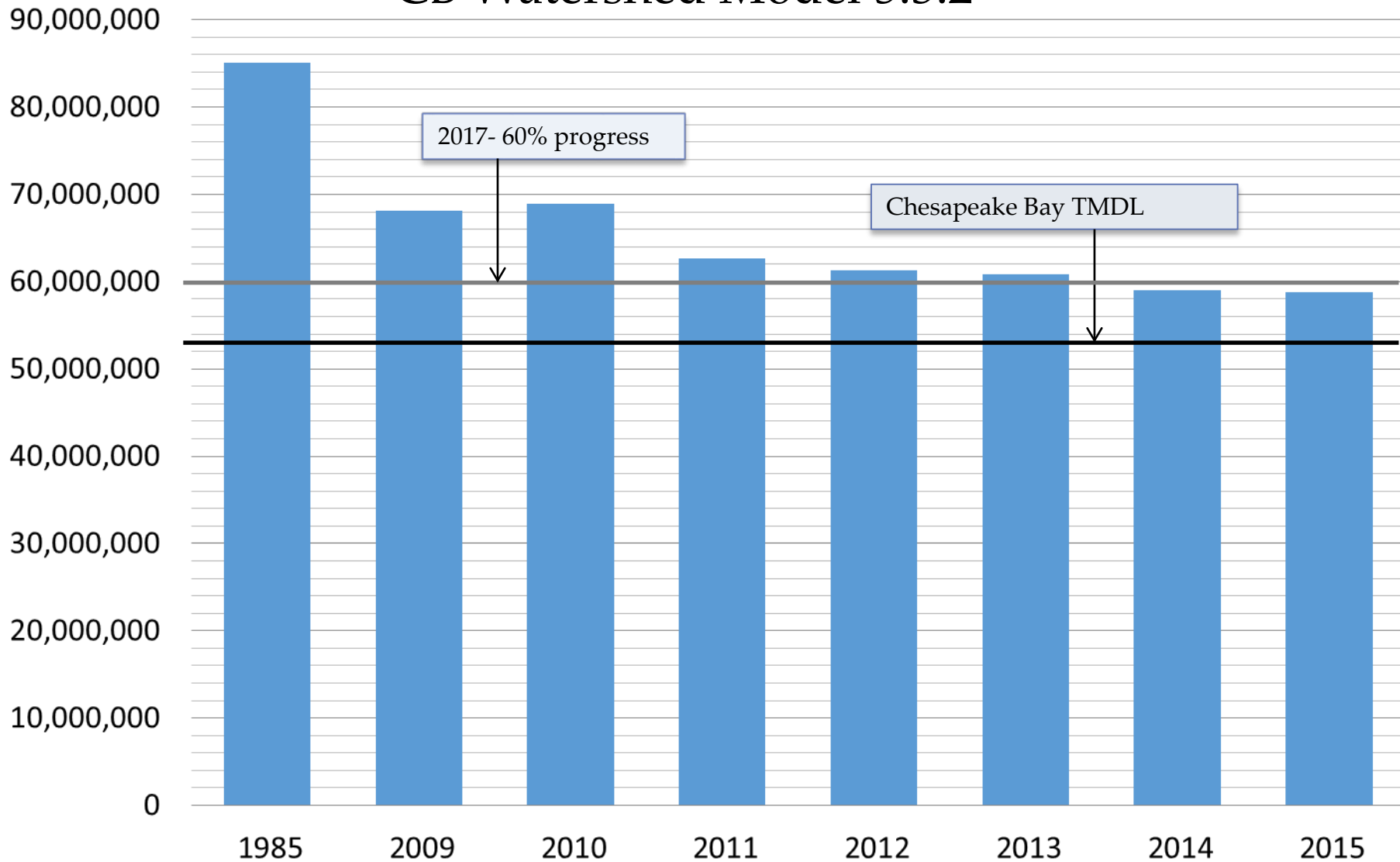


Watershed Implementation Plan (WIP) Timeline

- Phase I WIP – submitted to EPA November 2010
 - enhancements to existing state level programs and initiatives
- Phase II WIP – submitted to EPA March 2012
 - Updates to statewide strategies
 - Subdivided Bay TMDL planning targets for the state's 39 segment sheds into local area goals
 - Significant engagement of local governments and collection of local strategies
- Phase III WIP – Due August 2018
 - Further updates to statewide strategies
 - More focused engagement of local entities (localities and Soil & Water Conservation Districts) and stakeholders

Virginia Nitrogen Loads (lbs/year)

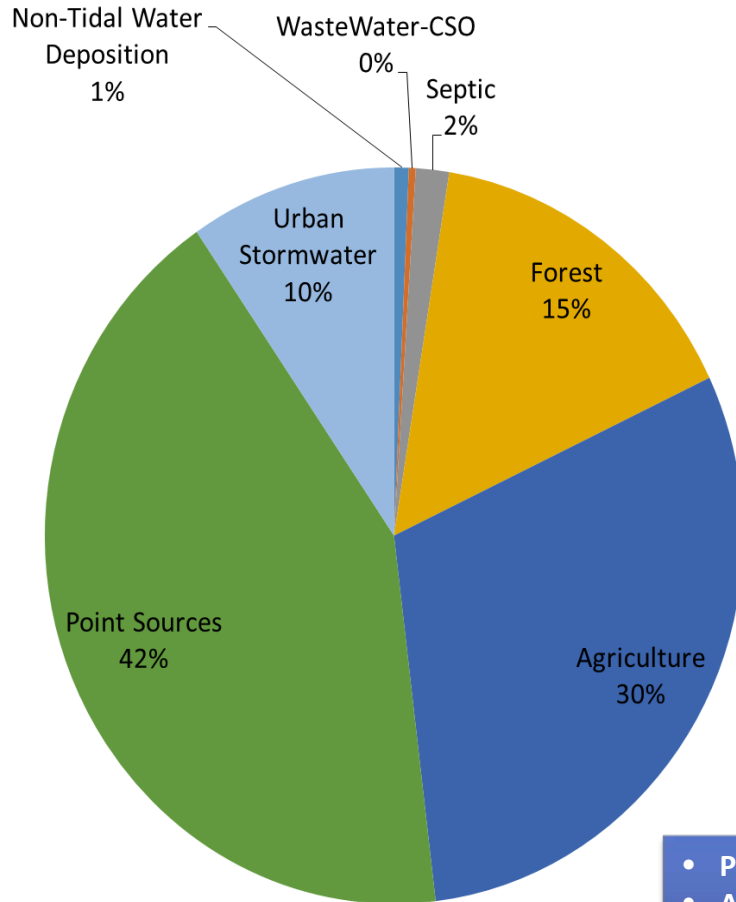
CB Watershed Model 5.3.2



Virginia Nitrogen Loads

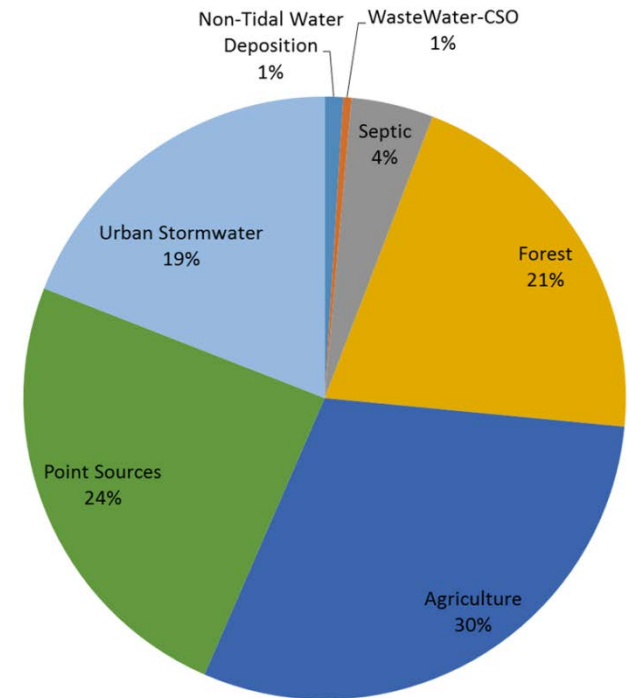
CB Watershed Model 5.3.2

1985



2015

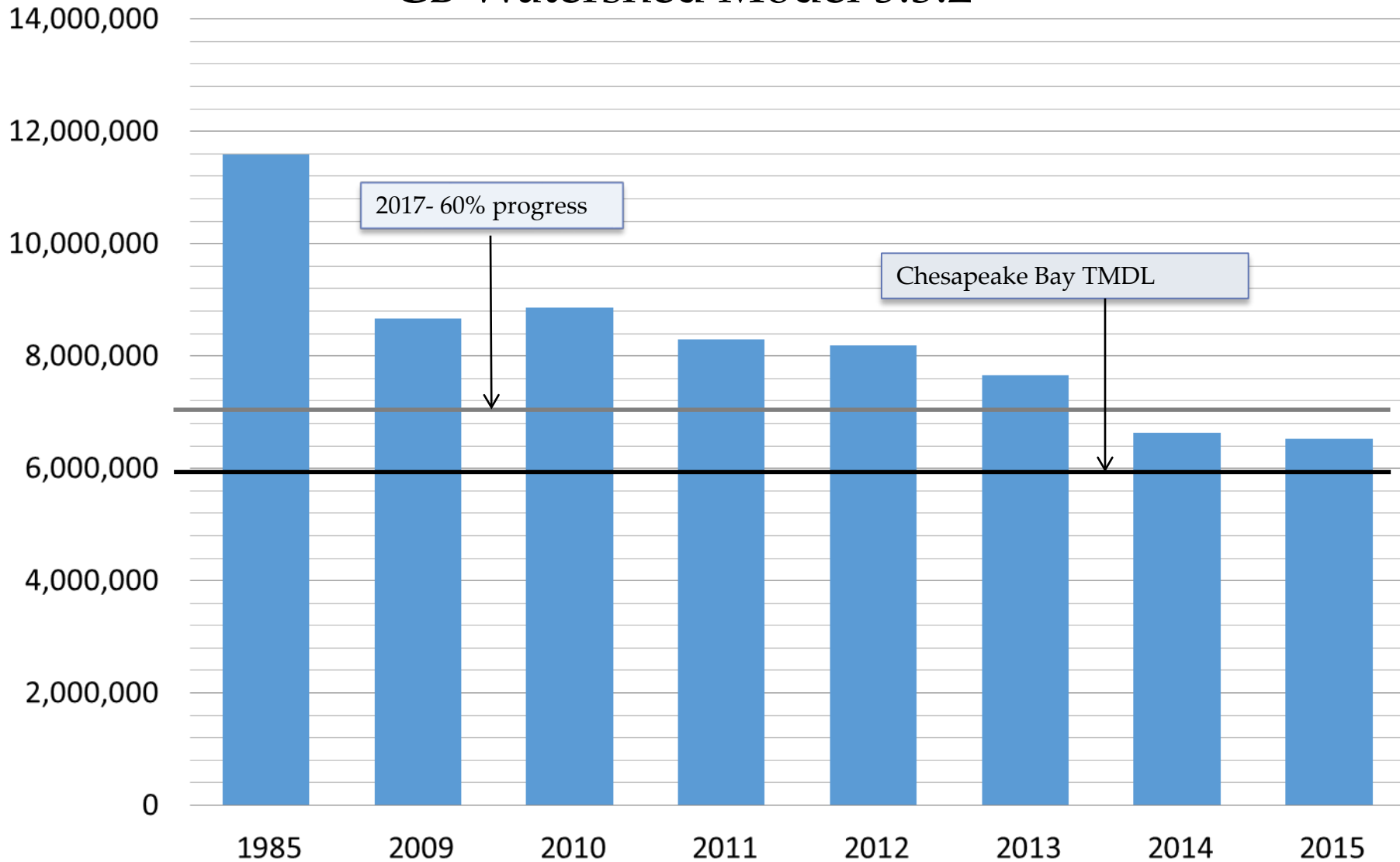
31.2% reduction



- Point source loads reduced by 60%
- Agricultural loads reduced by 31%
- Urban stormwater loads increased by 38%

Virginia Phosphorus Loads (lbs/year)

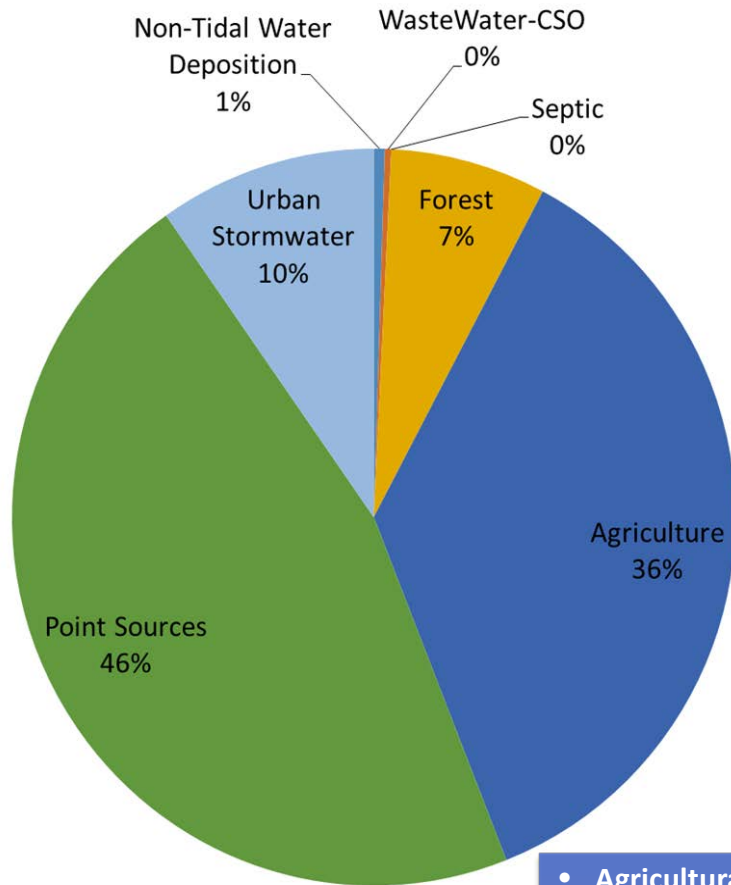
CB Watershed Model 5.3.2



Virginia Phosphorus Loads

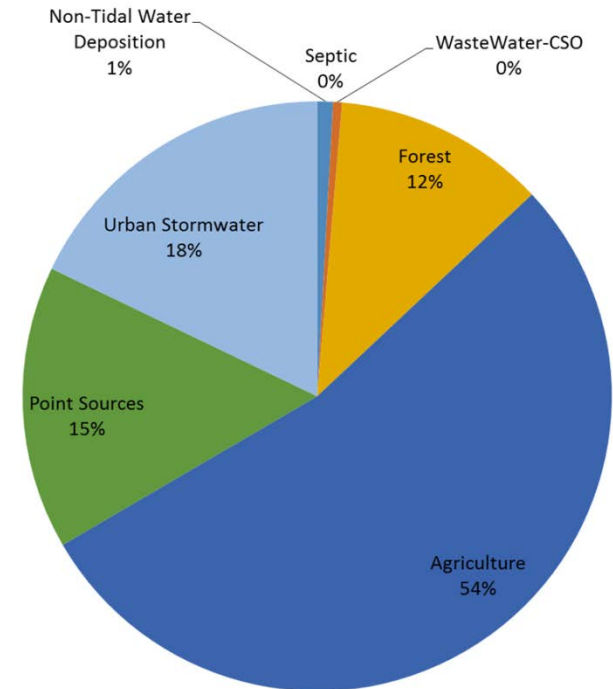
CB Watershed Model 5.3.2

1985



2015

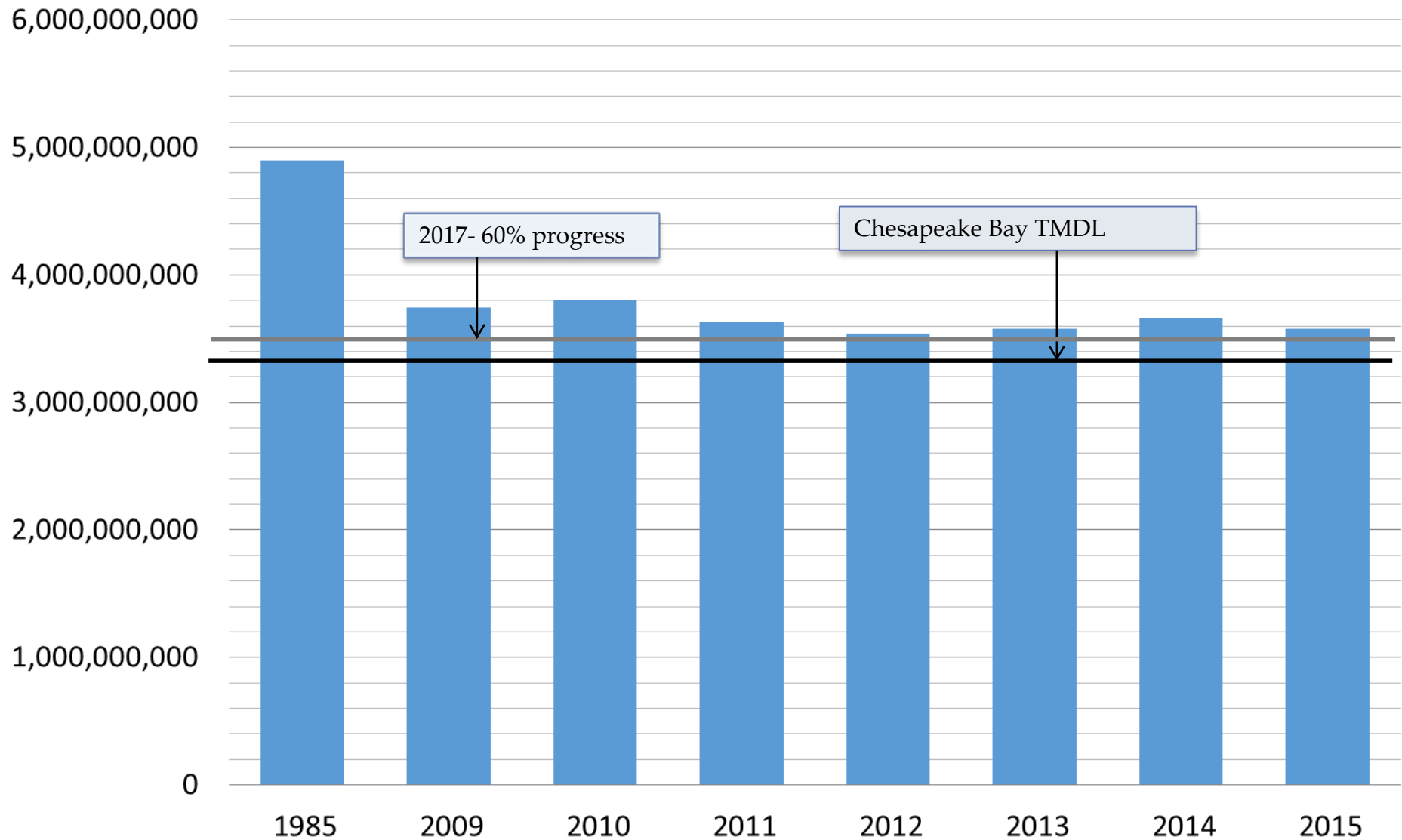
44% reduction



- Agricultural load are a larger % of the smaller pie due to significant reductions in point source discharges
- Agricultural phosphorous loads were reduced by 16.8%
- Urban stormwater phosphorous loads increased by 3.4%

Virginia Sediment Loads (lbs/year)

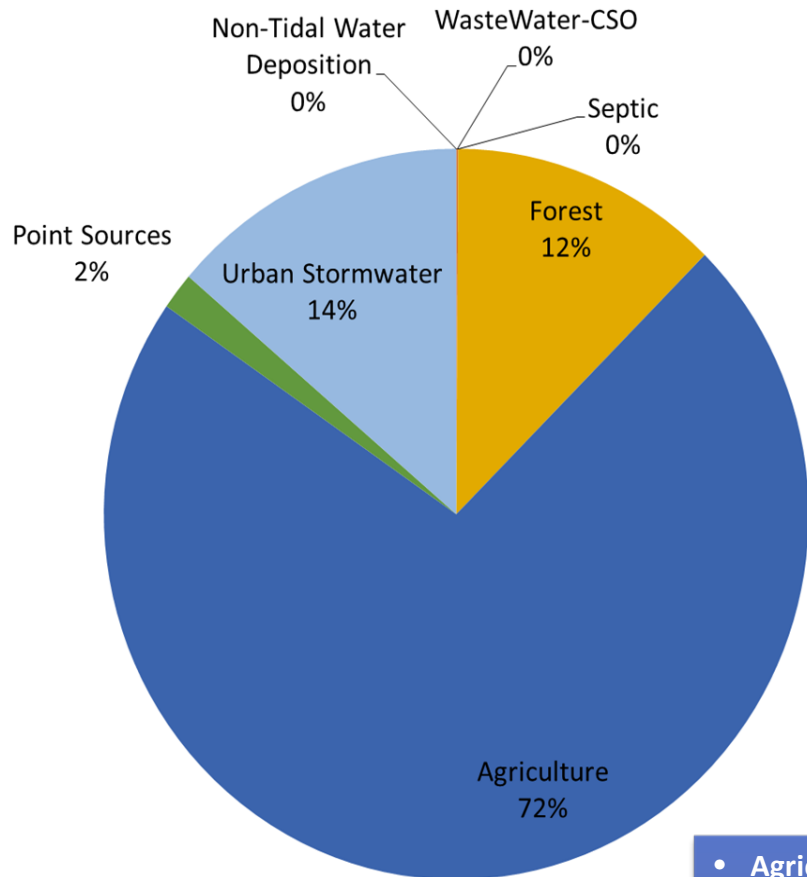
CB Watershed Model 5.3.2



Virginia Sediment Loads

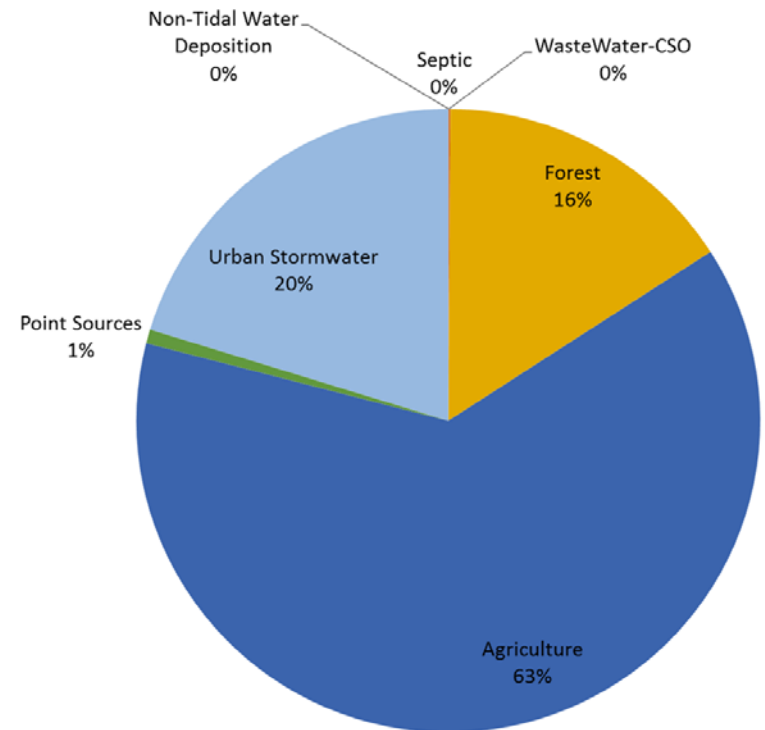
CB Watershed Model 5.3.2

1985



2015

27% reduction



- Agricultural loads have decreased by 36%
- Urban stormwater sediment loads have increased by 8%

Programmatic Initiatives

AGRICULTURE

- Increased cost share program including livestock exclusion
- Development of agricultural Resource Management Plans (RMPs)

STORMWATER

- Reissued all Phase I Municipal Separate Storm Sewer Systems (MS4) permits
- Regulatory development for reissuance of Phase II MS4 General Permit
- Virginia Stormwater Management Program Implemented statewide

FORESTRY

- Healthy watersheds forest project – local tools to retain forest lands

LAND USE

- Implementation of Chesapeake Bay Preservation Act environmental site design criteria: Minimize land disturbance; Maintain indigenous vegetation; Minimize impervious cover

WASTE WATER TREATMENT PLANS

- Waste water treatment plant upgrades through Watershed General Permit

Key Points

- Point source pollutant loads have significantly reduced due to waste water treatment plant upgrades, but these reductions will “level off” as growth occurs in the service areas of these plants
- Agricultural and urban source sectors have benefitted from “overachievement” of nutrient reductions from waste water treatment plants
- Although sediment loads from agricultural have decreased, these loads remain a primary source of sediment and further reductions are needed
- Need to address nutrient and sediment loads from urban sources
- State and local resources are limited

Ideas for Addressing Issues

- Focus on local water quality
- Prioritize those strategies that address community benefits and achieve multiple benefits
- Identify, verify and report practices resulting from existing local programs & initiatives
- More practices reported = less potential for future regulations

Opportunities for Combined Bay/Local Water Quality Protection

Continue/promote existing local nutrient and sediment reduction strategies:

- Stream restoration projects
- Resource Management Planning (agricultural sector)
- Environmental site design (minimize impervious cover, maintain indigenous vegetation, minimize land disturbance)
- Tree plantings
- Maintain/restore forest buffers
- Reduced threshold for erosion & sediment control practices

Key Activities Moving Forward

- Review of impact of climate change and the Conowingo Dam on the TMDL
- More Best Management Practices now available
- Need to identify multiple sources of funding for water quality strategy development and BMP implementation
- Receipt of Planning Targets and the WIP III development schedule
- Initiate planning process for establishment of local area planning goals

Phase 6 Model Update

- Land use categories and Model data have been updated, based on more recent data
- Finer resolution of land cover categories (now at 10 meter resolution)
- Model is the only tool used by EPA to forecast the effects of practices and strategies on the Chesapeake Bay
- Works best at a larger scale (e.g. river basin)
- Will be used for the Phase III WIP

Phase III WIP Timeline

- Local review of the Phase 6 model land use data ➡ October-Nov 2016
- EPA releases **final expectations** for Phase III WIPs ➡ June 2017
- Release of **final Phase 6 model** ➡ June 2017
- EPA releases draft Phase III WIP Planning Targets ➡ June 2017
- EPA releases final Phase III WIP Planning Targets ➡ December 2017
- **Draft Phase III WIPs** due to EPA ➡ August 2018
- EPA feedback and public comment on draft Phase III WIPs ➡ October 2018
- **Final Phase III WIPs** due to EPA ➡ December 2018

Local Engagement Timeline

- **On-going:** Regular meetings of Chesapeake Bay Stakeholder Advisory Group
- **January 2017 through second quarter of 2017:** Initial presentations to elected officials and staff, Soil & Water Conservation District Directors and staff
 - ➡ **Phase 6 Model and draft planning targets released June 2017**
- **Third and fourth quarters of 2017:** Two rounds of regional engagement work sessions including local and SWCD district staff as well as local stakeholders
 - ➡ **Final planning targets released December 2017**
- **First quarter 2018:** Final engagement round prior to submittal of the draft Phase III WIP in August 2018

Expectations and Opportunities for Local Engagement

- Feedback to EPA through Local Government Advisory Committee
- Continue to provide BMP information, not reported elsewhere, through BMP warehouse
- Review local programs and initiatives to identify gaps and optimize existing programs and projects
- Identify what pollutant reductions are already being achieved/planned for in various programs

Expectations and Opportunities for Local Engagement

- Develop workable strategies to fill gaps and that yield multiple benefits
- Explore and pursue peer-to-peer exchanges of ideas, tools, and best practices
- Participate in organized meetings & training opportunities
- Take advantage of funding opportunities



Implications of not participating in the Phase III WIP process ?

- There is no regulatory requirement to participate in the WIP III process
- However.....If Virginia does NOT reach pollutant reduction targets (from EPA), new programs and possibly regulations may be necessary
- Participation in the Phase III WIP process and contributing pollutant reduction strategies may avoid future regulations

MS4s and the Phase III WIP

- Continue compliance with all permit conditions and implement Chesapeake Bay TMDL Action Plans
- Continue to report all verified and installed BMPs
- Regulatory development schedule for reissuance of small MS4 General Permit will not likely allow for incorporation of the Phase 6 model or the Phase III WIP
- **Promote strategies to address pollutant reductions outside of MS4 service areas (unregulated area)**