EPA INTERIM EVALUATION OF NEW YORK's 2016-2017 MILESTONES

As part of its role in the accountability framework described in the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) for nitrogen, phosphorus, and sediment, the U.S. Environmental Protection Agency (EPA) is providing this interim evaluation of New York's progress toward meeting its statewide and sector-specific two-year milestones for the 2016-2017 milestone period. In 2018, EPA will evaluate whether each Bay jurisdiction achieved the Chesapeake Bay Program (CBP) partnership goal of practices in place by 2017 that would achieve 60 percent of the nitrogen, phosphorus, and sediment reductions necessary to achieve applicable water quality standards in the Chesapeake Bay compared to 2009.

Load Reduction Review

When evaluating 2016-2017 milestone implementation, EPA is comparing progress 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. Loads in this evaluation are simulated using version 5.3.2 of the CBP partnership Watershed Model and wastewater discharge data reported by the Bay jurisdictions. EPA is also considering the nutrient targets for 2017 that New York committed to in its Phase II Watershed Implementation Plan (WIP), which are approximately 3% higher than the Phase II WIP planning targets, largely due to increasing Wastewater sector loads between the Phase I and Phase II WIPs. EPA expects that New York will close the gap in its Phase III WIP and future milestones. Unless otherwise noted, New York is either on or off track for both sets of targets.

According to the data provided by New York for the 2016 progress run, New York is on track to achieve its statewide 2017 phosphorus target but is not on track to achieve its statewide 2017 nitrogen and sediment targets.

The data also show that at the sector scale, New York is on track to meet all of its 2017 phosphorus targets, but is off track in all sectors (Agriculture, Urban/Suburban Stormwater, Septic and Wastewater) to meet its 2017 nitrogen targets. For sediment, only the Urban/Suburban Stormwater sector is on track. However, data is being gathered for the 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. The Phase III WIP, combined with supporting two-year milestones, will address reductions needed from 2018 to 2025.

Through the CBP partnership's Chesapeake Bay Watershed Water Quality Monitoring Network, supported by the U.S. Geological Survey (USGS), the Susquehanna River Basin Commission, and the Bay jurisdictions, the monitoring trends indicate that nitrogen and phosphorus loads in New York have generally been improving (decreasing) over the past 30 years. However, the improvement (decrease) in the magnitude of trends moving from long-term to short-term is also important to note. For example, at Towanda, the rate of load reductions for nitrogen and phosphorus in the past 10 years are considerably less than the long-term change rates. Additional study will continue by USGS and others to better understand the causes behind the short-term and long-term monitoring trends observed at all monitoring stations. The continued investment in monitoring allows the CBP partnership to demonstrate observed

improvements to local water quality and to assist in identifying where additional implementation is necessary to achieve applicable water quality standards locally and in the Chesapeake Bay.

Agriculture – Maintain Ongoing Oversight

2016-2017 Milestone Achievements

- Issued a new Concentrated Animal Feeding Operation (CAFO) general permit (GP-0-16-002) and a new Environmental Conservation Law CAFO general permit (GP-0-16-001) in January 2017. EPA commends New York for working closely with EPA Region 2 in 2016 and 2017 to address concerns and comments on the draft permits. EPA reviewed the final Clean Water Act permit as a proposed permit and provided comments for New York to address. Following discussions with EPA Region 2, New York State Department of Environmental Conservation (NYSDEC) issued a Frequently Asked Questions (FAQs) document that addresses EPA Region 2's concerns about consistency with federal CAFO requirements.
- Issued a Request for Applications for a new grant program to support the permanent protection and restoration of riparian buffers. New York will make up to $1,000,000 of Chesapeake Bay Implementation Grant (CBIG) funding available for the first round of this program.
- Along with the Upper Susquehanna Coalition, made improvements to their agricultural practice database and reporting tools.
- Submitted an Agriculture Implementation Plan in August 2016 in response to EPA's request for an agricultural strategy. This Plan relied on improving water quality trends and focused on implementing Best Management Practice (BMP) verification procedures to increase reporting, planned funding increases for riparian buffers, and continuing to aggressively pursue funding opportunities.
- In 2016, New York came close to meeting its 2025 WIP target for livestock waste management systems.

Key Areas to Address to meet 2016-2017 Milestones

- EPA recommends that New York reconsider planned implementation rates of grass buffers, nutrient management, and manure injection based on progress to date.
- New York's nitrogen load from agriculture increased from 2015 to 2016 due, in part, to data cleanup. EPA supports New York's choice to use the best data available, however it appears to be highly unlikely that New York's Agriculture sector will attain 2017 Phase II WIP targets for nitrogen.

Urban/Suburban Stormwater – Maintain Ongoing Oversight

2016-2017 Milestone Achievements

- Issued a draft Municipal Separate Storm Sewer Systems (MS4) General Permit (GP-0-17-002) in October 2016.
- Updates its MS4 data template which will eventually be consistent with the new permit.
- Updated reporting of historical Urban/Suburban Stormwater practices and reported on most stormwater practices credited or put into place in 2016.

Key Areas to Address to meet 2016-2017 Milestones

- EPA expects New York to revise its draft MS4 permit to fully address EPA's comments (dated February 2) on the permit.
- EPA expects New York to outline a timeline and next steps for reporting on non-agricultural fertilizer sales data in order to determine whether credit should continue to be provided for urban nutrient fertilizer reductions.

Wastewater Treatment Plants and Onsite Systems – Maintain Enhanced Oversight

2016-2017 Milestone Achievements

- Implemented Phase I and II of its nitrogen bubble permit and met its permit limits both years.
- Started a monitoring program at select non-significant wastewater dischargers.
- Reported wastewater loads for nitrogen decreased by 100,000 pounds from 2015-2016.

Key Areas to Address to meet 2016-2017 Milestones

- EPA expects New York to report monitoring data from available non-significant wastewater treatment plants in 2017.
- EPA expects all jurisdictions to provide available bio-solids, spray irrigation, large monitored onsite system, and rapid infiltration basin data where these nutrients are applied to the land. The data is to include, where available, the location (county, latitude and longitude) of application, mass of bio-solids or volume of irrigation/large onsite system/rapid infiltration basin, concentrations of nutrients, and the year of applications. The data specifications are described in the Chesapeake Bay Program Grants Guidance.
- EPA recommends that New York evaluate and prioritize the potential for low-cost nitrogen optimization technologies at its significant dischargers. This recommendation becomes critical if New York is not able to significantly increase the rate of Agricultural sector nitrogen reductions.

Offsets and Trading – Maintain Ongoing Oversight

2016-2017 Milestone Achievements

- Developed an internal compliance tracking tool funded by the Chesapeake Bay Regulatory and Accountability Program (CBRAP) grant that identifies exceedances and trades under the nitrogen bubble permit.
- Data tracking tools are being used and expanded across several sectors.

Key Areas to Address to meet 2016-2017 Milestones

- EPA expects all jurisdictions to continue to identify new or increased sector loads and offset these within the appropriate timeframe and to continue to track and account for new or increased loads. Based on its 2013 assessment of growth, New York planned to address any increased loads from the Urban/Suburban Stormwater sector with reductions in the Agricultural sector. However, New York's Agriculture sector is not on track to meet sector-specific nitrogen targets. Therefore, the assumption that loads from Urban/Suburban Stormwater runoff will be offset by reductions in Agriculture is no longer appropriate.

Potential Federal Actions and Assistance

- None at this time.

Suggested Considerations for Development of the Phase III WIP and 2018-2019 Milestones

Any recommendations in this section for the Phase III WIP and 2018-2019 milestones are in addition to the Interim Phase III WIP Expectations.

- EPA expects that New York look beyond current programs to determine where additional reductions are feasible to achieve the Bay TMDL goals in the Phase III WIP. For example, EPA recommends that New York reconsider its wastewater strategy and/or consider developing statewide requirements for pasture fencing or other BMPs for farms with greater than a minimum number of livestock.
- EPA requests that New York strengthen its involvement in the Federal Facilities Workgroup (FFW) and contribute to continuing the progress that has been made in reporting BMP data received from the federal agencies. The FFW will also rely on New York's input to ensure that federal facility targets, the use of the Phase 6 watershed model, and federal facility-content in the Phase III WIPs are fully supportive of New York's WIP implementation. Continued coordination with federal agencies is necessary to allow full credit to be available to the jurisdiction and federal agencies for BMP implementation on federal lands.