



EPA Evaluation of Chesapeake Bay

2014-2015 Milestone Progress and 2016-2017 Milestone Commitments to Reduce Nitrogen, Phosphorus and Sediment

Overview

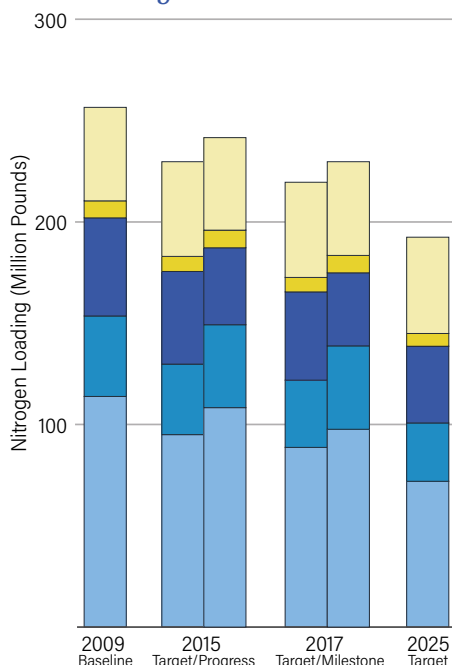
In 2008, the Chesapeake Executive Council charged the seven jurisdictions to develop a two-year milestone process for reducing their respective nitrogen, phosphorus and sediment contributions to the Chesapeake Bay and to track the pace of those reductions. Two-year milestones are short-term objectives under the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) accountability framework used to assess progress toward restoration goals while allowing the Bay jurisdictions to flexibly adapt their Watershed Implementation Plans (WIPs) to meet those goals. The Chesapeake Bay Program (CBP) partnership set restoration goals of having all practices necessary to meet applicable Chesapeake Bay water quality standards in place by 2025 and practices in place by 2017 that would achieve 60 percent of the necessary pollutant reductions compared to 2009.

Pollutant Reduction Progress and Future Targets by Source Sector

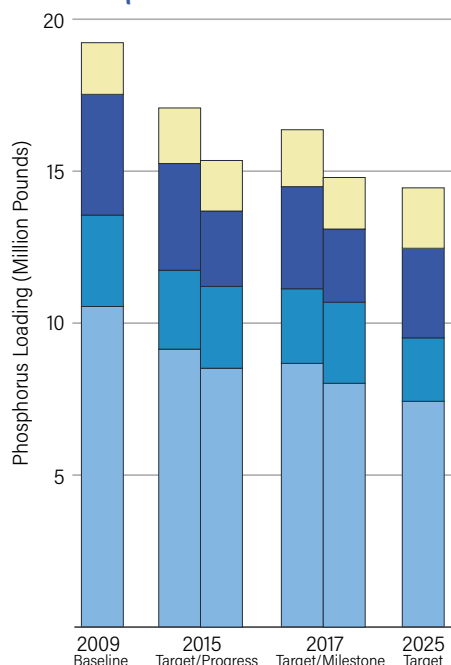
According to data provided by the Bay jurisdictions, the CBP partnership as a whole did not achieve the watershed-wide 2015 target for nitrogen but achieved the watershed-wide 2015 targets for phosphorus and sediment. The Bay jurisdictions collectively finished the 2014-2015 milestone period on target for Wastewater nitrogen but off target for Agriculture, Urban/Suburban Stormwater and Septic nitrogen. For phosphorus, the Bay jurisdictions as a whole achieved the watershed-wide 2015 targets for all sectors except Urban/Suburban Stormwater. For sediment, jurisdictions achieved the watershed-wide 2015 targets for Wastewater but did not achieve this goal for the Agriculture and Urban/Suburban Stormwater sectors.

The Bay jurisdictions' anticipated reductions during the 2016-2017 milestone period have the jurisdictions collectively on track to meet the watershed-wide 2017 targets for phosphorus and sediment, but not nitrogen. While the goal is to achieve 60% of the load reduction by 2017, nitrogen is currently projected to be at only 46% of the reduction in 2017. The jurisdictions will need to substantially increase nitrogen reductions in order to get back on target. In addition, while the jurisdictions appear on track to meet load reductions for phosphorus and sediment under the current suite of simulation tools, an updated Phase 6 Watershed Model could result in changes to the projected reductions.

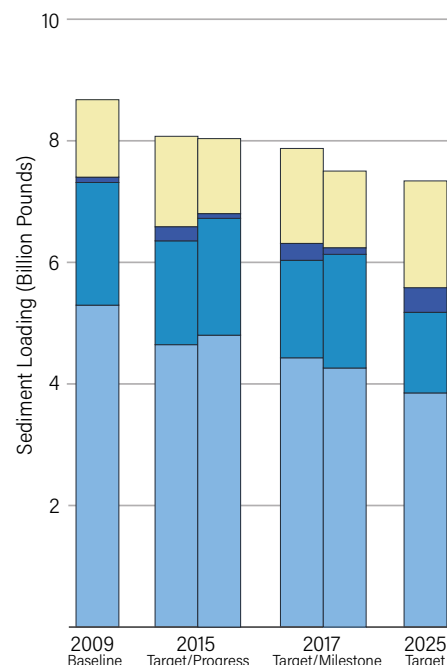
Nitrogen Loads and Goals



Phosphorus Loads and Goals



Sediment Loads and Goals



■ Agriculture
 ■ Urban Runoff
 ■ Wastewater
 ■ Septic
 ■ Forest*

*Forest includes other sources

For additional information on pollution reduction progress, commitments, and BMP see <http://www.chesapeakeprogress.com/clean-water/water-quality/watershed-implementation-plans>



Images by Chesapeake Bay Program

Federal Agencies Water Quality Progress and WIP Support

EPA will continue to assess options for developing methods to track progress in reducing nitrogen, phosphorus and sediment loads from federal lands and facilities that have been assigned pollution reduction targets. Progress assessment will continue to provide accountability and inform future federal activities that are intended to support the Bay jurisdictions' WIPs and the Bay TMDL.

2016 Oversight Status

■ Ongoing
 ■ Enhanced
 ■ Backstop

	Agriculture	Urban/Suburban	Wastewater	Trading/Offsets
Delaware	Enhanced Oversight	Ongoing Oversight	Enhanced Oversight	Ongoing Oversight
District of Columbia	Not Applicable	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
Maryland	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight
New York	Ongoing Oversight	Ongoing Oversight	Enhanced Oversight	Ongoing Oversight
Pennsylvania	Backstop Actions Level	Backstop Actions Level	Ongoing Oversight	Enhanced Oversight
Virginia	Ongoing Oversight	Enhanced Oversight	Ongoing Oversight	Ongoing Oversight
West Virginia	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight	Ongoing Oversight

2014–2015 Milestone Progress and 2016–2017 Milestone Review

The EPA review of progress toward meeting 2014-2015 milestones shows while some Bay jurisdictions are making enough progress in the various sectors to ensure implementation is occurring, there are areas which merit further attention to ensure the jurisdictions stay on track to meet the 2017 target of having practices in place to achieve 60 percent of reductions necessary to meet applicable water quality standards in the Chesapeake Bay. Some highlights include:

Strengths

- Delaware conducted cropland transect surveys to track and report cover crop and conservation tillage data and will be conducting these surveys annually in the future
- The District of Columbia completed enhanced nutrient removal (ENR) upgrades at Blue Plains WWTP
- Maryland implemented Phosphorus Management Tool regulations, effective June 8, 2015
- Maryland completed development of tracking system for Agriculture and is moving forward with developing similar tracking system for the Urban/Suburban Stormwater sector
- New York implemented two rounds of the Agricultural Nonpoint Source Abatement and Control Program for a total of \$6.1 million to support technical assistance and BMP implementation by Soil and Water Conservation Districts
- Pennsylvania funded the development of 433 nutrient management/manure management plans and 203 agriculture erosion and sediment (E&S) control plans as of June 2015
- Pennsylvania continued to make progress with issuing Wastewater permits that are consistent with the assumptions and requirements of applicable Bay TMDL wasteload allocations
- Virginia continued providing advanced funding for livestock exclusion through FY15, budgeted additional funding for stream exclusion in Chesapeake Bay watershed from federal Bay Grants (\$3.5M) and state funds (\$3M), and will add \$17.5M for FY16-17
- Virginia committed to project poultry house construction and plans to offset any increase in nutrients
- West Virginia met the vast majority of Agricultural and Wastewater programmatic and numeric milestones and added programmatic milestones related to enhancing BMP tracking, verification and reporting program in the Agriculture and Urban/Suburban Stormwater sectors
- EPA and the Bay jurisdictions set nutrient and sediment pollution reduction targets for more than 700 federal facilities throughout the watershed; federal agencies submitted facility-specific milestones for FY16-17



Images by Chesapeake Bay Program

Shortfalls

- Delaware did not issue Phase II MS4 General Permit
- Maryland did not provide schedule or next steps for finalizing the state's Accounting for Growth regulations
- New York is not on track to meet 2017 targets for nitrogen and sediment
- Pennsylvania did not increase implementation of priority practices to improve water quality such as grass buffers, animal waste management and nutrient management; also, did not increase implementation in urban areas to meet its load reduction commitments
- Virginia Urban/Suburban loads remain off track for nitrogen, phosphorus and sediment
- West Virginia did not meet the state's Urban/Suburban Stormwater sector nitrogen target for 2014-2015 and is not on track to meet the Urban/Suburban Stormwater target for nitrogen in 2016-2017
- EPA issued only two of four technical memoranda on nutrient trading scheduled for completion in 2015

Issues to Address

- Delaware: issue permit coverage for the 167 non-land-applying poultry operations that submitted a Notice of Intent for coverage and issue a permit for land applying operations
- Delaware: provide adequate documentation to support its nutrient management compliance levels submitted for the 2015 progress reporting year by October 2016
- The District of Columbia: develop schedule and anticipated timeframes for implementation of revised MS4 permit and accelerate implementation of retrofits consistent with MS4 permit
- Maryland: issue tentative determinations for Phase II MS4 permits (i.e., draft permits) by September 30, 2016, and issue final determinations (i.e., final permits) by March 31, 2017
- Maryland: review, approve, and/or take appropriate enforcement actions according to established Standard Operating Procedures (SOPs) on Phase I MS4 Restoration Plans submitted during or prior to the 2016-2017 period
- New York: provide milestone describing new plans for funding and implementing updated suite of BMPs, or explanation of how implementation of current suite of BMPs will be accelerated by additional funding and/or new programs in order to get back on track with Phase II WIP targets
- Pennsylvania: revise milestones to include increased levels of priority BMP implementation
- Pennsylvania: develop a plan for how to redistribute Urban/Suburban Stormwater loads and provide reasonable assurance for those reductions; consider all sectors when doing so
- Virginia: show more aggressive implementation of practices to manage urban and suburban stormwater
- West Virginia: implement more aggressive programmatic milestones to close the nitrogen gap in the Urban/Suburban Stormwater sector
- Bay jurisdictions should work with the CBP partnership and federal agencies to ensure data reported by federal agencies is entered into the National Environmental Information Exchange Network so CBP simulation tools can more accurately reflect implementation at federal facilities
- Federal agencies need to improve the completeness of reported data; EPA notes instances of lapsing agency reporting activities

Potential Federal Actions and Assistance

EPA will maintain "Ongoing Oversight" for most sectors in most Bay jurisdictions; some sectors merit additional federal oversight:

- EPA is downgrading the Delaware Agriculture sector to "Enhanced Oversight" and will be carefully monitoring progress toward the following: providing permit coverage for non-land-applying CAFO operations; issuance of a CAFO permit for land applying agriculture operations; and compliance documentation to justify nutrient management credit
- EPA will maintain the Delaware Wastewater sector in "Enhanced Oversight"
- EPA will maintain ongoing oversight for the Urban/Suburban Stormwater sector, however EPA may downgrade this sector to "Enhanced Oversight" in subsequent evaluations if Maryland does not make substantial improvements
- EPA will potentially downgrade New York's Agriculture sector to "Enhanced Oversight" by the end of 2016 unless the state provides a detailed strategy describing how it will offset increased loads identified in the 2012 Agriculture Census and meet the state's Phase II 2017 WIP planning targets; New York has agreed to provide this detailed strategy to EPA by August 5, 2016 – EPA will evaluate this strategy and would maintain "Ongoing Oversight" if a clear, credible strategy is provided
- EPA will maintain the Pennsylvania Agriculture and Urban/Suburban Stormwater sectors in "Backstop Actions Level" and will maintain the Offsets and Trading sector in "Enhanced Oversight"
- EPA will maintain "Enhanced Oversight" for the Virginia Urban/Suburban Stormwater sector
- EPA will upgrade the West Virginia Agriculture sector to "Ongoing Oversight"
- EPA will maintain "Ongoing Oversight" for West Virginia Urban/Suburban Stormwater but will continue to monitor West Virginia's progress in closing the nitrogen gap in the 2016-2017 milestone period
- Federal agencies have a responsibility to ensure BMPs are planned, installed, maintained, tracked and reported, which the new BayFAST tool will help facilitate, in support of jurisdictions meeting WIP commitments and the Bay TMDL allocations and Federal lands and facilities meeting their targets
- Substantial improvements in any jurisdiction's sectors during the milestone period may lead EPA to upgrade those sectors oversight category in subsequent evaluations