

EPA INTERIM ASSESSMENT OF VIRGINIA 2012-2013 MILESTONES AND WIP PROGRESS

The U. S. Environmental Protection Agency (EPA) is providing this interim assessment of Virginia’s progress towards meeting its 2012-2013 sector-specific milestones to assist Virginia in meeting its short-term goals and maintaining progress on its Watershed Implementation Plan (WIP).

Load Reduction Progress and BMP Implementation Progress

According to the data provided by Virginia for the 2012 progress run, the Commonwealth is on track to meet the 2013 milestones largely due to the wastewater sector surpassing its milestone goals, which was expected according to Virginia’s Phase I WIP (Section 4.5, page 41). Virginia achieved its 2013 nitrogen and sediment targets and needs to reduce phosphorus by an additional 2% to reach its 2013 milestone target. For future progress runs starting in 2013, EPA encourages Virginia to clarify the source of best management practices (BMP) data and distinguish between actual increases in implementation and improved reporting of existing implementation when submitting data annually to the Chesapeake Bay Program Office. The following chart contains a sample of BMPs that Virginia implemented in 2012 to achieve progress towards its 2013 milestone targets, as well as 2012 delivered loads and 2013 target loads for wastewater.

Implementation of Select BMPs ¹ and Wastewater Loads				
		Unit	2012 Progress ²	2013 Milestone Target ²
Agriculture	Nutrient Application Management (All Forms)	Acres	466,879	362,315
	Animal Waste Management Systems	Animal Units	266,343	268,250
	Pasture Management Composite	Acres	518,799	326,241
	Grass/Forest Buffers (All Forms)	Acres	43,965	57,009
Urban	Urban Nutrient Management	Acres	39,156	60,149
	Erosion and Sediment Control	Acres	26,722	19,966
Wastewater	Nitrogen Loads	Pounds delivered to the Chesapeake Bay	15,269,855	16,672,834
	Phosphorus Loads	Pounds delivered to the Chesapeake Bay	1,082,548	1,506,191
	Wastewater Facilities Meeting Water Quality Standards in Chesapeake Bay as of December 31, 2012 ³	Facilities Meeting/ Total Facilities (Percent of Facilities)	71/119 (60%)	71/119 (60%)

Notes:

¹ Table only includes a subset of BMPs that were implemented as of June 30, 2012 and reported by jurisdictions in their 2012 progress runs and projected by jurisdictions in their 2013 milestone targets. At the end of the 2012-2013 milestone period, EPA will assess implementation based on achievement of the milestone target nitrogen, phosphorus and sediment loads. Therefore, jurisdictions may change the BMPs that they implement during the milestone period to achieve their milestone target loads.

² 2012 progress and 2013 targets represent the total acres, feet, or animal units that will have BMPs in place as of 2012 or 2013. Values do not represent a net increase in BMP levels compared to the start of the milestone period in 2011. 2012 actual loads and 2013 target loads are provided for wastewater.

³ Based on permits for significant facilities with effluent limits in effect that meet DO and SAV/clarity standards. Does not include assessment of chlorophyll-a standards. Facilities in the James River do not yet have permit limits in effect

or established individual allocations to meet DO standards and are following a staged implementation approach, as prescribed in Appendix X of the Chesapeake Bay TMDL. The 11 facilities in the York River have final TP effluent limits that will take effect on January 1, 2016 pursuant to the Virginia watershed general permit.

Agriculture - Ongoing Oversight

Achievements

- Virginia is generally on track with reported BMP implementation, and, in fact, is exceeding its 2013 milestone for many BMPs, such as nutrient management and mortality composting.
- Virginia launched a new Small Animal Feeding Operation (AFO) Strategy to tackle water quality concerns from small AFOs through state assessments of approximately 800 farms.
- Virginia launched a new Virginia Enhanced Conservation Initiative to provide farmers financial and technical assistance to implement stream exclusion and pastureland conservation practices.
- Virginia finalized Resource Management Plan (RMP) Program legislation in 2012 and regulations in 2013 to motivate the agricultural community to implement high priority water quality BMPs outlined in Virginia's WIP by providing certainty.

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- Consistent with the adaptive management nature of the TMDL, EPA expects Virginia to continue to engage local partners on agriculture efforts through the milestone and implementation process, given that the Phase II WIP did not identify specific local strategies.
- In accordance with Virginia's 2013 milestone commitments, Virginia committed to issue individual Virginia Pollutant Discharge Elimination System (VPDES) Concentrated Animal Feeding Operations (CAFO) permits to Virginia Pollution Abatement (VPA)-permitted facilities that have previously submitted VPDES CAFO permit applications based on the discharge of pollutants. Currently, approximately 89 facilities have applied for VPDES CAFO permits. EPA expects that Virginia make progress in CAFO permitting and ensuring that 75% of the unpermitted dairies have nutrient management plans (NMPs).
- EPA encourages Virginia to identify implementation year and data source for BMPs in the 2013 progress run so newly implemented BMPs can be distinguished from historically implemented practices. It is not known whether increased levels of agriculture practices, including mortality composting and pasture management practices, reported in 2012 reflected new implementation or a mixture of new and historic data.

Urban/Suburban Stormwater – Enhanced Oversight

Achievements

- Virginia finalized a letter of agreement with EPA to address EPA's stormwater assessment.
- Virginia adhered to the schedule in the letter of agreement, including submitting draft Municipal Separate Storm Sewer Systems (MS4) permits and a draft Compliance Monitoring Strategy for EPA review.
- Virginia is on schedule to reissue regulations for small MS4 general permit before the current permit expires in July 2013.
- The small MS4 general permit and draft Phase I permits submitted to EPA contain provisions consistent with the Phase I WIP for required pollutant reductions.

- The process for renewing the construction general permit is on schedule and includes provisions from the national construction general permit as well as the federal effluent limitation guidelines.
- Virginia has allocated almost \$1 million of the FY2012 Chesapeake Bay Regulatory and Accountability Program (CBRAP) grant to help local governments develop and implement stormwater programs. This has been accompanied by a significant outreach effort to local governments to assist in local stormwater program development.
- Virginia is preparing localities to adopt local stormwater programs consistent with the revised Virginia Stormwater Management Regulations. In April 2013, 143 of 143 required localities submitted substantive progress packages for state review.
- Virginia's next biennial budget, approved by the 2013 General Assembly, included bond authorization to capitalize the Water Quality Improvement Fund with \$35 million for urban BMP implementation. The approved budget also included \$1 million for local stormwater program development as well as \$300,000 for locality stormwater training.

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- Consistent with the adaptive management nature of the TMDL, EPA expects Virginia to continue to engage local partners on stormwater efforts through the milestone and implementation process, given that the Phase II WIP did not identify specific local strategies.
- As stormwater programs transition to the Virginia Department of Environmental Quality (VADEQ) in July 2013, EPA expects Virginia to continue progress in implementing 2013 milestones and adhering to schedule in the September 2012 letter of agreement addressing EPA's assessment of Virginia's stormwater program.
- Total urban loads have increased from 2011 to 2012, according to the models, despite major increases in some BMPs such as urban stream restoration since 2011 that may in part be the result of more thorough reporting. For the 2013 progress run and the 2014-15 milestones, Virginia should consider how it will continue to hold the line against growth and reduce urban loads through increased implementation.

Wastewater Treatment Plants and Onsite Systems – Ongoing Oversight

Achievements

- For the second year (2012), all facilities covered by the Chesapeake Bay Watershed General Permit were required to meet their respective wasteload allocations. As allowed under the General Permit, the aggregate nitrogen and phosphorus loads from actual discharges within each sub-basin were well below the aggregated permit requirements.
- The Regulation for Alternative Onsite Sewage Systems (AOSS) 12 VAC 5-613 became effective 2011. Virginia has been implementing this new regulation in 2012.
- New septic growth impacts will be mitigated by the new nitrogen-reducing requirements of the AOSS Regulations that are expected to become effective in December 2013.
- An implementation manual is being finalized to improve consistency with the application of the new regulations.
- One hundred fifty-four (154) denitrification systems have been installed, even before the implementation date of the regulatory requirement.

- The Virginia Environmental Information Systems database has been revised to enable tracking of onsite facilities that are connected to public sewer when the information is received by Virginia Department of Health (VDH).
- Virginia's next biennial budget, approved by the 2013 General Assembly, included bond authorization to capitalize the Water Quality Improvement Fund for point source nutrient control programs: \$101 million to fund grants for wastewater plant upgrades; and, up to \$75 million for CSO control projects in the cities of Richmond and Lynchburg.

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- There is currently no requirement for information to be relayed to VDH to inform them of onsite facilities being connected to public sewers. VDH should consider developing a requirement to solicit this information from wastewater authorities.

Offsets and Trading – Ongoing Oversight

Achievements

- Legislation was passed in 2012 that established a stakeholder process, which is underway, for the development of regulations that govern the certification of nutrient credits. The regulations are expected to be final in 2015.
- The revised MS4 permits contain provisions to allow trading to meet WIP I commitments for Chesapeake Bay TMDL reductions.
- Virginia has committed to reevaluate sector growth periodically and submitted an initial sector growth demonstration in response to EPA trading and offset assessment findings in February 2013.

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- A response to the common recommendations that EPA made in its 2012 trading and offset program assessment is due to EPA by the end of 2013. EPA is issuing a Technical Memoranda to assist with this response as well as guide development and implementation of trading and offset programs.
- Virginia's initial sector growth submittal needs further information to support how Virginia has determined that the projected increase in the urban and suburban stormwater sector loads will not require an offset program and how this is tracked.

Suggested Considerations for Development of the 2014 – 2015 Milestones

- Consider milestones to increase the pace of phosphorus and sediment reductions. EPA expects milestones for nitrogen, phosphorus and sediment targets should be on track for achieving the goal of having practices in place by 2017 that would achieve 60% of the necessary load reductions compared to 2009.
- Given Virginia's WIP assumes that the RMP program will help the state to meet its implementation goals, EPA suggests Virginia include a 2014-2015 milestone for implementation and tracking of the RMP Program.
- EPA suggests Virginia include a 2014-2015 milestone for continued implementation of the Small AFO Strategy.
- EPA suggests Virginia include 2014-2015 milestones that describe how Virginia will achieve the large jumps in implementation or changes in implementation strategies for specific priority practices such as nutrient management (from 33% in 2012 to 60% in 2025),

pastureland grass buffers (from 22% in 2012 to 52% in 2025), and animal waste management systems (from 26% in 2012 to 86% in 2025) or provide alternative implementation strategies that can be supported to meet the load reduction goals.

- EPA suggests Virginia include a 2014-2015 milestones that will continue to meet the schedule in the letter of agreement with EPA, including the continued issuance of NPDES permits and the review and acceptance of MS4 Program Plans and Chesapeake Bay and Other TMDL Action Plans.
- EPA suggests Virginia include a 2014-2015 milestone that will build the capacity to support priority practices with significant commitments for implementation increases by 2025, including infiltration and filtration practices, bioretention, impervious surface reduction, urban nutrient management, tree planting, and forest buffers.
- EPA suggests Virginia include a 2014-15 milestone to track the completion of the expansion of the Nutrient Credit and Stormwater Offset Program.

Summary Points and Next Steps

- EPA will host regular calls with the Commonwealth to track progress.
- The Chesapeake Bay Program partnership is developing verification protocols in order for nutrient and sediment controls to be more accurately credited by the Chesapeake Bay Program models. These protocols will address the source of BMP implementation data and under-reported and non-cost shared practices and will include guidelines for identifying and removing duplicate records and addressing expired, failed, or removed practices.