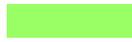


**Pennsylvania
Loads and Goals
(3/18/15)**

		2009	2014	2015	2015	2017	2025
		Progress	Progress	Milestone	Target	Target	Target
		TOTN	TOTN	TOTN	TOTN	TOTN	TOTN
Jurisdiction	Source	(M lbs/year)					
PA	Agriculture	62.66	65.10	55.03	50.47	46.41	35.58
PA	Urban Runoff	17.41	17.44	16.68	14.19	13.12	10.26
PA	Wastewater+CSO	12.14	9.81	9.80	10.69	10.21	8.92
PA	Septic	2.33	2.55	2.13	2.07	1.98	1.74
PA	Forest+	22.10	22.11	22.00	22.27	22.33	22.49
PA	AllSources	116.64	117.01	105.64	99.70	94.05	79.00
		2009	2014	2015	2015	2017	2025
		Progress	Progress	Milestone	Target	Target	Target
		TOTP	TOTP	TOTP	TOTP	TOTP	TOTP
Jurisdiction	Source	(M lbs/year)					
PA	Agriculture	2.716	2.564	2.535	2.311	2.176	1.816
PA	Urban Runoff	0.767	0.696	0.602	0.613	0.561	0.424
PA	Wastewater+CSO	1.071	0.758	0.750	0.992	0.966	0.897
PA	Forest+	0.431	0.421	0.430	0.433	0.433	0.435
PA	AllSources	4.984	4.438	4.317	4.348	4.136	3.571
		2009	2014	2015	2015	2017	2025
		Progress	Progress	Milestone	Target	Target	Target
		TSS	TSS	TSS	TSS	TSS	TSS
Jurisdiction	Source	(M lbs/year)					
PA	Agriculture	1,677	1,695	1,398	1,414	1,326	1,092
PA	Urban Runoff	560	519	436	433	391	278
PA	Wastewater+CSO	21	25	16	96	121	187
PA	Forest+	386	379	378	387	388	389
PA	AllSources	2,644	2,618	2,229	2,330	2,225	1,945



Loads meet 2014 trajectory target.



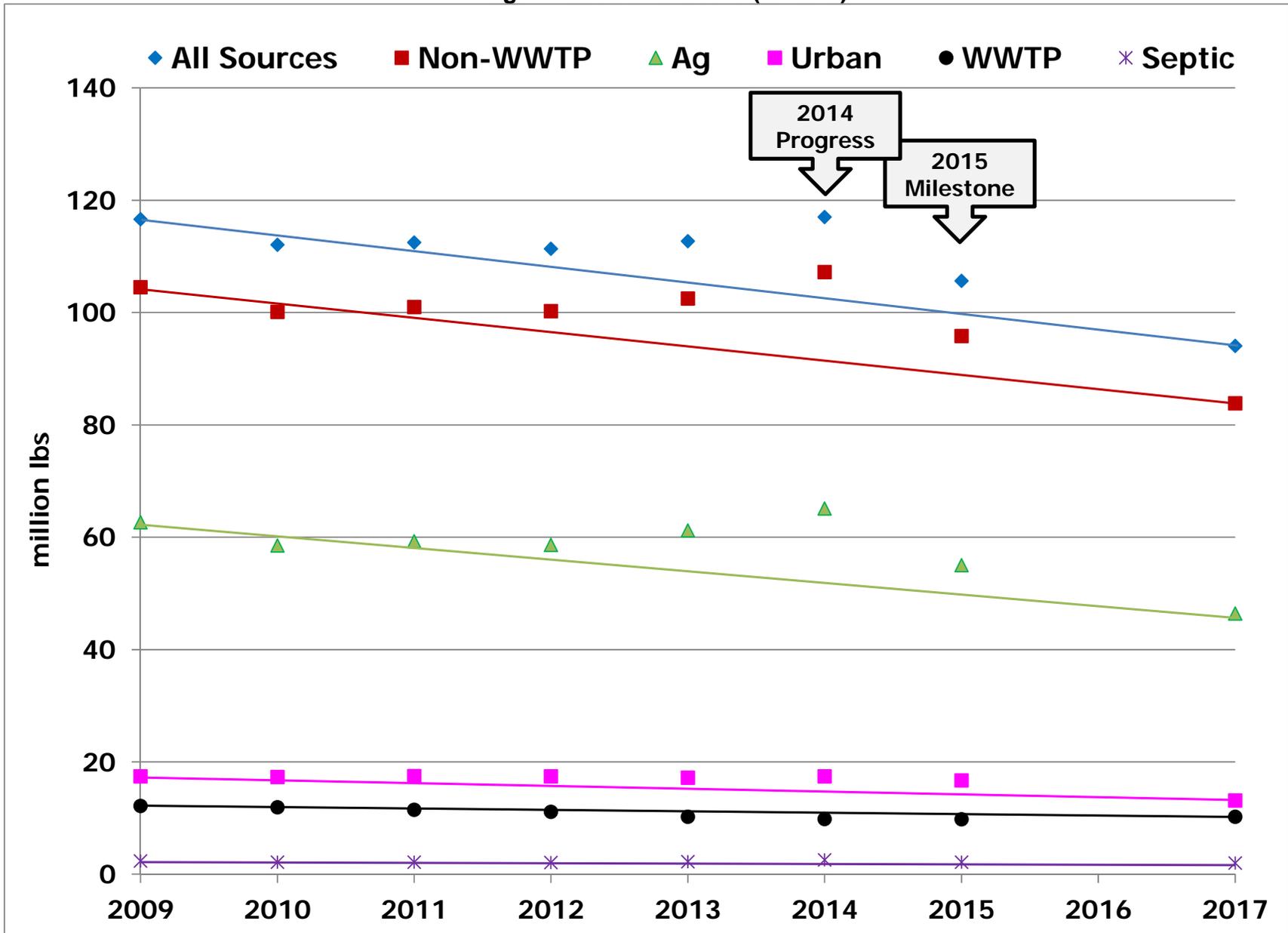
Loads don't meet 2014 trajectory target but are within 5%.



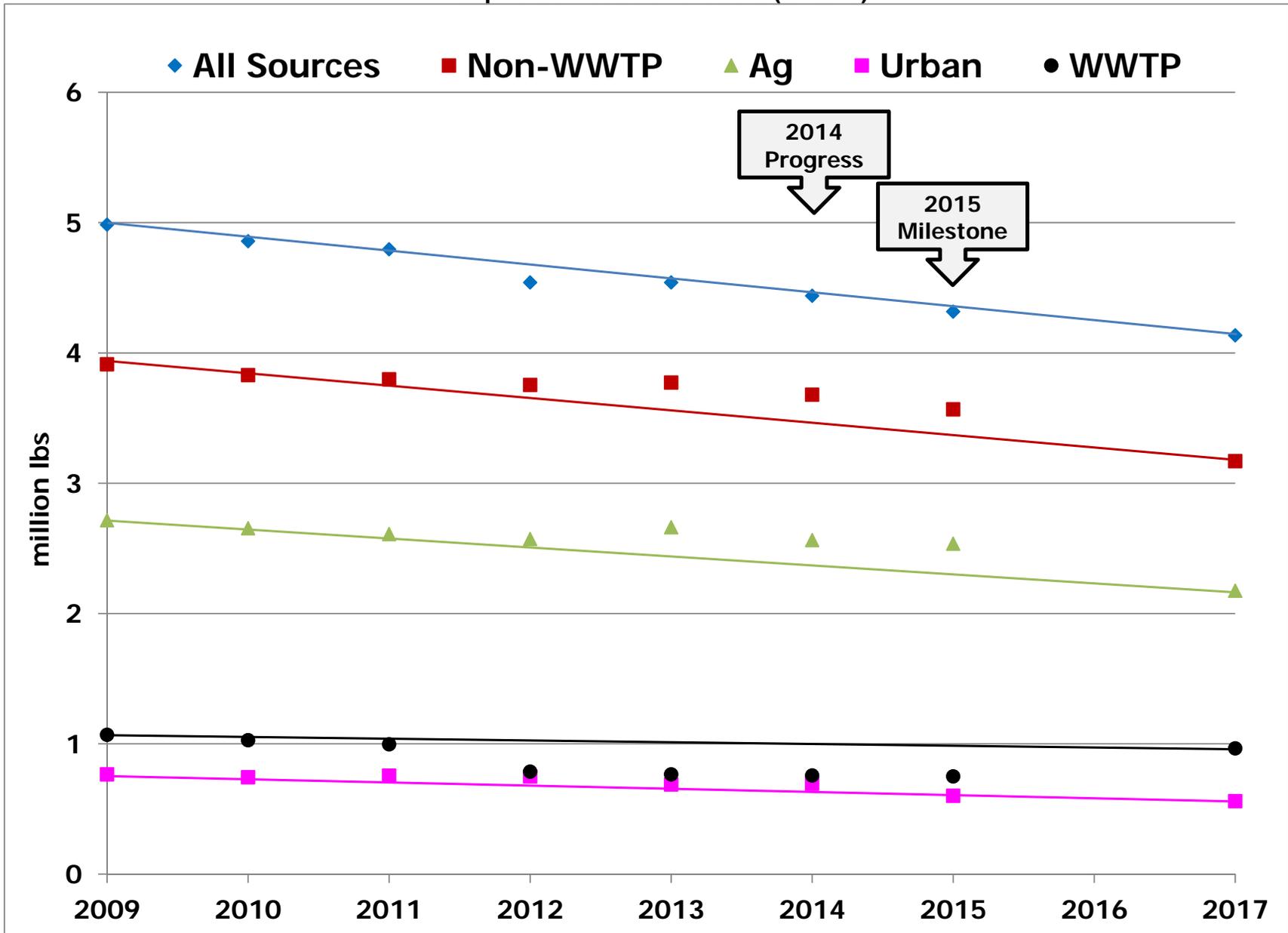
Loads don't meet 2014 trajectory target by relatively large amount.

Source: EPA Chesapeake Bay Program

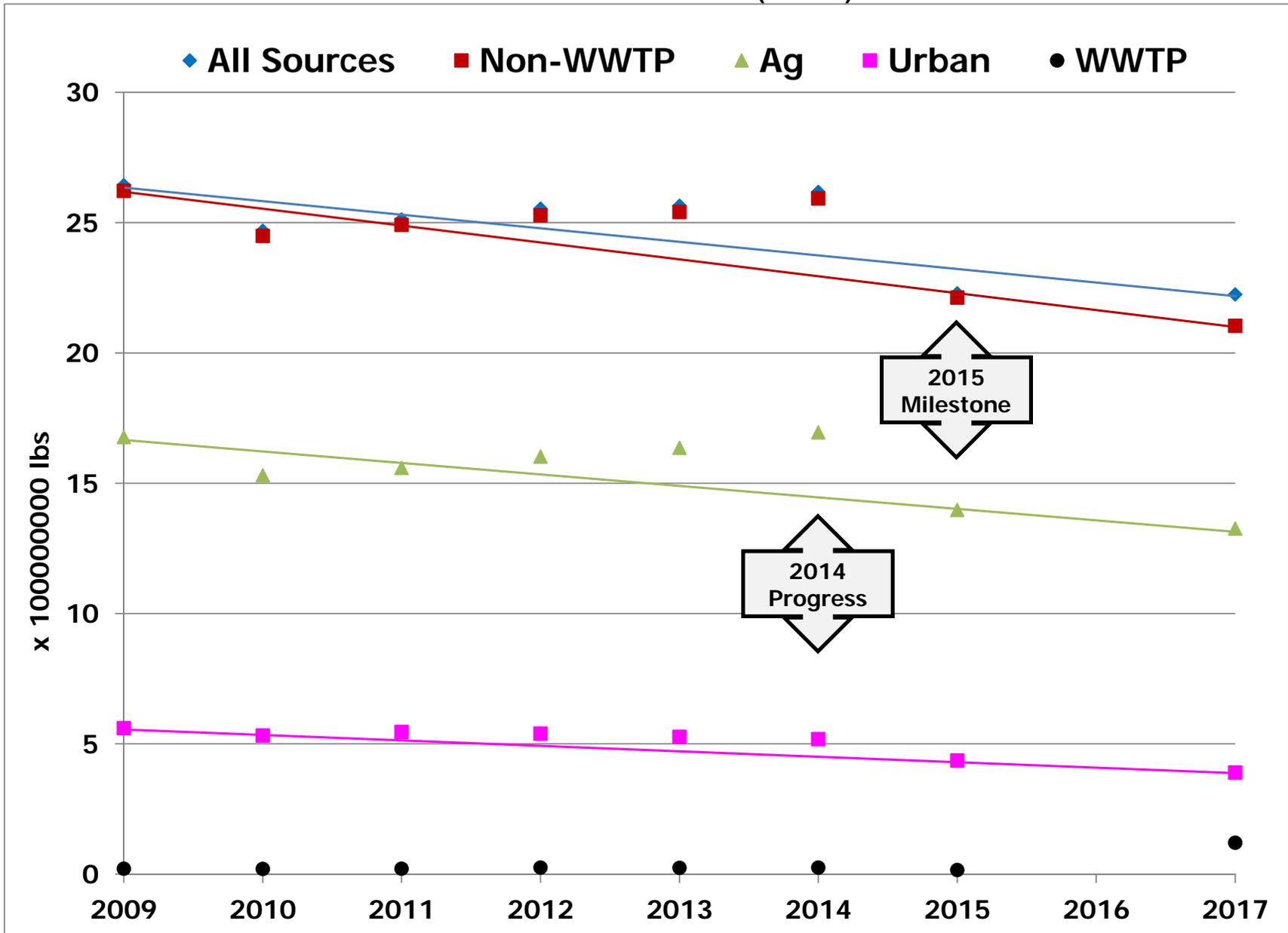
**Pennsylvania
Nitrogen Loads and Goals (3/19/15)**



Pennsylvania
Phosphorus Loads and Goals (3/19/15)



Pennsylvania
Sediment Loads and Goals (3/19/15)



BMP Implementation

3/10/15		2009	2013	2014	2015	2025
		Progress	Progress	Progress	Milestone	WIP
<i>Agriculture Practices</i>	Unit	PA	PA	PA	PA	PA
Nutrient Application Management on Crop	acres	1,200,602	586,362	344,684	672,656	0
Decision Agriculture	acres	0	0	0	0	187,785
Enhanced Nutrient Application Management	acres	1,783	0	0	0	1,596,169
Crop Nutrient Management	acres	1,202,385	586,362	344,684	672,656	1,783,954
Nutrient Application Management on Pasture	acres	3,487	0	0	227,344	449,864
Enhanced Nutrient Application Management on Pasture	acres	0	0	0	0	0
Conservation-Till Specialty Crops	acres	0	0	0	0	0
High Residue Tillage	acres	31,775	0	0	0	14,423
Conservation Tillage including High Residue Tillage	acres	604,206	572,687	676,371	750,000	829,065
Cover Crop	acres	197,279	5,879	11,225	150,000	396,010
Commodity Cover Crop	acres	0	54,809	65,473	150,000	202,610
Cover Crops	acres	197,279	60,688	76,698	300,000	598,620
Pasture Alternative Watering	acres	7,653	65,222	82,930	80,000	71,997
Prescribed Grazing	acres	46,923	62,330	67,583	100,000	119,255
Precision Intensive Rotational Grazing	acres	29	29	29	500	282,289
Horse Pasture Management	acres	1	366	366	500	0
Stream Access Control with Fencing	acres	1,748	14,409	15,497	16,617	14,184
Pasture Management	acres	56,354	142,356	166,406	197,617	487,725
Forest Buffers on Fenced Pasture Corridor	acres	0	0	0	0	4,653
Grass Buffers on Fenced Pasture Corridor	acres	0	0	0	0	128
Forest Buffers	acres	43,096	54,843	58,459	70,000	154,160
Wetland Restoration	acres	3,837	3,857	3,858	10,000	54,135
Land Retirement	acres	147,376	179,112	180,567	290,000	407,379
Grass Buffers	acres	3,914	5,345	6,133	16,000	46,757
Tree Planting	acres	43,896	48,927	48,579	60,000	72,519
Carbon Sequestration	acres	27,596	27,267	27,438	30,000	99,337
Conservation Plans	acres	1,336,350	1,420,532	1,520,309	1,950,000	2,908,925
Water Control Structures	acres	0	0	3,483	0	0
Crop Irrigation Management	acres	0	0	0	0	0
Liquid & Poultry Injection	acres	0	0	0	0	34,179
Capture & Reuse	acres	0	0	0	200	873
Ditch Filters	acres	0	0	0	0	0
NonUrban Stream Restoration	feet	168,271	608,225	621,373	800,000	529,435

BMP Implementation

		2009	2013	2014	2015	2025
		Progress	Progress	Progress	Milestone	WIP
<i>Urban/Suburban Practices</i>	Unit	PA	PA	PA	PA	PA
Runoff Reduction Performance Standard	acres	0	0	0	0	0
Wet Ponds & Wetlands	acres	75,990	78,490	79,077	97,329	145,722
Dry Ponds	acres	444,112	449,974	450,569	447,157	35,183
Extended Dry Ponds	acres	93,131	95,626	96,225	91,293	35,183
Infiltration Practices	acres	81,888	91,666	92,122	108,000	540,690
Filtering Practices	acres	0	0	0	0	456,215
BioRetention	acres	0	0	0	0	0
BioSwale	acres	0	2,712	2,854	2,607	0
Permeable Pavement	acres	0	0	0	0	0
Vegetated Open Channel	acres	0	0	23	0	0
SWM by Era (1985-2002)	acres	0	0	0	0	0
SWM by Era (2002-2010)	acres	0	0	0	0	0
Retrofit Stormwater Management	acres	0	0	0	65	0
Stormwater Management	acres	695,121	718,469	720,871	746,451	1,212,993
Erosion and Sediment Control	acres	8,094	10,078	17,141	11,000	5,900
Extractive Erosion and Sediment Control	acres	0	0	0	100,000	138,925
Forest Conservation Act	acres	0	0	0	0	0
Impervious Surface & Urban Growth Reduction	acres	48	48	48	815	2,610
Urban Forest Buffers	acres	0	393	580	933	15,894
Urban Tree Planting	acres	0	36	91	451	1,444
Urban Nutrient Management	acres	0	0	0	0	311,154
Abandoned Mine Reclamation	acres	12,063	12,746	13,085	14,500	15,594
Street Sweeping	acres	0	0	0	0	46,200
Street Sweeping	lbs	0	3,240,489	3,367,040	6,000,000	0
Urban Phosphorus Fertilizer Reduction	% acres @ % TP reduction	0	100% @ 60%	100% @ 60%	100% @ 60%	0
Urban Stream Restoration	feet	2,200	5,967	6,630	19,920	55,000
Urban Shoreline Erosion Control	feet	0	0	0	0	0
Septic Connections	systems	9,679	65,255	67,756	88,000	140,588
Septic Denitrification	systems	0	0	0	0	0
Septic Pumping	systems	0	0	0	0	0
<i>Resource Practices</i>	Unit					
Forest Harvesting Practices	acres	228	11,319	13,914	14,898	25,000
Dirt&Gravel Road E&S	feet	3,312,375	3,921,785	4,053,990	6,792,987	7,763,151

BMP Implementation

		2009 Progress PA	2013 Progress PA	2014 Progress PA	2015 Milestone PA	2025 WIP PA
<i>Agriculture Practices</i>	Unit					
Nutrient Application Management on Crop	%	50.8%	25.5%	14.1%	31.9%	0.0%
Decision Agriculture	%	0.0%	0.0%	0.0%	0.0%	10.0%
Enhanced Nutrient Application Management	%	0.1%	0.0%	0.0%	0.0%	85.0%
Crop Nutrient Management	%	50.9%	25.5%	14.1%	31.9%	95.0%
Nutrient Application Management on Pasture	%	0.7%	0.0%	0.0%	31.9%	95.0%
Enhanced Nutrient Application Management on Pasture	%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation-Till Specialty Crops	%	0.0%	0.0%	0.0%	0.0%	0.0%
High Residue Tillage	%	20.1%	0.0%	0.0%	0.0%	34.8%
Conservation Tillage including High Residue Tillage	%	47.2%	48.5%	48.7%	65.5%	96.1%
Cover Crop	%	14.4%	0.5%	0.8%	12.2%	43.0%
Commodity Cover Crop	%	0.0%	4.3%	4.4%	12.2%	22.0%
Cover Crops	%	14.4%	4.8%	5.2%	24.4%	65.0%
Pasture Alternative Watering	%	1.4%	11.7%	18.7%	11.2%	15.2%
Prescribed Grazing	%	8.8%	11.2%	15.2%	14.0%	25.2%
Precision Intensive Rotational Grazing	%	0.0%	0.0%	0.0%	0.1%	59.6%
Horse Pasture Management	%	0.0%	0.1%	0.1%	0.1%	0.0%
Stream Access Control with Fencing	%	10.5%	86.7%	93.3%	100.0%	85.4%
Pasture Management	%	10.2%	24.8%	36.2%	27.1%	99.5%
Forest Buffers on Fenced Pasture Corridor	%	0.0%	0.0%	0.0%	0.0%	28.0%
Grass Buffers on Fenced Pasture Corridor	%	0.0%	0.0%	0.0%	0.0%	0.8%
Forest Buffers	%	1.3%	1.7%	1.8%	2.1%	4.7%
Wetland Restoration	%	0.1%	0.1%	0.1%	0.3%	1.7%
Land Retirement	%	4.5%	5.4%	5.6%	8.8%	12.5%
Grass Buffers	%	0.1%	0.2%	0.2%	0.5%	1.4%
Tree Planting	%	1.3%	1.5%	1.5%	1.8%	2.2%
Carbon Sequestration	%	0.8%	0.8%	0.8%	0.9%	3.1%
Conservation Plans	%	41.2%	43.4%	47.0%	60.6%	95.5%
Water Control Structures	%	0.0%	0.0%	0.1%	0.0%	0.0%
Crop Irrigation Management	%	0.0%	0.0%	0.0%	0.0%	0.0%
Liquid & Poultry Injection	%	0.0%	0.0%	0.0%	0.0%	1.1%
Capture & Reuse	%	0.0%	0.0%	0.0%	2.0%	10.0%
Ditch Filters						
NonUrban Stream Restoration						

BMP Implementation

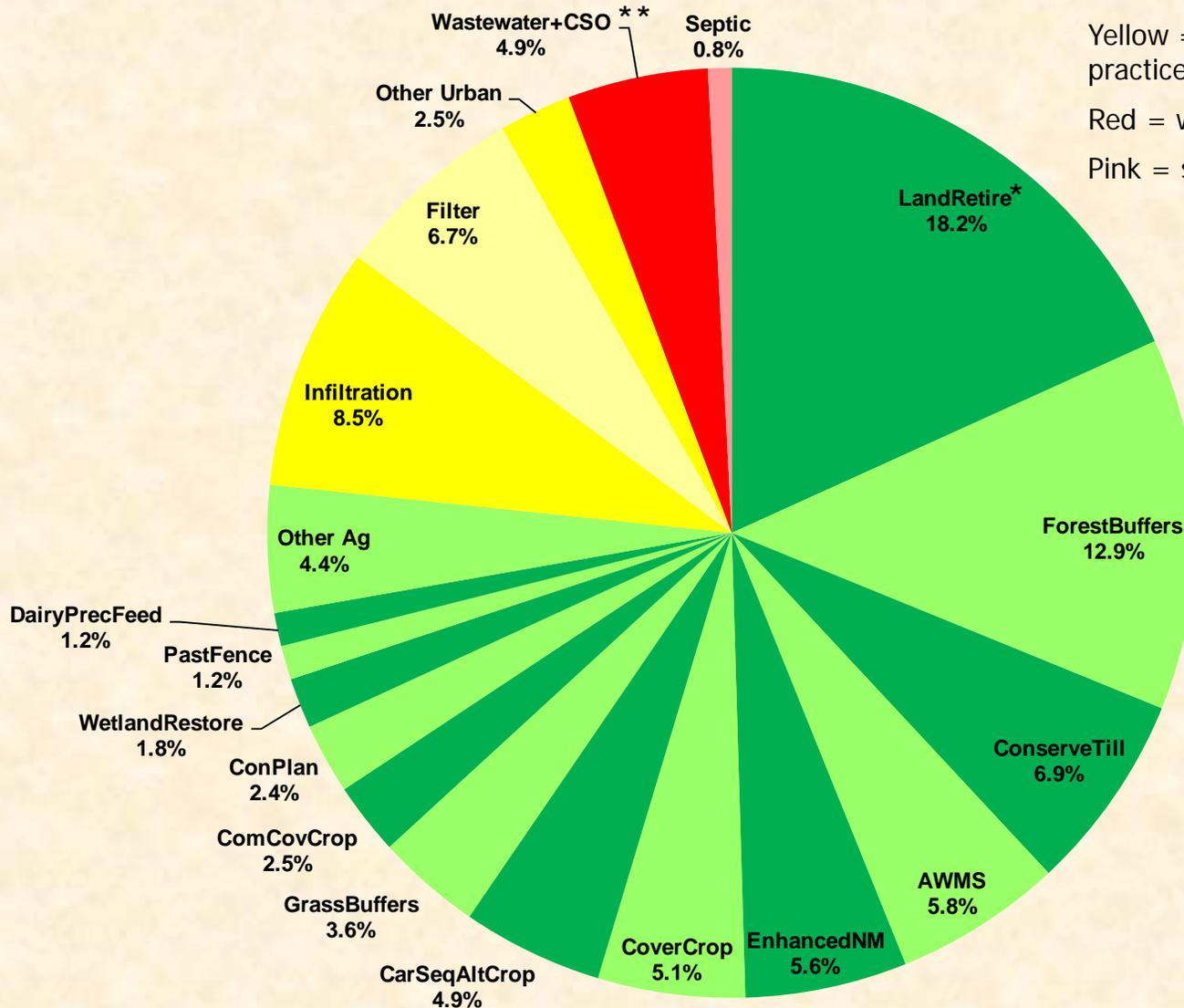
		2009	2013	2014	2015	2025
		Progress	Progress	Progress	Milestone	WIP
		PA	PA	PA	PA	PA
<i>Urban/Suburban Practices</i>	Unit					
Runoff Reduction Performance Standard	%	0.0%	0.0%	0.0%	0.0%	0.0%
Wet Ponds & Wetlands	%	5.4%	5.5%	5.5%	6.7%	10.4%
Dry Ponds	%	31.4%	31.4%	31.2%	31.0%	2.5%
Extended Dry Ponds	%	6.6%	6.7%	6.7%	6.3%	2.5%
Infiltration Practices	%	5.8%	6.4%	6.4%	7.5%	38.4%
Filtering Practices	%	0.0%	0.0%	0.0%	0.0%	32.4%
BioRetention	%	0.0%	0.0%	0.0%	0.0%	0.0%
BioSwale	%	0.0%	0.2%	0.2%	0.2%	0.0%
Permeable Pavement	%	0.0%	0.0%	0.0%	0.0%	0.0%
Vegetated Open Channel	%	0.0%	0.0%	0.0%	0.0%	0.0%
SWM by Era (1985-2002)	%	0.0%	0.0%	0.0%	0.0%	0.0%
SWM by Era (2002-2010)	%	0.0%	0.0%	0.0%	0.0%	0.0%
Retrofit Stormwater Management	%	0.0%	0.0%	0.0%	0.0%	0.0%
Stormwater Management	%	49.2%	50.2%	49.9%	51.8%	86.2%
Erosion and Sediment Control	%	49.3%	100.0%	100.0%	100.0%	67.0%
Extractive Erosion and Sediment Control	%	0.0%	0.0%	0.0%	64.4%	88.4%
Forest Conservation Act	%	0.0%	0.0%	0.0%	0.0%	0.0%
Impervious Surface & Urban Growth Reduction	%	0.0%	0.0%	0.0%	0.1%	0.2%
Urban Forest Buffers	%	0.0%	0.0%	0.1%	0.1%	1.5%
Urban Tree Planting	%	0.0%	0.0%	0.0%	0.0%	0.1%
Urban Nutrient Management	%	0.0%	0.0%	0.0%	0.0%	30.0%
Abandoned Mine Reclamation	%	7.4%	7.8%	8.1%	8.9%	9.6%
Street Sweeping	%	0.0%	0.0%	0.0%	0.0%	12.5%
Street Sweeping						
Urban Phosphorus Fertilizer Reduction						
Urban Stream Restoration						
Urban Shoreline Erosion Control						
Septic Connections	%	1.9%	12.0%	12.9%	16.2%	26.8%
Septic Denitrification	%	0.0%	0.0%	0.0%	0.0%	0.0%
Septic Pumping	%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>Resource Practices</i>	Unit					
Forest Harvesting Practices	%	0.2%	12.1%	14.8%	15.9%	26.5%
Dirt&Gravel Road E&S						



Nitrogen Relative Load Reductions

Pennsylvania

Green = agricultural practices
 Yellow = urban/suburban stormwater practices
 Red = wastewater practices
 Pink = septic practices



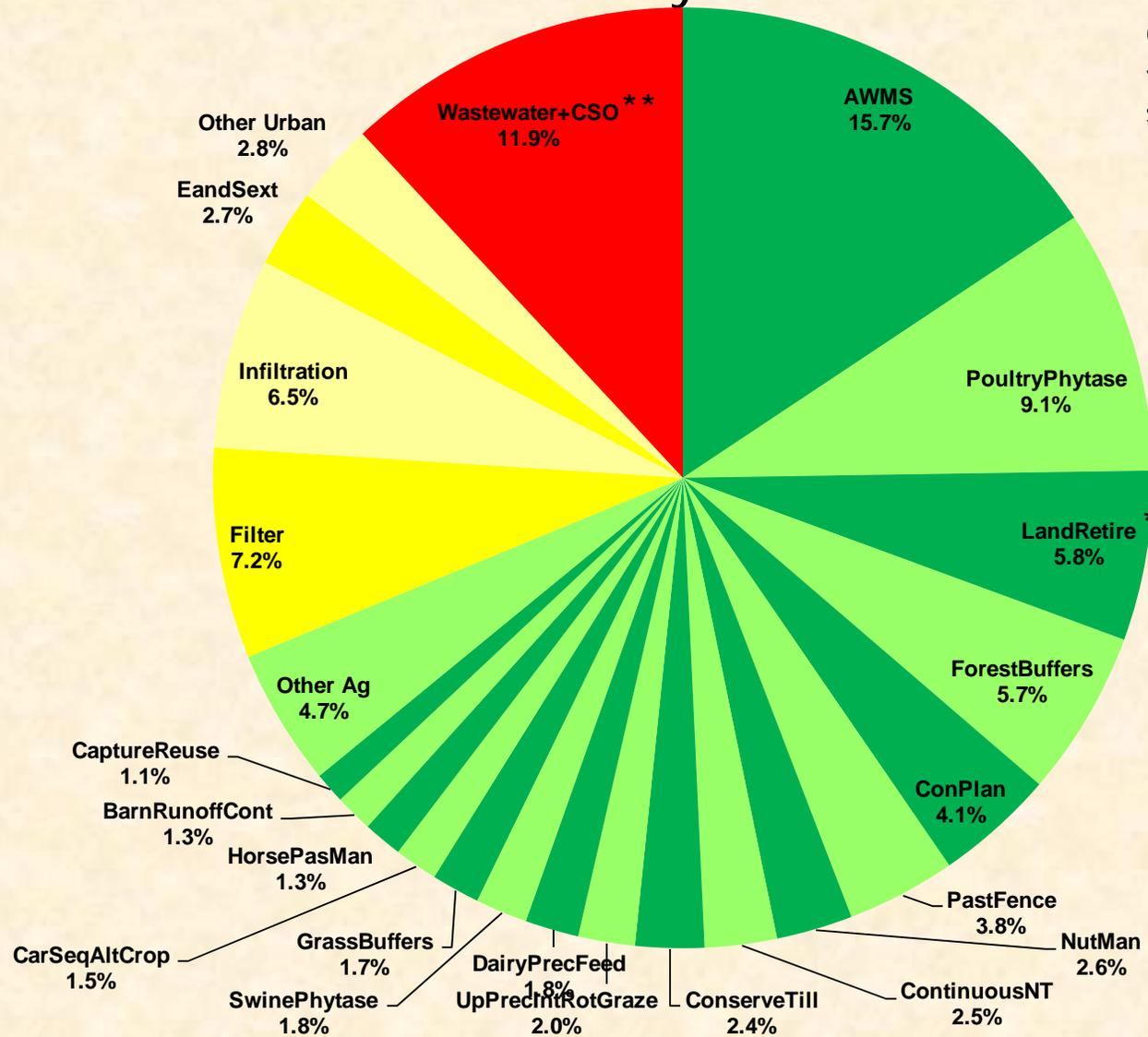
*Agricultural land retirement takes marginal and highly erosive cropland out of production by planting permanent vegetative cover such as shrubs, grasses, and/or trees.

**For wastewater, the contribution to the total load reduction compares current discharges (2011) to WIP discharges while BMPs outside wastewater compare No-Action to WIPs.



Phosphorus Relative Load Reductions Pennsylvania

Green = agricultural practices
 Yellow = urban/suburban stormwater practices
 Red = wastewater practices



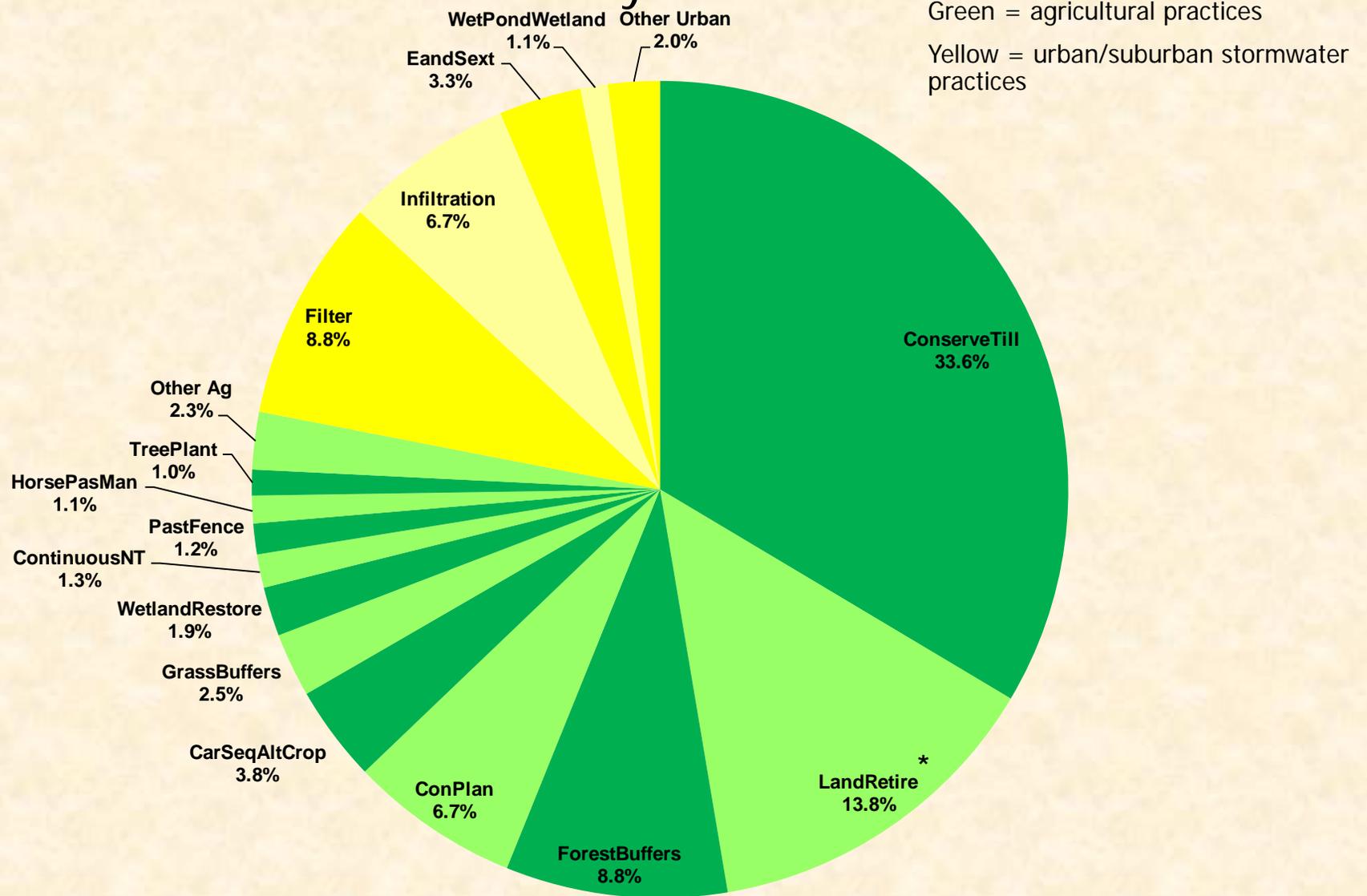
*Agricultural land retirement takes marginal and highly erosive cropland out of production by planting permanent vegetative cover such as shrubs, grasses, and/or trees.

**For wastewater, the contribution to the total load reduction compares current discharges (2011) to WIP discharges while BMPs outside wastewater compare No-Action to WIPs.



Sediment Relative Load Reductions

Pennsylvania



*Agricultural land retirement takes marginal and highly erosive cropland out of production by planting permanent vegetative cover such as shrubs, grasses, and/or trees.