EPA EVALUATION OF NEW YORK's 2014-2015 and 2016-2017 MILESTONES

The U.S. Environmental Protection Agency (EPA) is providing this evaluation of New York's progress towards meeting its 2014-2015 milestones and its sector-specific commitments for the 2016-2017 milestone period.

Load Reduction Review

When evaluating 2014-2015 milestone implementation and the 2016-2017 commitments, EPA is comparing progress and commitments to expected pollutant reduction targets to assess whether statewide and sector load reductions are on track to have practices in place by 2017 that will achieve 60 percent of necessary reductions compared to 2009.

According to the data provided by New York for the 2015 progress run¹ for all sources combined, New York did not achieve its state-wide 2015 nitrogen or sediment targets but did achieve its state-wide target for phosphorus.

Based on New York's anticipated reductions during the 2016-2017 milestone period, New York is not on track to meet its 2017 state-wide Bay TMDL targets for nitrogen, phosphorus or sediment. In addition, data that is being gathered for the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) midpoint assessment could show that changes in levels of effort may be necessary in order to achieve the 2025 targets for all three pollutants.

New York increased its implementation of agricultural best management practices (BMPs) by about 60 percent during the 2015 reporting period. However, even by subtracting the increased commodity crop loads identified in 2014 as part of the U.S. Department of Agriculture's 2012 Census of Agriculture (0.4 million pounds per year (MPY) of nitrogen and 0.01 MPY of phosphorus) from its 2015 loads, New York still did not achieve its original 2015 targets. In summary, New York has not met its nitrogen targets and has not made progress towards offsetting additional agricultural loads identified by the 2012 Census of Agriculture.

EPA recommends that New York, along with all Susquehanna River states, begins to develop a strategy to further reduce nutrient and sediment loads to the Chesapeake Bay given that a greater portion of pollutants than previously anticipated is passing through the Conowingo Dam and into the Chesapeake Bay as a result of the reservoirs filling up and losing their trapping capacity.

Agriculture – Maintain Ongoing Oversight*

2014-2015 Milestone Achievements

- Released draft Concentrated Animal Feeding Operation (CAFO) General Permits under both federal Clean Water Act and state authorities.
- Installed six coupled biochemical/biophysical denitrifying bioreactor and active drainage management systems and is monitoring them for water quality data. In addition, New York sponsored stakeholder outreach and training on the design of bioreactors.

¹ Loads simulated using 5.3.2 version of the Chesapeake Bay Watershed Model and wastewater discharge data reported by the Bay jurisdictions.

- 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 (SWCDs).
- Developed an agricultural BMP verification program Quality Assurance/Quality Control Plan that EPA approved on May 6, 2016 as specified in the EPA Chesapeake Bay Program Office 2016 Grant and Cooperative Agreement Guidance.
- Implemented 45 percent of all of the Animal Waste Management Systems anticipated by the Phase II Watershed Implementation Plan (WIP) through 2025.

2014-2015 Milestones Missed

- Did not meet planned BMP implementation trajectories for grass buffers, conservation plans or conservation tillage.
- Did not meet but completed approximately half of its 2015 goal of integrating 8,000 feet of stream rehabilitation with 100 acres of buffers and 450 acres of pasture land. This is an ongoing project that is continued in the 2016-2017 milestones.

2016-2017 Milestones Strengths

- Committed to issue a new Clean Water Act CAFO general permit and a new Environmental Conservation Law CAFO general permit by the end of 2016.
- Committed to implement two rounds of Agricultural Nonpoint Source funding for BMP implementation and Dairy Acceleration Program funding to cost-share Comprehensive Nutrient Management Plan Development at dairies with fewer than 300 cows.
- Committed to continue its pilot data collection program in which SWCD staff participate in New York State Department of Environmental Conservation (NYSDEC) compliance inspections to report both cost-shared and non-cost shared BMPs and to improve data quality.

Key Areas to Address in 2016-2017 Milestone Period

- EPA expects New York to provide specific milestones with targeted implementation levels of key agricultural practices.
- EPA expects New York to provide a milestone describing its new plans for funding and implementing an updated suite of BMPs, or an explanation of how implementation of the current suite of BMPs will be accelerated by additional funding and/or new programs in order to get back on track with its Phase II targets.

<u> Urban/Suburban Stormwater – Maintain Ongoing Oversight</u>

2014-2015 Milestone Achievements

- Included data for stormwater BMPs beyond erosion and sediment control for the first time in its 2015 reporting of implementation progress.
- Developed a template for record-keeping to demonstrate compliance with the Municipal Separate Storm Sewer System (MS4) permit.

2014-2015 Milestones Missed

• None identified.

2016-2017 Milestones Strengths

- Committed to track and report stormwater BMPs beyond erosion and sediment control in its annual implementation progress submissions to EPA by 2017.
- Committed to report on historical BMP implementation to support calibration of the Chesapeake Bay Program's Phase 6 Watershed Model.
- Committed to evaluate non-farm fertilizer sales by the end of 2016.

Key Areas to Address in 2016-2017 Milestone Period

- EPA expects New York to provide a milestone to ensure that the 2017 MS4 general permit includes provisions that address reductions in the urban/suburban stormwater sector in New York's portion of the Chesapeake Bay watershed consistent with the assumptions and requirements of applicable Bay TMDL wasteload allocations. EPA acknowledges the need for continued discussions with NYDEC on this issue during the general permit review and coordination process.
- EPA expects New York to include a milestone to implement its stormwater verification program and to train NYSDEC and the Upper Susquehanna Coalition staff on verification protocols, as appropriate.

<u>Wastewater Treatment Plants and Onsite Systems – Maintain Enhanced Oversight</u> 2014-2015 Milestone Achievements

- Decreased wastewater load for phosphorus by 20 percent primarily due to implementation of phosphorus permit limits at all significant facilities.
- Decreased nitrogen loads by 10,000 pounds in 2014-2015 due to the implementation of the first phase of nitrogen limits in significant permits in 2015.
- Completed all 2015 programmatic milestones in this sector.

2014-2015 Milestones Missed

• None identified.

2016-2017 Milestones Strengths

• Committed to continue oversight of the Binghamton/Johnson City reconstruction project.

Key Areas to Address in 2016-2017 Milestone Period

- EPA expects New York to provide EPA with a list of wastewater treatment plants (WWTPs) that have been upgraded and those scheduled for upgrades for both nitrogen and phosphorus.
- EPA expects New York to incorporate monitoring data where possible in its tracking and reporting of non-significant wastewater treatment plants starting in the 2016 progress run.
- EPA recommends that New York evaluate and prioritize the potential for low-cost nitrogen optimization technologies at its significant dischargers. If New York is not able to develop a detailed strategy to significantly increase the rate of agricultural nitrogen reductions, this recommendation becomes critical.

Offsets and Trading – Maintain Ongoing Oversight

2014-2015 Milestone Achievements

• Implemented the first round of New York's bubble permit limits for nitrogen in wastewater in 2015.

2014-2015 Milestones Missed

• None identified.

2016-2017 Milestones Strengths

• None identified.

Key Areas to Address in 2016-2017 Milestone Period

- EPA expects New York to continue to work with EPA by commenting on EPA-prepared draft sector growth information and providing any requested additional information regarding sector growth.
- EPA expects New York to continue to identify new sector loads and offset these within the appropriate timeframe.

Potential Federal Actions and Assistance

- *EPA will potentially downgrade New York's agriculture sector to enhanced oversight by the end of 2016 unless New York provides EPA with a detailed strategy describing how it will offset the increased loads identified in the 2012 Census of Agriculture and meet its Phase II WIP planning targets in 2017. New York has agreed to provide this detailed strategy to EPA by August 5, 2016. EPA will evaluate this strategy and will maintain New York's oversight in ongoing oversight if a clear, credible strategy is provided.
- EPA fully supports New York in the development of this strategy and is available to meet and discuss the strategy with NYSDEC, Upper Susquehanna Coalition, and the Department of Agriculture and Markets.