

The Virginia Annual Recycling Rate Report

Calendar Year 2009 Summary



November 2010

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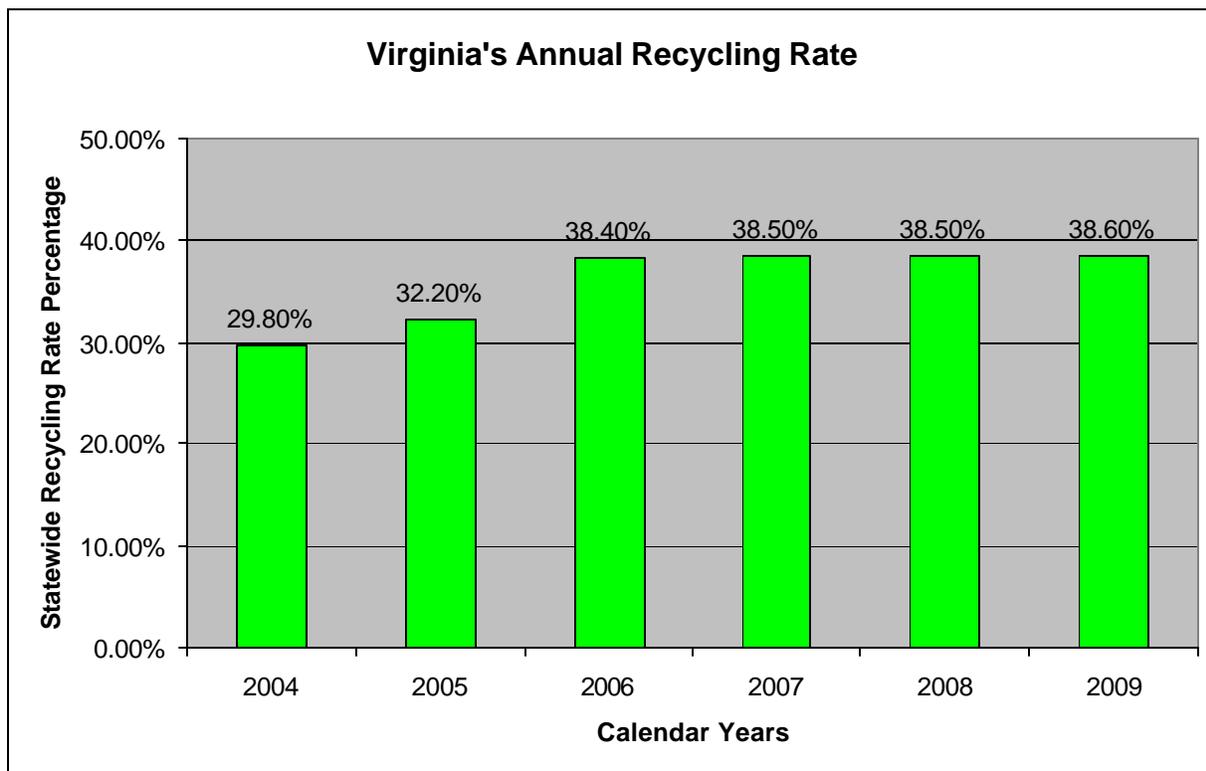
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VIRGINIA'S STATEWIDE RECYCLING RATE

FOR CALENDAR YEAR 2009

The Virginia Department of Environmental Quality (DEQ) has completed its review of the recycling rate data reported for calendar year (CY) 2009. The data for this summary report was compiled from the reports submitted by the 71 solid waste planning units (SWPUs), and represents recycling information from 324 Virginia cities, counties and towns. In some cases, reported data was adjusted for consistency with the Virginia Solid Waste Planning Regulation (9 VAC 20-130 et. seq.).

Virginia's calculated recycling rate for CY 2009 is 38.6%. For the first time since the adoption of the recycling mandate in 1989, all Solid Waste Planning Units have met or exceeded their respective required recycling rates. This achievement reflects well upon the commitment made by Virginia localities to promote and support recycling over the last twenty-one years.



Statewide Recycling Rate Data – 3-year summary

2009 – 3,490,151 tons of material recycled or reused, and 9,098,045 tons of solid waste generated (calculation includes +.23% for source reduction initiatives)

2008 – 3,661,027 tons of material recycled or reused, and 9,542,428 tons of solid waste generated (calculation includes +.17% for source reduction initiatives)

2007 – 3,637,933 tons of material recycled or reused, and 9,526,959 tons of solid waste generated (calculation includes +.27% for source reduction initiatives)

Areas Reporting Highest Rates – 2007-2009

Higher recycling rates were reported in the more densely populated areas of the state. For CY 2009, these areas reported a total of 3 million recycled tons, or 86 % of all recyclables collected, and had a calculated average recycling rate of 41 %. These areas include:

Calculated Regional Recycling Rates by Year			
<u>Area</u>	<u>CY 2009</u>	<u>CY 2008</u>	<u>CY 2007</u>
Bristol Area	41.7 %	39.5%	31.4%
Roanoke Area	42.1 %	33.3%	32.9%
Lynchburg Area	32.0 %	34.0%	40.7%
Northern Shenandoah Valley	36.5 %	33.5%	35.8%
Fredericksburg Area	51.4 %	47.1%	46.5%
Richmond Area	52.8 %	52.8%	53.0%
Northern Virginia	37.2 %	37.1%	35.4%
Hampton Roads/Tidewater Area	36.5 %	31.2%	43.3%

Trends Observed in CY 2009 Reports

In reviewing the statewide totals from the recycling rate reports, the following trends were observed:

- **Principal Recyclable Materials* (PRMs) decreased about 1 %; Credits* decreased overall by 15 %; and Municipal Solid Waste* (MSW) disposed decreased by 5 %.**

** PRMs, Credits and MSW disposed are defined on Page 8 of this report.*

As subsets of the PRM category, the commodity capture rates changed as indicated:

- **Paper 17.0 % down from CY 2008 level**
- **Metals 9 % up from CY 2008 level**
- **Plastics 5 % up from CY 2008 level**
- **Glass 10 % down from CY 2008 level**
- **Commingled 18 % down from CY 2008 level**
- **Waste tires 9 % down from CY 2008 level**
- **Yard/Wood waste 4 % up from CY 2008 level**
- **Used oil/filters/antifreeze 42 % up from CY 2008 level**
- **Electronics 69 % up from CY 2008 level**

Mandated Recycling Rate Results

In each of the last four reporting years, more of the reporting entities (SWPUs) have met the required recycling rate:

<u>Year (% meeting rate)</u>	<u># Reports</u>	<u>25 % or Greater</u>	<u>15% to 25 %</u>	<u># below mandated recycling rate</u>
CY 2009 (100 %)	71	51	20	0
CY 2008 (97 %)	71 *	48	21	2
CY 2007 (89 %)	74	49	19	8
CY 2006 (86 %)	74	46	18	10

** The reduction in number of reports submitted is due to consolidation and re-alignment of SWPU membership.*

Each SWPU is required to achieve a minimum 25 % recycling rate *unless*

- its population density is less than 100 persons per square mile, or
- its civilian unemployment rate is 50 % or more above the state wide unemployment average.

SWPUs meeting these criteria were required to achieve a minimum 15 % recycling rate. Using this two-tiered recycling mandate standard, 71 of the 71 SWPUs (or 100 %) met or exceeded their minimum mandated recycling rate.

Solid Waste Management Planning and Recycling Action Plans

DEQ continues to review the required Solid Waste Management Plans (SWMPs) and any updates submitted by the SWPUs for completeness, including locality or regional recycling program information. If at any time the SWPU reports less than the required 15 % or 25 % recycling rate, DEQ will require a Recycling Action Plan (RAP) be submitted as an amendment to the SWPU's Solid Waste Management Plan to identify specific elements of the recycling program that will be improved in order for the SWPU to achieve its mandated recycling rate.

A RAP requires both a commitment by the SWPU to provide resources necessary to improve its program, as well as a timeline for achieving the program elements. The RAP must be adopted by the administrative governmental board(s) for all localities covered by the Solid Waste Management Plan, and then approved by DEQ. Regular reporting on the progress made on the RAP elements is required until such time as the SWPU meets its minimum required recycling rate.

Calculated Recycling Rates for CY 2009

Solid Waste Planning Unit Recycling Rates and Data

REPORTING ENTITY (Solid Waste Planning Units)	CY 2009 Recycling Rate* (%)	CY 2009 Total Recycled Tons (PRMs + Credits)	CY 2009 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Statewide Totals	38.6 % *	3,490,151 tons	9,098,045 tons
Accomack County SWPU	25.1 *	8,770	33,733
Alexandria (City) SWPU	28.6	56,051	195,791
Alleghany Highlands SWPU	21.6	5,094	23,635
Amelia County SWPU	29.8 *	2,621	8,797
Amherst County SWPU	28.5	8,755	30,680
Arlington County SWPU	40 *	124,275	279,410
Augusta –Staunton-Waynesboro SWPU	26.6	33,691	126,842
Bath County SWPU	26.2 *	1,525	6,297
Bedford County SWPU	42 *	25,748	64,372
Botetourt County SWPU	19.1	3,679	19,245
Bristol (City) SWPU	41.7	10,096	24,219
Brunswick County SWPU	25.3	4,162	16,430
Buckingham County SWPU	35	5,390	15,409
Caroline County SWPU	15.3	2,141	13,963
Carroll-Grayson-Galax SWPU	29.8	12,084	40,538
Central Virginia Waste Management Authority SWPU (Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, Prince George; Cities of Richmond, Hopewell, Colonial Heights and Petersburg)	52.8 *	656,461	1,121,670

REPORTING ENTITY (Solid Waste Planning Units)	CY 2009 Recycling Rate* (%)	CY 2009 Total Recycled Tons (PRMs + Credits)	CY 2009 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Craig County SWPU	22.8	812	3,566
Culpeper County SWPU	30.4	10,273	33,752
Cumberland Plateau Regional Waste Management Authority SWPU (Buchanan, Dickenson and Russell Counties)	35.3 *	29,460	83,516
Danville (City) SWPU	41.4	10,790	26,073
Fairfax (City) SWPU	49.9	24,182	48,455
Fairfax County SWPU	39.4 *	445,624	1,190,306
Falls Church (City) SWPU	57.6 *	7,183	12,922
Fauquier County SWPU	31.8 *	33,496	102,654
Floyd County SWPU	24.7 *	3,954	15,223
Franklin County SWPU	29.6	14,507	49,012
Gloucester County SWPU	31.8	12,824	40,307
Greater Rockingham SWPU	27.5	17,392	63,291
Harrisonburg (City) SWPU	25.9	19,558	75,376
Herndon (Town) SWPU	38.9	9,569	24,607
Highland County SWPU	20.6	402	1,951
King George County SWPU	20 *	51,021	66,265
Lee County SWPU	17.8	3,472	19,481
Loudoun County SWPU	31.2	95,869	306,986
Louisa County SWPU	35.8	7,781	21,724

REPORTING ENTITY (Solid Waste Planning Units)	CY 2009 Recycling Rate* (%)	CY 2009 Total Recycled Tons (PRMs + Credits)	CY 2009 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Lunenburg County SWPU	17.2	2,371	13,797
Madison County SWPU	24.9	1,969	7,920
Manassas (City) SWPU	43	24,404	56,701
Manassas Park (City) SWPU	42.1	8,293	19,678
Martinsville (City)/Henry County SWPU	30.3	23,457	77,357
Montgomery Regional Solid Waste Authority SWPU (Montgomery County, Blacksburg and Christiansburg)	32.1	34,388	95,077
Mount Rogers PDC SWPU (Counties of Bland, Smyth, Washington, and Wythe)	26	21,689	83,304
Newport News (City) SWPU	36.7	159,306	350,392
New River Resource Authority SWPU (Counties of Pulaski and Giles; City of Radford)	31.4	34,759	90,660
Northampton County SWPU	21.6	3,757	17,389
Northern Neck PDC SWPU (Counties of Lancaster, Northumberland, Richmond and Westmoreland)	22.1	12,010	54,230
Northern Shenandoah Valley Regional Commission SWPU (Counties of Clarke, Frederick, Shenandoah, Warren and Page; City of Winchester)	36.5	72,388	198,282
Nottoway County SWPU	15	3,101	20,652
Orange County SWPU	21.5	9,067	25,762
Patrick County SWPU	36.3	4,345	11,971
Pittsylvania County SWPU	30.1	13,202	43,794
Prince Edward - Cumberland SWPU	22.2	5,873	26,483

REPORTING ENTITY (Solid Waste Planning Units)	CY 2009 Recycling Rate* (%)	CY 2009 Total Recycled Tons (PRMs + Credits)	CY 2009 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Prince William County SWPU	36.1	157,646	432,877
Rappahannock County SWPU	22.4	1,311	5,847
Rappahannock Regional Solid Waste Management Board SWPU (County of Stafford and City of Fredericksburg)	45.4	61,430	141,430
Region 2000 (Counties of Nelson, Appomattox and Campbell, Cities of Lynchburg and Bedford)	32 *	101,110	302,317
Roanoke (City) SWPU	48.7	63,445	108,597
Roanoke County SWPU	28	17,325	61,843
Rockbridge – Lexington – Buena Vista SWPU	43.8	15,882	36,294
Salem (City) SWPU	46.9	20,662	44,080
Scott County SWPU	16.2	2,919	17,965
Southeastern Public Service Authority SWPU (Counties of Isle of Wight and Southampton; Cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, and Virginia Beach)	32.7 *	555,210	1,588,823
Southern Crater Region SWPU (Counties of Dinwiddie, Greensville, Surry, and Sussex; City of Emporia)	17.7	12,734	72,084
Southside Regional PSA SWPU (Counties of Charlotte, Halifax and Mecklenburg)	15.4	8,325	53,925
Spotsylvania County SWPU	37.3	50,041	108,646
Tazewell County SWPU	22.1	15,603	70,544
Thomas Jefferson PDC SWPU (Counties of Albemarle, Fluvanna, and Greene; City of Charlottesville)	31.2	54,399	179,551
Vienna (Town) SWPU	53	5,378	10,142

REPORTING ENTITY (Solid Waste Planning Units)	CY 2009 Recycling Rate* (%)	CY 2009 Total Recycled Tons (PRMs + Credits)	CY 2009 Total MSW Generation Tons (PRMs + Credits + MSW disposed)
Vinton (Town) SWPU	41.3 *	6,597	10,459
Virginia Peninsulas Public Service Authority SWPU (Counties of Essex, James City, King & Queen, Mathews, Middlesex, and York; Cities of Hampton, Poquoson, and Williamsburg)	35.4	144,234	407,174
Wise County SWPU	30.4	18,319	60,234
STATEWIDE TOTALS CY 2009	38.6 % *	3,490,151 tons	9,098,045 tons

* All data based on adjustments by DEQ for consistency with 9VAC-20-130-10 and 9VAC20-130-120, with a 5 % maximum percentage allowed for credits to the base recycling rate calculated by a solid waste planning unit. A 2 % source reduction credit may have been added to the calculated recycling rates for a documented source reduction programs.

PRMs = Principal Recyclable Materials (paper, metal, plastic, glass, commingled materials, yard waste, waste wood, textiles, waste tires, used oil, used oil filters, used antifreeze, inoperative automobiles, batteries, electronics and other)

CREDITS = Recycling Residues, Solid Waste Reused, and Non-MSW Recycled (includes construction and demolition material, ash and debris), and Source Reduction Initiatives. Source Reduction Initiatives must be documented as SWPU policy and promoted across the SWPU.

MSW Disposed = Municipal solid waste delivered to sanitary landfills or incinerators for disposal.

Recycling Rate Report Summary

Virginia Solid Waste Planning Units Reporting Rate Information for CY 2009

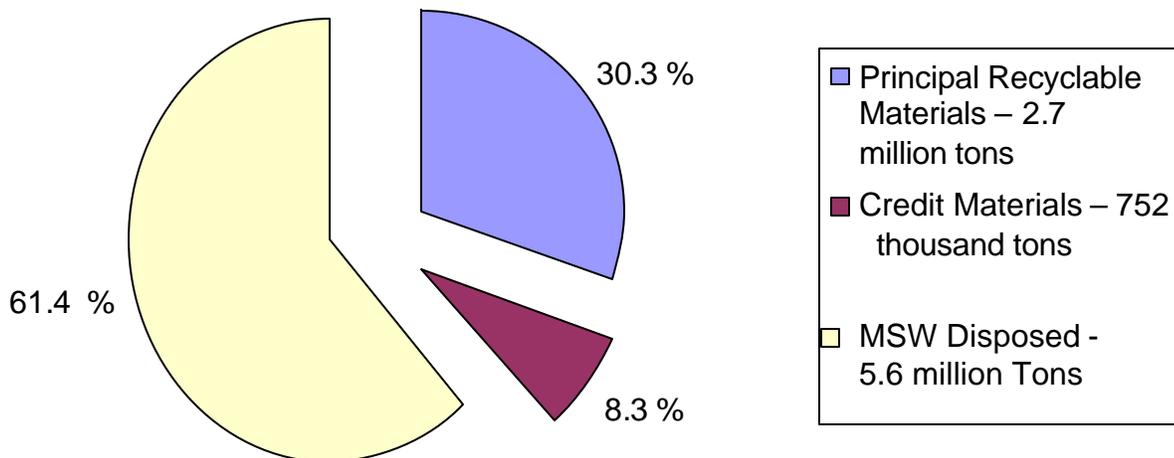
71 Recycling Rate Reports, representing **324 Virginia localities** and every **Solid Waste Planning Unit**, were received. This represents a return rate of 100 %. Totals for all reports are presented below:

Principal Recyclable Material (PRM)		Credits			Total MSW Disposed	
Paper	725,026	Recycling Residue	14,750		Household Waste	4,539,568
Metal	782,609	Solid Waste Reused	605,039		Commercial Waste	958,629
Plastic	30,667	Non-MSW Recycled	132,721		Institutional Waste	104,567
Glass	24,005	TOTAL CREDITS (C) (Tons)	752,510		Other:	5,130
Commingled	144,753				TOTAL MSW (M) (Tons)	5,607,895
Yard Waste	537,675	2 % Source Reduction Credit 8 entities, equaling .23% overall			2009 State Recycling Rate	38.6 %
Waste Wood	231,406					
Textiles	23,117					
Waste Tires	60,961					
Used Oil	66,454					
Used Oil Filters	1,786	$\frac{((P+C)/(P+C+M) \times 100) + \text{Source Reduction Credit}}{(3,490,151/9,098,045) \times 100} + .23\%$				
Used Antifreeze	5,954					
Auto Bodies	4,101					
Batteries	16,212					
Electronics	7,755	<i>(rounding of individual data entries may affect sums in Totals)</i>				
Other:	75,159					
Total PRM (P) (Tons)	2,737,641					

* All data based on adjustments by DEQ for consistency with 9VAC-20-130-10 and 9VAC20-130-120.

RECYCLING IN VIRGINIA

2009 Statewide Recycling Rate of 38.6 %



Percentages as shown reflect adjustment based upon Source Reduction Credit of .23% applied to calculations.

PRMs = Principal Recyclable Materials (paper, metal, plastic, glass, commingled materials, yard waste, waste wood, textiles, waste tires, used oil, used oil filters, used antifreeze, inoperative automobiles, batteries, electronics and other)

CREDITS = Recycling Residues, Solid Waste Reused, and Non-MSW Recycled (includes construction and demolition material, ash and debris), and Source Reduction Initiatives. Source Reduction Initiatives must be documented as SWPU Policy and promoted across the SWPU.

MSW Disposed = Municipal solid waste delivered to sanitary landfills or incinerators for disposal.

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