

Appendix F. State of Florida Diversion Measurement Information



Programs

- » [Waste Home](#)
- » [Petroleum Storage Systems](#)
- » [Solid and Hazardous Waste](#)
- » [Waste Cleanup](#)

Information

- » [Data Reports](#)
- » [Forms](#)
- » [News](#)
- » [Publications and Reports](#)
- » [Rules](#)

Navigation

- » [Site Map](#)
- » [Search Waste Management](#)

Solid Waste Management in Florida 2000

This 2000 Solid Waste Management Annual Report provides a comprehensive analysis of solid waste generation, recycling and disposal in Florida primarily based on information compiled by each county for 1998. This report also includes information about the activities of the Department, other state agencies and organizations dealing with waste issues.

Contents:

- » [Appendix Tables](#)
- » [The Chapters of the Report](#)
- » [Instructions for downloading the whole report and viewing online](#)
- » [Archives of this Report](#)

Individual Chapter Files:

- » [Executive Summary](#), (132 Kb)
- » [Chapter 1 - Introduction](#), (327 Kb)
- » [Chapter 2 - Waste Reduction and Recycling](#), (309 Kb)
- » [Chapter 3 - Combustion](#), (52 Kb)
- » [Chapter 4 - Landfill Disposal](#), (671 Kb)
- » [Chapter 5 - Special Waste](#), (504 Kb)
- » [Chapter 6 - Other State Agencies and Programs](#), (721 Kb)
- » [Chapter 7 - Appropriations and Budget](#), (452 Kb)

Appendices:

Click on the formats of the tables below to view/download them as Adobe PDF, or Microsoft Excel format.

Appendix A: Introduction

Title	Description	Format
Table 1A	County Municipal Solid Waste Collection Per Capita	Adobe Excel
Table 2A	MSW Collected by Generator Type in Florida	Adobe Excel
Table 3A	Total Tons of MSW Materials Predicted to be Collected (2017)	Adobe Excel
Table 4A	Total Tons of MSW Managed in Florida Facilities	Adobe Excel
Table 5A	Final Disposition of MSW in Florida	Adobe Excel

Appendix B: Recycling and Waste Reduction

Table 1B	County Municipal Solid Waste Disposal Per Capita	Adobe Excel
Table 2B	County Waste Reduction in Florida	Adobe Excel
Table 3B	Total Tons of MSW and Minimum Five Materials Collected and Recycled	Adobe Excel

Highlights

- » [Recycling Main Page](#)
- » [Contacts](#)
- » [Educational Resources](#)
- » [Grants](#)
- » [Greening Florida Government](#)
- » [Green Lodging Certification](#)
- » [Rules & Related Laws](#)
- » [Publications](#)
- » [Recycling FAQ](#)
- » [Recycling and Reuse Business Assistance Center \(RBAC\)](#)
- » [Announcements, Events & News](#)
- » [Waste Composition Models](#)

Table 4B	Total Tons of MSW and Special Waste Materials Collected and Recycled	Adobe Excel
Table 5B	Total Tons of Other MSW Materials Collected and Recycled	Adobe Excel
Table 6B	County Recycling by Descending Adjusted Recycling Rate	Adobe Excel
Table 7B	Tons of MSW Materials Predicted to be Collected and Recycled (1998) *	Adobe Excel
Table 8B	Minimum Five Materials Recycled in Florida by Descending Population	Adobe Excel
Table 9B	Recycling Program Cost Summary by County	Adobe Excel
Table 10B	Curbside Recycling Programs in Florida	Adobe Excel
Table 11B	Single-Family Participation in Recycling by Descending Population	Adobe Excel
Table 12B	Multi-Family Participation in Recycling by Descending Population	Adobe Excel
Table 13B	Commercial Participation in Recycling by Descending Population	Adobe Excel
Table 14B	Florida's Certified Recyclers	Adobe Excel
Table 15B	Existing and Proposed Recycling Facilities and Service Centers (269kb)	Adobe Excel
Table 16B	Florida State Agency 1998 Recycled Paper Purchase Report	Adobe Excel

Appendix C: Waste-to-Energy, Landfills and Special Waste

Table 1C	Florida Active Landfill Facilities	Adobe Excel
Table 2C	Florida Construction and Demolition Debris Facilities	Adobe Excel
Table 3C	Florida Class I MSW Tipping Fees	Adobe Excel
Table 4C	County Solid Waste Disposal Fees in Florida	Adobe Excel
Table 5C	Florida's Waste-to-Energy Facilities	Adobe Excel
Table 6C	Tire Stabilization and Abatement Activities	Adobe Excel
The following 4 tables are all contained in one file:		Adobe Excel
Table 7C	Total Tons of WTE Ash Generated by Facility	-- --
Table 8C	Florida WTE Ash Analysis	-- --
Table 9C	TCLP Test Results for Florida's WTE Facilities	-- --
Table 10C	Florida WTE Ash Landfill Information	-- --

Appendix D: Appropriations and Budget

Table 1D	Grant Recipients and Awards Solid Waste Management Trust Fund	Adobe Excel
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Appendix E: Department's Solid and Hazardous Waste Staff

Table 1E	DEP Solid and Hazardous Waste Staff	Adobe Excel
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Appendix F: County and City Coordinators

Table 1F	County Solid Waste Directors and Recycling Coordinators	Adobe Excel
Table 2F	City Recycling Programs in Florida	Adobe Excel

Appendix G: County MSW and Recycling Data Summary Sheets

Florida			
Alachua	Flagler	Lake	Pinellas
Baker	Franklin	Lee	Polk
Bay	Gadsden	Leon	Putnam
Bradford	Gilchrist	Levy	Reedy Creek
Brevard	Glades	Liberty	Santa Rosa
Broward	Gulf	Madison	Sarasota
Calhoun	Hamilton	Manatee	Seminole
Charlotte	Hardee	Marion	St. Johns
Citrus	Hendry	Martin	St. Lucie
Clay	Hernando	Monroe	Sumter
Collier	Highlands	Nassau	Suwannee
Columbia	Hillsborough	Okaloosa	Taylor
Dade	Holmes	Okeechobee	Union
De Soto	Indian River	Orange	Volusia
Dixie	Jackson	Osceola	Wakulla
Duval	Jefferson	Palm Beach	Walton
Escambia	Lafayette	Pasco	Washington

Archives:

- » [Solid Waste Management Annual Report 1999](#)
- » [Solid Waste Management Annual Report 1998](#)

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2. Download the following file, [chapterszipped.exe](#), saving it in on your DESKTOP. This file is 3.19 Megabytes (MB). It will take some time to download, please be patient.
3. If prompted, chose "save this program to disk" option and then select the desktop.
4. When the download completes, minimize your windows and double click the file on the desktop you downloaded. This will start the extraction program. It has a default destination, but you can change the folder if you wish.
5. Double click on a specific PDF file in that folder to open that chapter or file. Or, use the <File> <Open> command once inside the acrobat viewer.

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1. Make sure that you have the Acrobat Reader installed.
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Last updated: March 22, 2005

Bureau of Solid & Hazardous Waste #850-245-8707 MS #4550

Division of Waste Management #850-245-8705 MS #4500
2600 Blair Stone Road, Tallahassee, Florida 32399-2400

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Executive Summary

- Florida's population in 1998 was 15,000,475. In that year, 24.8M tons of municipal solid waste (MSW) were collected. Fifty-one percent of that MSW was generated from commercial establishments and 49 percent from the residential sector. Fifteen counties generated 77 percent of the MSW collected.
- Of the total MSW collected in 1998, approximately 16 percent (3.8M tons) was combusted into energy and gases, 28 percent (6.9M tons) was recycled, and 56 percent (14.1M tons) was disposed in landfills.
- There was an apparent dramatic drop in the statewide recycling rate from 38% (1997) to 28% (1998). However, DEP attributes most if not all of that drop to more accurate measuring methodology first employed in 1998 rather than to any real change in recycling activities throughout the state. In recent years, even before the use of the revised measuring methodology, the percentages of MSW recycled and combusted had flattened out while landfill disposal had begun to increase.
- The major components of the MSW stream in 1998 were paper (26 percent), construction and demolition debris (23 percent), and yard trash (14 percent).
- Counties with population greater than 75,000 were required to meet a 30 percent waste reduction/recycling goal by the end of 1994. In 1998, nine of 35 eligible counties had met this goal. All counties are required to recover a majority of the newspaper, glass, aluminum cans, plastic bottles and steel cans from their waste stream. In 1998, none of the counties met the goal for all five materials. Thirty-three percent have achieved the goal for one or more of the materials and 16 percent for two or more of the materials.
- Local governments have received over \$342M in solid waste grants and awards since 1988. In FY 1998-99, counties were awarded \$10.0M in Recycling and Education Grants. Local governments and customers receiving recycling services spent about \$10.08 of their own dollars for every \$1 provided by State grants in 1998.
- Florida has 299 curbside recycling programs that collect over 21 different types of materials. Over 8.5 million Floridians had curbside recycling available to them in 1998. Scheduled recycling service was available to 51 percent of commercial establishments while on-call service was available to 35 percent.
- A 1999 study estimated that over 32,000 people were employed in some recycling capacity in Florida, with 51 percent of those jobs in the private sector.
- Florida has 56 Materials Recovery Facilities, 158 Recovered Materials Processing Facilities, and eight permitted composting facilities.
- Pollution Prevention (P2) is another key component of Florida's waste reduction program. Since its inception in 1988, Florida's P2 program has assisted more than 450 Florida businesses in eliminating or reducing the generation of hazardous waste and toxic releases to Florida's environment.

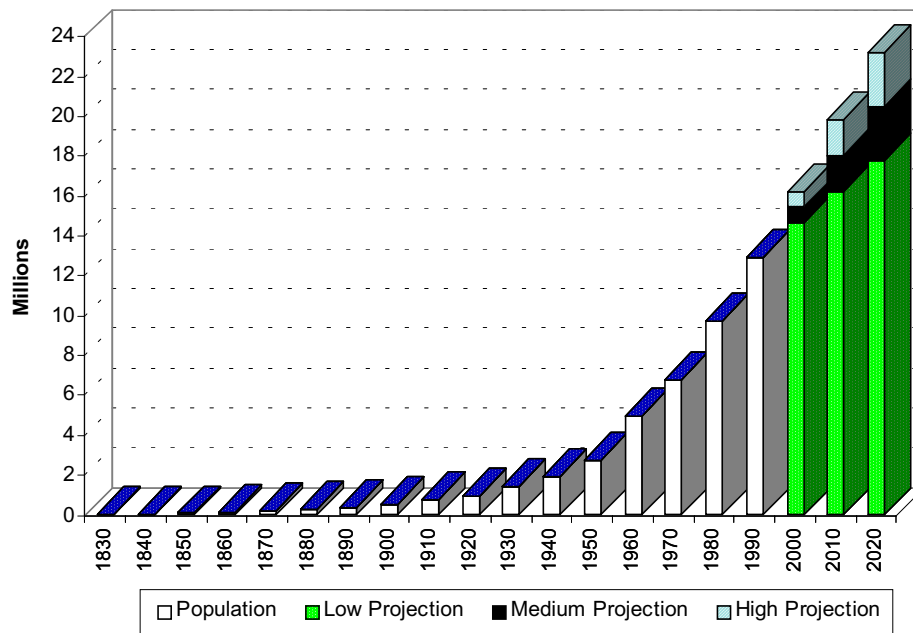
EXECUTIVE SUMMARY

- Florida has the largest capacity to burn MSW of any state in the nation and is host to 13 Waste-to-Energy (WTE) facilities. In counties with these facilities, the average percentage of waste burned was 27 percent in 1998. Each day that year an average of 15,393 tons of MSW was combusted. Combined, Florida's WTE facilities have the capacity to generate over 500 megawatts of electricity daily.
- Florida has 61 Class I landfills, 1 Class II landfill, 34 Class III landfills, 92 C&D debris disposal facilities, and 69 land clearing disposal facilities. 85 percent of Class I landfills in Florida are publicly-owned.
- Tipping fees at Class I landfills vary from county to county, ranging from \$23.00 per ton to \$92.00 per ton. The statewide average tipping fee per ton of MSW for Class I landfills is \$42.47.
- In 1998, approximately 175,000 tons of waste tires were collected and 76 percent of them were recycled or burned as fuel.
- Approximately 50,000 tons of biomedical waste was generated in Florida in 1998. In 1999, 14 commercial biomedical waste treatment facilities were permitted in the state.
- The amount of mercury reaching Florida's MSW via household batteries and mercury-containing lamps and devices was estimated to be less than 6 tons in 1998, down from an estimated 12 tons in 1995.
- Cathode Ray Tubes from television and computer monitors are estimated to be the second largest source of lead in Florida's MSW, exceeded only by the combined category of vehicular lead acid batteries and small sealed lead acid batteries.
- Public Used Oil Collection Centers accepted nearly 2.5M gallons of used oil in 1998, estimated to be about 34 percent of the used oil generated by Do-It-Yourselfers. In 1998, 93.7M gallons of used oil and oily wastes were collected. In that year, 18.5M used oil filters were collected (36 percent of the total estimated to be generated in Florida) and 9,272 tons of steel were recovered.
- State Agencies and Universities recycled nearly 1,903 tons of paper in 1998 generating over \$43,000 in revenues from its sale. The number of recycled content items on State contracts exceeds 1,000.
- Despite a 50 percent litter reduction goal adopted by the 1993 Legislature, the amount of litter in Florida increased 17 percent according to a study in 1997.
- Numerous State Agencies and non-profit organizations have worked together to improve the way Florida manages its waste, for example:

Department of Management Services managed the State's procurement efforts for recycled-content products and operated recycling programs in State owned and operated buildings throughout Florida;

Department of Health provided training to the local regulated community on proper procedures for biomedical waste management;

Figure 1: Florida Population Growth (1830 - 2020)



Florida added 10.2 million people, with over one third of this growth taking place during the 1980's. By 1990, Florida had become the fourth most populous State, even with a decrease in the growth rate. It is expected to hold this position through the year 2020, when the population is predicted to be between 17.5 and 23 million people (the low and the high growth projections shown in Figure 1). The official state population for 1998 was 15,000,475.

Understanding the Data and Its Validity

Information reported for years 1988 through 1994 refer to data collected during a State Fiscal Year (SFY), July 1 through June 30. Since 1995, data has been collected and reported on a Calendar Year (CY), which is January 1 through December 31. This distinction is noted in the appropriate tables and figures throughout this report.

State Fiscal Year vs. Calendar Year

Some of the numbers reported for recycled material which are used to calculate the recycling rate for the counties are based on waste composition studies as reported by the counties. Some of these studies may be outdated and may not accurately reflect the amount of county waste generated. This distinction is noted in the appropriate tables and figures throughout the report.

Prior to CY 1995, recycling data was collected by county managers via surveys of local public and private sector facilities then forwarded to FDEP. Starting in CY 1995, recycling data for 12 material types was provided directly to FDEP from recyclers via the Recovered Materials Dealers Certification and Reporting Program (discussed in Chapter 2). County managers continued to carry out surveys to gather recycling data on materials not covered under this program.

This year (2000), the Department implemented a Construction and Demolition material reporting mechanism which provided more accurate accounting of waste material being managed than in previous years. This new mechanism uncovered a greater amount of MSW being managed than was previously known. As a result, when that new data was factored into 1998 data, the calculations for the percentage of materials recycled showed decreases, while the percentages of materials disposed showed increases. A detailed explanation can be found in Chapter 2, under the *Materials Recycled* section.

How much Municipal Solid Waste is collected?

From 1989 through 1996, the State demonstrated a steady growth in the amount of municipal solid waste (MSW) collected. In 1991, about 19.5 million tons of MSW were collected in Florida. This is equivalent to 8.3 pounds per day per person or 1.5 tons per year per person collected in the State of Florida. In 1998, about 24.9 million tons of MSW were collected in the State. This is equivalent to saying the average person generated 9.1 pounds per day in 1997.



For county specific information, reference Tables 1A, 2A and 5A in the appendices or at: <http://www.dep.state.fl.us/dwm/documents.htm>

As might be expected, the county with the largest population, Dade, collected more MSW in 1998 than any other county in Florida. In fact, with 3,419,768 tons collected for the year, Dade exceeded the collection of the next largest county, Broward, by over 1,259,779 tons. The ten most populated counties accounted for 71 percent of the total tons of MSW collected statewide, and the 15 most populated counties accounted for over 77 percent of the total tons of MSW collected.

15 counties generate 77% of Florida's MSW

Table 1: MSW Collected by Generator Type in Florida in CY 1998¹

Collected Jan 1, 1998 - Dec 31, 1998				Population: 15,000,475	
Generator Type	Collected Tons	Percent Total Tons	Total Units ⁴	Population Served ⁵	Pounds per Capita per Day
Residential Single Family ²	8,694,449	35	4,344,712	11,252,804	3.18
Residential Multi-Family ³	3,379,538	14	2,350,635	4,677,764	1.23
Commercial	12,783,994	51	521,904	14,712,922	4.67
State Totals	24,857,981	100	7,217,251	14,712,922	9.08

¹ This table is a compilation of data reported by each county. Significant digits have not been addressed.

² Includes apartments, condominiums and others.

³ Includes government and institutional

⁴ Number of generator type reported by all the counties.

⁵ Total units times residents per unit: Single Family - 2.59, Multi-Family - 1.99 and Commercial - State Population

**Table 6B: County Recycling⁴ in Florida
By Descending Adjusted Recycling Rate**

(Jan 1, 1998 - Dec 31, 1998)

County	Adjusted Recycling Rank	Population Rank	Population ⁴	MSW Recycling (%)		Minimum 5 Materials Recycling (%) ³				
				Unadjusted	Adjusted ³	News-papers	Glass	Aluminum Cans	Plastic Bottles	Steel Cans
Lee	1	11	405,637	38	38	59	22	29	21	100
Duval	2	7	753,823	37	37	54	77	24	14	49
Taylor	3	53	19,527	36	36	11	0	16	11	0
Palm Beach	4.5	3	1,020,521	35	35	50	26	53	11	58
Alachua	4.5	19	211,403	35	35	56	76	17	20	15
Saint Lucie	6.5	22	183,222	40	34	41	64	57	34	19
Sarasota	6.5	14	316,023	34	34	84	94	32	21	20
Marion	8	17	242,357	32	32	22	14	28	1	1
Citrus	9.5	30	112,424	31	31	39	26	41	9	6
Putnam	9.5	36	71,454	31	31	26	0	16	14	2
Polk	11	8	465,858	37	30	28	6	21	13	2
Volusia	12	10	420,431	30	29	48	33	21	24	15
Hillsborough	13	4	942,322	28	28	61	37	38	21	78
Hernando	16	28	125,008	27	27	65	16	1	4	1
Martin	16	29	119,370	37	27	63	40	19	18	14
Lake	16	21	196,073	27	27	53	12	16	9	20
Brevard	16	9	465,825	43	27	42	27	16	22	7
Orange	16	6	824,095	27	27	36	8	42	12	13
Leon	20.5	18	233,232	39	26	44	5	21	9	8
Charlotte	20.5	26	133,655	26	26	57	63	50	29	34
Sumter	20.5	41	47,907	26	26	53	35	17	6	29
Broward	20.5	2	1,460,890	26	26	73	75	20	91	11
Manatee	24	16	247,028	32	25	17	29	24	6	17
Calhoun	24	62	13,572	25	25	0	0	3	0	3
Columbia	24	37	55,368	25	25	12	4	27	3	4
Pinellas	26	5	892,178	24	24	33	13	98	17	97
Santa Rosa	28.5	33	107,814	27	23	29	3	16	2	2
Monroe	28.5	34	85,646	24	23	42	20	20	19	35
Indian River	28.5	32	106,690	40	23	75	26	18	27	7
Dade	28.5	1	2,090,314	23	23	31	40	8	20	41
Collier	32	20	210,095	22	22	47	9	49	69	7
Highlands	32	35	80,458	22	22	35	12	9	3	3
Suwannee	32	45	33,746	22	22	7	1	31	0	17
Bradford	34	49	25,355	21	21	21	6	13	4	3
Gilchrist	35.5	63	13,140	20	20	9	11	46	6	9
Okeechobee	35.5	44	35,059	20	20	7	0	15	0	0
Madison	37	54	19,277	19	19	8	2	10	3	3
Gulf	39	57	14,260	27	18	3	7	2	0	2
Escambia	39	15	296,164	18	18	11	0	16	0	0
Seminole	39	12	345,166	18	18	93	17	10	13	9
Union	41	60	13,459	17	17	11	4	16	3	3
Holmes	43.5	56	17,949	16	16	0	0	10	0	11
Wakulla	43.5	55	19,828	16	16	100	56	18	37	16
Glades	42	65	9,875	16	16	14	0	0	1	0
Osceola	43.5	25	148,712	16	16	40	6	4	2	1
Franklin	43.5	64	10,739	15	15	21	19	7	17	87
Lafayette	47	67	6,998	15	15	37	11	0	7	100
Clay	47	27	134,534	15	15	77	8	13	18	10
Saint Johns	47	31	109,894	15	15	55	3	5	3	2
Okaloosa	50	23	175,568	14	14	20	15	12	1	16
Nassau	52	38	54,538	13	13	11	5	1	0	0
Dixie	52	61	13,196	13	13	0	0	35	0	0
Pasco	52	13	321,074	13	13	17	18	9	23	24
Levy	55	46	32,416	12	12	22	12	26	0	0
Bay	55	24	147,496	12	12	0	0	12	0	0
Hardee	55	50	22,801	12	12	0	7	21	0	0
Gadsden	57	39	50,820	11	11	91	14	37	11	23
Jefferson	58.5	58	14,207	10	10	20	5	0	5	0
Hamilton	58.5	59	14,120	10	10	3	0	0	0	0
Baker	61	51	21,131	9	9	15	2	10	4	3
De Soto	61	48	27,927	9	9	26	4	19	1	0
Flagler	61	42	43,441	9	9	17	0	1	0	0
Washington	63	52	21,319	8	8	5	2	15	19	16
Liberty	64	66	7,708	7	7	30	10	6	5	10
Walton	65	43	38,304	5	5	0	0	31	1	100
Jackson	66	40	49,670	4	4	2	0	0	1	6
Hendry	67	47	30,364	3	3	1	0	0	1	0
State	NA	NA	5,913,450	28	28	44	30	22	18	30

¹ Percentages are based on Waste Composition Studies as reported by each County.

For further discussion of the data's validity, see page 6 of the Introduction.

² Official 1998 Governor's Office estimates.

³ The Legislature established a goal of 30 percent by the end of 1994 for each county with a population over 75,000.

⁴ The Legislature established a goal of 50 percent for these materials by the end of 1994 for each county.

Waste Reduction and Recycling

Introduction

Waste Reduction is an integral part of Florida’s municipal solid waste (MSW) management system. Waste reduction in Florida is measured by assessing the amount of waste that is *not* being combusted in one of the State’s waste-to-energy facilities or buried in one of its landfills. The most recognizable form of waste reduction in Florida is recycling. Section 403.706, Florida Statutes, established two goals for waste reduction and recycling:

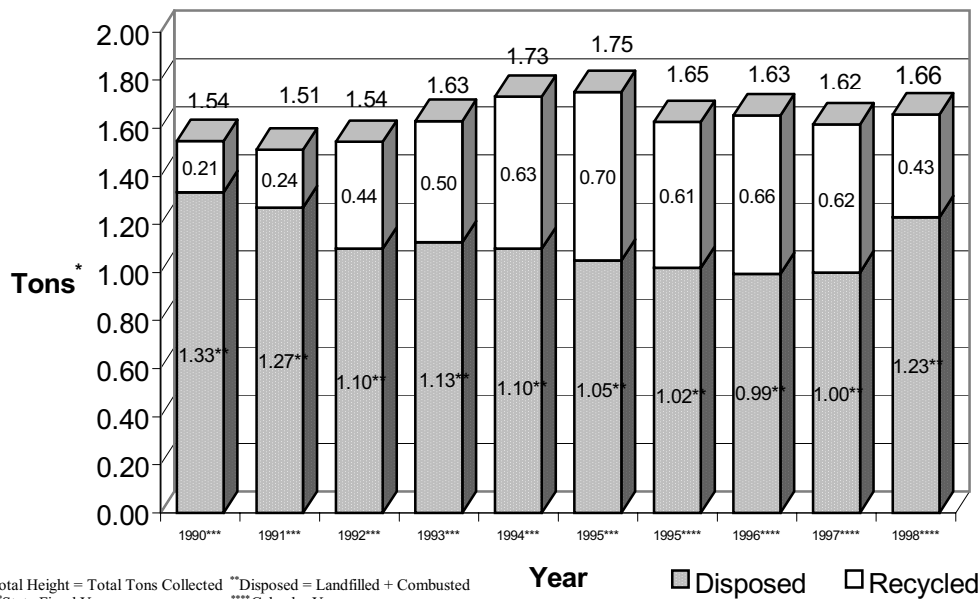
Waste reduction is measured as disposal reduction

- Counties with populations greater than 75,000 were required to meet a 30% adjusted waste reduction rate for all MSW by the end of calendar year 1994. Counties with populations below 75,000 could elect to provide residents the “opportunity to recycle” in lieu of achieving the 30% reduction goal.
- All counties were required to initiate a recycling program designed, at a minimum, to recover a majority of the newspaper, glass, aluminum cans, plastic bottles and steel cans from the solid waste stream.

Is Florida Reducing Its Waste?

When assessed on a **per capita** basis, the level of waste disposed has been steadily declining in past years (Figure 8). This year, however, the total amount of MSW being reported as disposed is greater than last year. This is primarily

Figure 8: Florida’s MSW Recycling and Disposal per Capita
(July 1, 1989 - December 31, 1998)



because the Department implemented a Construction and Demolition material reporting mechanism which provided more accurate accounting of waste material being managed than was heretofore available to the Department. This uncovered a greater amount of MSW being managed than was previously known, while the tons of materials recycled changed little in either a positive or negative direction (other than C&D material). As a result, the calculations for the percentage of materials recycled showed decreases, as did the calculations for the per capita amounts of recycling. Conversely, the calculations for the percentages of materials disposed showed increases.

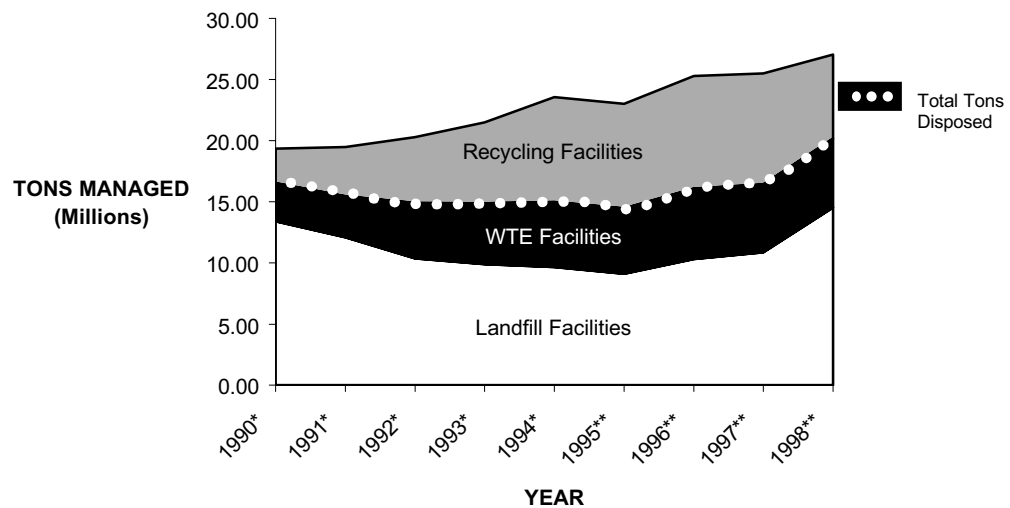
Measuring Florida’s progress towards waste reduction requires a “base year” to be determined. However, the Florida Legislature has not defined one. Using FY88-89 as the base year, only 17 counties met the 30 percent waste reduction goal by 1998. Using FY92-93 as the base year, only 13 counties met the goal in 1998. On a statewide basis, Florida has at best only achieved a per capita waste reduction rate of 27 percent.



For specific waste reduction progress, reference Table 2B in the appendices or at: <http://www.dep.state.fl.us/dwm/documents.htm>.



Figure 9: Total Tons of MSW Managed by Florida Facilities (1990 - 1997)



* State Fiscal Year / ** Calendar Year

Florida’s population increases by the amount of a city the size of Tampa each year.

When progress towards the waste reduction goal is assessed as a function of **total tons managed** (versus per capita), the State’s progress toward waste reduction becomes less clear (Figure 9). The total amount of MSW being managed by disposal facilities appears to be on the increase since 1995. This trend may simply be a function of the State’s rapid population growth. With roughly 700 new residents a per day, Florida’s waste reduction program cannot keep pace.

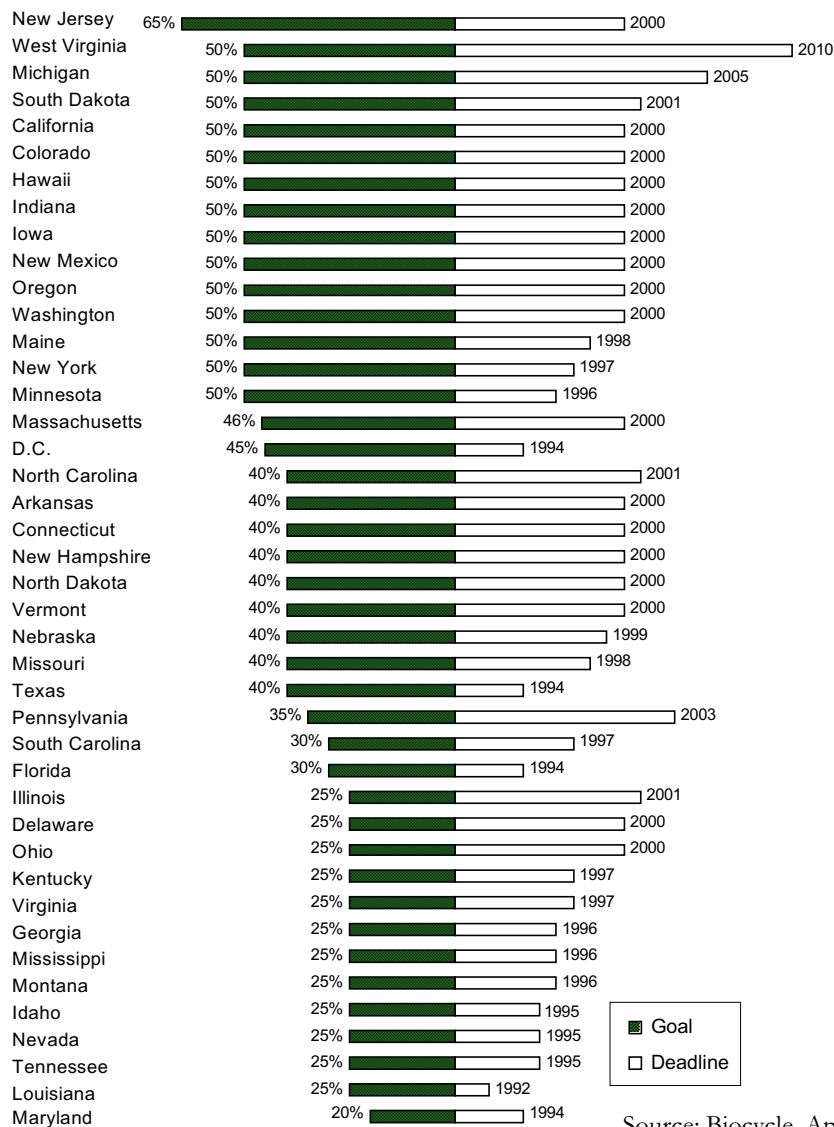
“Recycling” as a proxy for Waste Reduction

Although Florida Statute 403.706 establishes a goal for waste reduction, the language is commonly interpreted by the legislature, state agencies, local governments and the general public as a recycling rate. Because growth in recycling approximates Florida’s progress towards waste reduction, the balance of this report will focus on an analysis of the State’s recycling rates.

• **Florida’s Recycling Program**

Florida collected 24.8M tons of MSW 1998. Of that amount, 6.9M tons were recycled. Recycling is defined by Florida Statute 403.703 as any process by which solid waste, or materials which would otherwise become solid waste, are

Figure 10: State Diversion Goals and Deadlines



Source: *Biocycle*, April 1999

collected, separated, or processed and reused or returned to use in the form of raw materials or products. Recycling is an important strategy in Florida’s plan to reduce the amount of waste material being landfilled annually.

States use different methods to calculate recycling rates

Recycling goals and deadlines for 41 states and the District of Columbia are reported in Figure 10. The various state goals range from 65 percent for New Jersey to 20 percent Maryland. It should not be assumed that a higher numerical goal in one state is harder to reach or represents more recycling than a lower goal in another state. Various states use different methods of calculating progress towards their goal. For example, some states allow automobile recycling to count towards their goal, while others (including Florida) do not. Over the past several years, various states and the USEPA have attempted to standardize recycling and waste reduction accounting processes nationwide. This effort has been frustrated because numerous state statutes define solid waste terms and formulas in various ways, while the federal government has no authority to impose any particular accounting process on the states.

Table 3 (opposite page) summarizes the recycling data for 19 categories of material collected in Florida in 1998. The amount recycled through publicly-owned versus privately-owned facilities is broken out for each material type. The recycling rate for each material is shown in the far right corner. Upon first glance, several rates might appear much lower than numbers published through industry trade groups. For example, Florida reports a 22 percent recycling rate for aluminum cans, whereas the national industry estimate is 56 percent. This discrepancy might be explained by considering that the waste composition analyses of many Florida counties have not been updated in several years. This could result in an artificially high estimate of the amount of aluminum cans in the MSW stream and thus a lower recycling rate. Another explanation may be that the “bottle bill” states (those states that offer a return deposit on bottles) have such a high recycling rate that it pulls the national average up.



Floridians achieved an unadjusted recycling rate of 28% in 1998

The focus of this report is the data presented by each of Florida’s counties. That data shows the “unadjusted” recycling rate for 1998 to be 28 percent and the “adjusted” recycling rate to be 28 percent. A discussion of the distinction between adjusted and unadjusted follows.

Progress Toward Meeting the 30 Percent Recycling Goal

Florida Statute 403.706(4)(a) requires that *no more than one-half* of the 30 percent waste reduction/recycling goal can be met by a combination of certain special wastes: yard trash, white goods, C & D debris, tires, and process fuel. Process fuel is composed of pre-treated yard trash, wood and paper waste used in process boilers.

A county’s unadjusted recycling rate is calculated by dividing the weight of recycled MSW by the total weight of MSW. Recycling rates are then adjusted

Table 3: Florida Municipal Solid Waste Collected and Recycled (CY1998)

MATERIALS	MUNICIPAL SOLID WASTE COLLECTED ¹		MUNICIPAL SOLID WASTE RECYCLED				
	TONS PER YEAR	PERCENT OF TOTAL TONS PER YEAR	PUBLIC TONS RECYCLED	PRIVATE TONS RECYCLED	TOTAL TONS RECYCLED	PERCENT OF TOTAL TONS RECYCLED	MATERIAL RECYCLING RATE ² (PERCENT)
1. Newspapers	1,363,410	5.5	365,658	235,488	601,146	8.7	44.1
2. Glass	742,482	3.0	104,754	119,887	224,641	3.3	30.3
3. Aluminum Cans	155,251	0.6	13,724	20,761	34,485	0.5	22.2
4. Plastic Bottles	250,422	1.0	29,214	15,397	44,612	0.6	17.8
5. Steel Cans	281,563	1.1	58,359	26,359	84,718	1.2	30.1
6. C & D Debris	5,851,508	23.5	30,206	532,880	563,085	8.2	9.6
7. Yard Waste	3,496,082	14.1	1,054,576	641,380	1,695,956	24.7	48.5
8. White Goods	253,556	1.0	43,816	96,383	140,199	2.0	55.3
9. Tires	180,700	0.7	24,701	27,173	51,874	0.8	28.7
10. Other Plastics	927,632	3.7	1,564	10,860	12,423	0.2	1.3
11. Ferrous Metals	1,983,684	8.0	104,052	1,053,485	1,157,536	16.8	58.4
12. Non-Ferrous Metal	545,099	2.2	12,271	183,384	195,655	2.8	35.9
13. Corrugated Paper	2,177,118	8.8	74,535	908,815	983,350	14.3	45.2
14. Office Paper	746,303	3.0	21,816	103,332	125,148	1.8	16.8
15. Other Paper	2,136,057	8.6	52,644	83,250	135,894	2.0	6.4
16. Food Wastes	1,338,395	5.4	2,398	59,070	61,468	0.9	4.6
17. Textiles	614,664	2.5	1,760	26,005	27,766	0.4	4.5
18. Miscellaneous	1,814,056	7.3	150,407	184,967	335,375	4.9	3.0
19. Process Fuel ³	N/A	N/A	233,550	168,417	401,967	5.8	100.0
Total	24,857,983	100.0	2,380,004	4,497,293	6,877,297	100.0	27.7

¹ Municipal solid waste collected is the total recycled, landfilled and combusted.

² Unadjusted recycling rate. (See page 18 for discussion.)

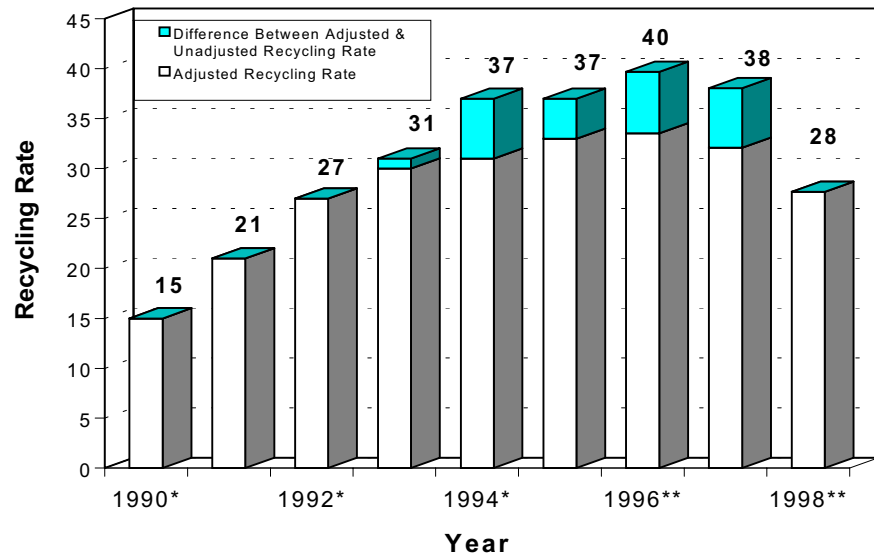
³ Process fuel is composed of yard, wood and paper waste used in process boilers.

⁴ Process fuel is not included in the total. The tonnage collected has been counted in other material categories.

Special Wastes recycling can count towards half of the goal

to reflect the statutory requirements for special wastes. The adjusted recycling rate is determined by first calculating the percent of special wastes recycled. Divide the total weight of special wastes recycled by the total weight of all MSW. If the result is less than 15 percent, no adjustment is needed. If the result is greater than or equal to 15 percent, take the unadjusted recycling rate percent, subtract the percent of special waste recycled, and add 15 percent. The result will be the adjusted recycling rate. Figure 11 represents Florida’s annual progress in recycling.

Figure 11: Annual Adjusted and Unadjusted Recycling Rate (CY 1998)



After a dramatic increase from 1989 to 1995, and a leveling off of the rates from 1996 to 1997, Florida’s adjusted and unadjusted recycling rate has dropped to 28 percent. As far as the Department can tell, this drop is attributable more to improved accounting methods than any real change in recycling activities throughout the state. As mentioned earlier, the Department implemented a Construction and Demolition reporting mechanism which allowed for more accurate accounting of material being managed. The C&D reporting mechanism uncovered a greater amount of MSW being managed, which resulted in recycling rates decreasing and disposal rates increasing.

All counties under 75,000 population are exempted by statute from having to reach the 30 percent recycling goal. Of the 35 counties over 75,000 population, only 9 met the recycling goal in 1998. Eleven more counties reported rates between 25 and 28 percent.



For county specific information, reference Table 5A in the appendices or at: www.dep.state.fl.us/dwm/documents.htm

Figure 12: Recycling in Florida's Counties (CY 1998)

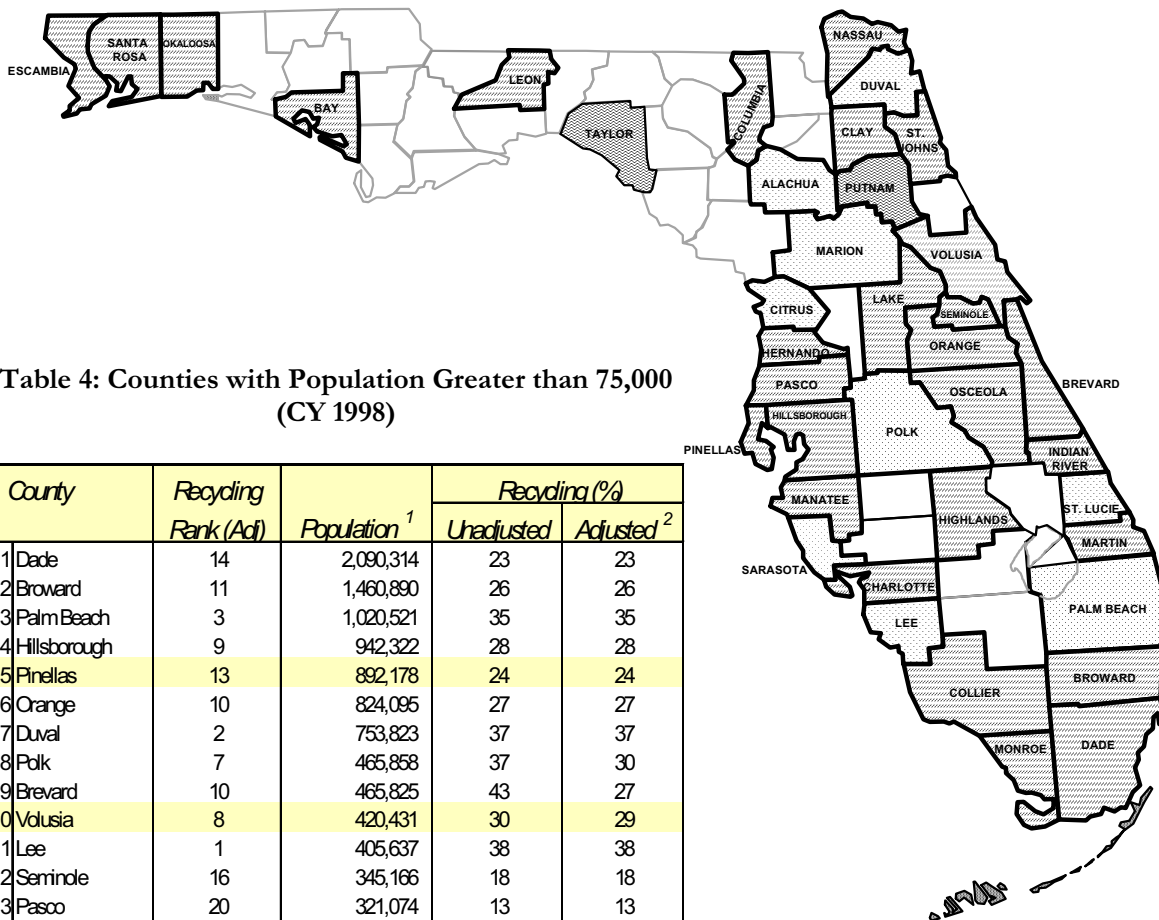






Table 4: Counties with Population Greater than 75,000 (CY 1998)

County	Recycling Rank (Adj)	Population ¹	Recycling (%)	
			Unadjusted	Adjusted ²
1 Dade	14	2,090,314	23	23
2 Broward	11	1,460,890	26	26
3 Palm Beach	3	1,020,521	35	35
4 Hillsborough	9	942,322	28	28
5 Pinellas	13	892,178	24	24
6 Orange	10	824,095	27	27
7 Duval	2	753,823	37	37
8 Polk	7	465,858	37	30
9 Brevard	10	465,825	43	27
10 Volusia	8	420,431	30	29
11 Lee	1	405,637	38	38
12 Seminole	16	345,166	18	18
13 Pasco	20	321,074	13	13
14 Sarasota	4	316,023	34	34
15 Escambia	16	296,164	18	18
16 Manatee	12	247,028	32	25
17 Marion	5	242,357	32	32
18 Leon	11	233,232	39	26
19 Alachua	3	211,403	35	35
20 Collier	15	210,095	22	22
21 Lake	10	196,073	27	27
22 Saint Lucie	4	183,222	40	34
23 Okaloosa	18	175,568	14	14
24 Bay	21	147,496	12	12
25 Osceola	19	148,712	16	16
26 Charlotte	11	133,655	26	26
27 Clay	18	134,534	15	15
28 Hernando	10	125,008	27	27
29 Martin	10	119,370	37	27
30 Citrus	6	112,424	31	31
31 Saint Johns	18	109,894	15	15
32 Indian River	14	106,690	40	23
33 Santa Rosa	14	107,814	27	23
34 Monroe	14	85,646	24	23
35 Highlands	15	80,458	22	22

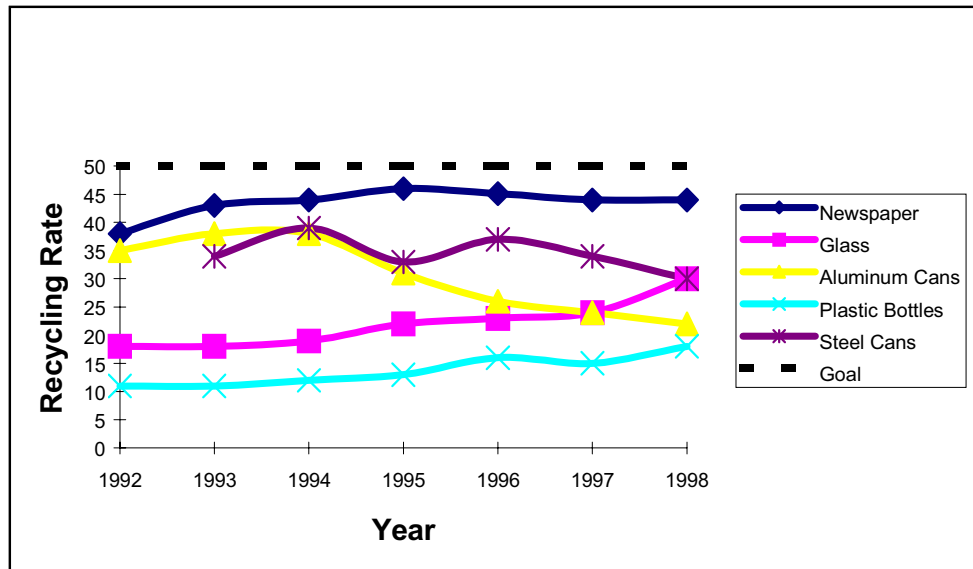
-  Counties with a population >75,000 which have met the 30% recycling goal.
-  Counties with a population > 75,000 which have not met the 30% recycling goal.
-  Counties with a population < 75,000 which have recycling rates of 30% or greater.
-  Counties with a population < 75,000 which have recycling rates < 30%.

1 1998 populations used by FDEP to allocate Recycling and Education (R&E) grants for the 1999-2000 grant cycle.
 2 The Legislature established a goal of 30 percent by the end of 1994 for counties with a population over 75,000.

Progress Toward Meeting the 50% “Minimum 5” Goal

Like the 30 percent waste reduction/recycling goal, there is some disagreement as to how the “Minimum 5” goal is to be interpreted. The law requires that local programs be *designed to* recover the majority of the newspaper, glass, plastic bottles, aluminum cans and steel cans (a.k.a. Minimum 5) from the waste stream. One interpretation of the wording of this goal is that the only way to know if a program is designed to reach the goal is when it is actually reaching it.

Figure 13: Florida’s Progress Towards Meeting the “Minimum 5” Goal



No counties have met the entire “Minimum 5” goal

In 1998, none of the 67 counties met the 50 percent recycling goal for all of the Minimum 5 materials. However, 33 percent of all the counties have achieved the goal for one or more materials, 16 percent for two or more materials. In 1998, only 18 counties met the goal for newspaper, six counties met the goal for steel cans, four counties met the goal for aluminum cans, seven counties met the goal for glass, and no county met the goal for plastic bottles. Figure 13 shows Florida’s overall progress toward achieving the 50 percent recycling goal for each material type since 1992.



For county specific information, reference Table 8B at: <http://www.dep.state.fl.us/dwm/documents.htm>

Materials Recycled

“Other plastics” is least recycled material

Florida accumulated data on 18 categories of materials collected for recycling for 1998. See Figures 14 and 15. The highest individual material recycling rates were yard trash at 26 percent, ferrous metals (not including steel cans or white goods) at 18 percent, corrugated paper at 15 percent, and newspaper at 9 percent. The lowest recycling rates were for “other plastics” at 0.14 percent, textiles at 0.31 percent, food waste at 0.68 percent, and “other paper” at 1.50 percent.