

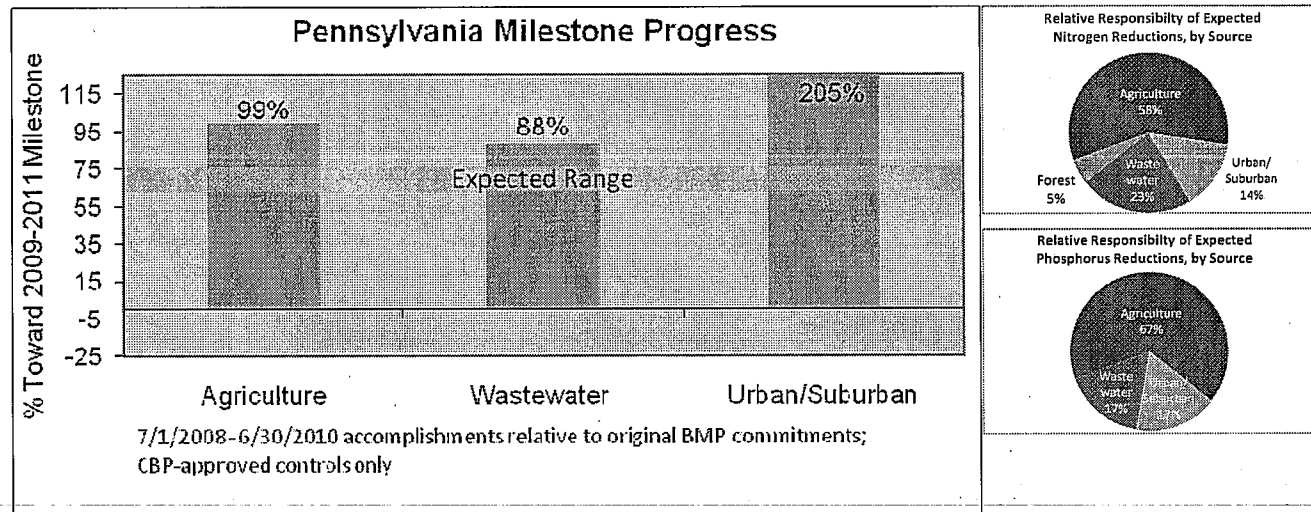
Pennsylvania

2011 Milestones to Reduce Nitrogen & Phosphorus Interim Progress Assessment July 2011

Introduction

During the 2009 Chesapeake Executive Council meeting, the governor of Pennsylvania (PA) set short-term goals to reduce pollution to the Bay and dramatically accelerate the pace of restoration. PA's 2011 milestone commitments are to reduce nitrogen by 7.3 million pounds and phosphorus by 300,000 pounds during the three-year reporting period, July 2008-June 2011. As of June 2010, PA is ahead of schedule to meet these commitments. PA's implementation rate for agricultural practices was 99%, for urban practices was 208%, and for wastewater was 88%. As evidenced by this progress, PA takes its milestone commitments seriously and recognizes that continued vigilance will be necessary to meet the Chesapeake Bay TMDL allocations.

Percent of Milestone that Has Been Implemented



Interim Progress Highlights

- **Dirt & Gravel Road Erosion & Sediment Control: 408%.** PA's milestone was based on early program BMP implementation rates. There have been large increases in BMP implementation over the last two years.
- **Forest Harvesting Practices: 3,806%.** PA's milestone was based on historical BMP reporting levels. The PA Department of Conservation and Natural Resources has significantly increased its reporting.
- **Manure Transport: 474%.** A survey of Manure Brokers was completed in 2010 that more accurately represents manure transport within and out of the Bay watershed.
- **Septic Improvements: 571%.** The increase resulted from the first time reporting of septic system hook-ups by PennVest and a significant increase in hook-ups reported by USDA's Rural Development Program.
- **Wastewater: 75%.** PA committed to having 40 Wastewater Treatment Plants (WWTPs) operating under reduced nutrient limit permits by June 2011. Through June 2010, 10 WWTPs have reduced nutrient limit permits. Since then, an additional 36 WWTPs have such permits, placing PA ahead of schedule.

Current and Anticipated Shortfalls

- **Conservation Tillage: 58%.** USDA/NASS reported that 78% of the tilled land in PA during 2009 used either "No-Till" or other conservation tillage. Efforts are underway to better track voluntary conservation tillage activities.
- **Nutrient Management: 54%.** Evidence in south-central Pennsylvania counties, and a recent USDA/CEAP study, suggests that implementation levels may range from 50-70%. Efforts are underway to better track voluntary activities.
- **Pasture Grazing BMPs: 38%.** This implementation rate is believed to be low due to the lack of complete data. When "voluntary" and "Grass Roots" project data are available, the rate will increase.
- **Stormwater Management: 1%.** Ongoing efforts to better track urban BMPs will result in a higher implementation rate than is currently reported.

Contingencies to Address Shortfalls

- Erosion and Sediment Control Regulation revisions adopted November 19, 2010: Codification of Post Construction Stormwater Requirements; Mandatory Riparian Forest Buffer for Exceptional Value waters; Conservation Plan revision to include animal heavy use areas
- Natural Floodplain, Stream and Riparian Wetland Restoration Best Management Practice: This BMP is being developed to address legacy sediment. Nutrient and sediment reduction efficiencies will be developed by October 2013 through monitoring the Big Spring Run restoration project in Lancaster County. BMP benefits include sediment and nutrient reduction, storm water management, flood conveyance/reduction, wetland restoration, native flora and fauna restoration and reduced maintenance costs.
- Phosphate Detergent Ban for household detergent: Became effective on July 1, 2010.

Interim Progress

Approved Controls Included in 2009-2011 Milestone Commitments

	2009-2011 Commitment	% Achieved (7/1/08- 6/30/10)
Agriculture:		
Animal Waste Mgmt. Systems, All Types (animal units/structures/systems)	275	100%
Carbon Sequestration/Alternative Crops (acres)	25,740	18%
Conservation Plans/SCWQP (acres)	327,599	48%
Conservation Tillage, All Types (acres/yr)	175,491	58%
Cover Crop Planting, All Types (acres/yr)	174,818	115%
Forest Buffers (acres)	19,059	187%
Forest Harvesting Practices (acres)	125	3,806%
Grass Buffers (acres)	1,161	265%
Land Retirement/Environmental Planting (acres)	58,876	242%
Manure Transport (net tons transported)	58,913	474%
Mortality Composters (units)	22	82%
Nutrient Management, All Types (acres/yr)	129,250	54%
Pasture Grazing Best Mgmt Practices, All Types (acres, animal units, feet)	34,727	38%
Poultry Phytase (P lbs reduced)	19,626	67%
Stream Restoration (linear feet)	215,088	92%
Tree Planting (acres)	15,065	21%
Wetland Restoration (acres)	1,548	52%
Urban/Suburban:		
Abandoned Mine Reclamation (acres)	2,219	73%
Dirt & Gravel Road Erosion & Sediment Control (feet)	124,913	408%
Erosion & Sediment Control (acres)	7000	117%
Septic Improvements, All Types (systems)	7,353	571%
Stormwater Management, All Types, Urban/Suburban (acres)	8,690	1%
Stream Restoration (linear feet)	4,400	0%
Wastewater:		
Wastewater Nitrogen (N lbs reduced)	1,679,000	83%
Wastewater Phosphorus (P lbs reduced)	49,500	245%

Controls Not Included in 2009-2011 Milestone Commitments (e.g. "Contingencies")

	Amount Completed
Horse Pasture Management (acres)	1
Tree Planting – Urban Land (acres)	652
Barnyard Runoff Controls (systems)	19

"Interim" Controls Included in 2009-2011 Milestone Commitments

	2009-2011 Commitment	% Achieved (7/1/08- 6/30/10)
Heavy Truck Anti-Idling Rule (hours reduced)	9,780,000	100%