

New York State
Department of Environmental Conservation

Division of Solid & Hazardous Materials

**The New York State
Recycling Bulletin
1999 Edition - Executive Summary**

GEORGE E. PATAKI, *Governor*

JOHN P. CAHILL, *Commissioner*

EXECUTIVE SUMMARY

The Recycling Bulletin 1999 Edition

The Recycling Bulletin is updated and published annually by the New York State Department of Environmental Conservation (NYSDEC), Division of Solid & Hazardous Materials, to quantify materials recovery by municipal recycling programs in the State.

In 1987, the NYSDEC issued the first State Solid Waste Management Plan which established a State goal to reuse/recycle 40-42 percent of the solid waste generated in New York State by 1997. Through the diligent efforts of local governments and the private sector, during the 1997 calendar year, New York State achieved its goal by reusing/recycling an estimated 42 percent of the solid waste generated in the State. In 1998, New York State once again recycled an estimated 42 percent of the solid waste generated.

Factors contributing to the level of reuse/recycling achieved in our State include: recycling educational materials, workshops and programs; composting; beneficial use of materials; development of markets for recycled materials; local, nonprofit and private recycling projects; and the operation of recycling facilities. Since 1988, New York State and local governments have, in partnership, invested more than \$202 million in waste reduction, recycling and household hazardous waste management projects. DEC has administered State assistance grant programs from which over \$96 million in contracts for recycling has been awarded through March 9, 2000. Of the \$96 million, \$13.7 million has been awarded under the Clean Water/Clean Air Bond Act of 1996 for municipal recycling projects, including the purchase of equipment and the construction of structures needed for a municipal recycling program.

Summary of Recycling in 1998

During 1998, New York State generated an estimated **29.65** million tons of solid waste, of which approximately **12.55** million tons of various materials were reportedly recycled as follows:

- 7.42 million tons - materials as reported by municipalities (see Figure 4);
- 1.63 million tons - American Forest & Paper Association (waste paper);
- 0.49 million tons - Port Authority of New York/New Jersey (scrap metal);
- 0.22 million tons - NYS Returnable Container Act; and
- 2.79 million tons - Beneficial Use Determinations (BUDs);
- 12.55 million tons** - TOTAL Recycled Materials

These figures do not include wastes that may be recycled by nonregulated segments of the private sector, rather only those facilities that are permitted or registered with the Department.

Beneficial use determination figures were determined through a comprehensive written survey to 298 program participants, with 208 responding.

Figures 1 through 4 provide yearly comparisons of recycling information. More detailed information is available on pages 14 through 87 of the *Recycling Bulletin*.

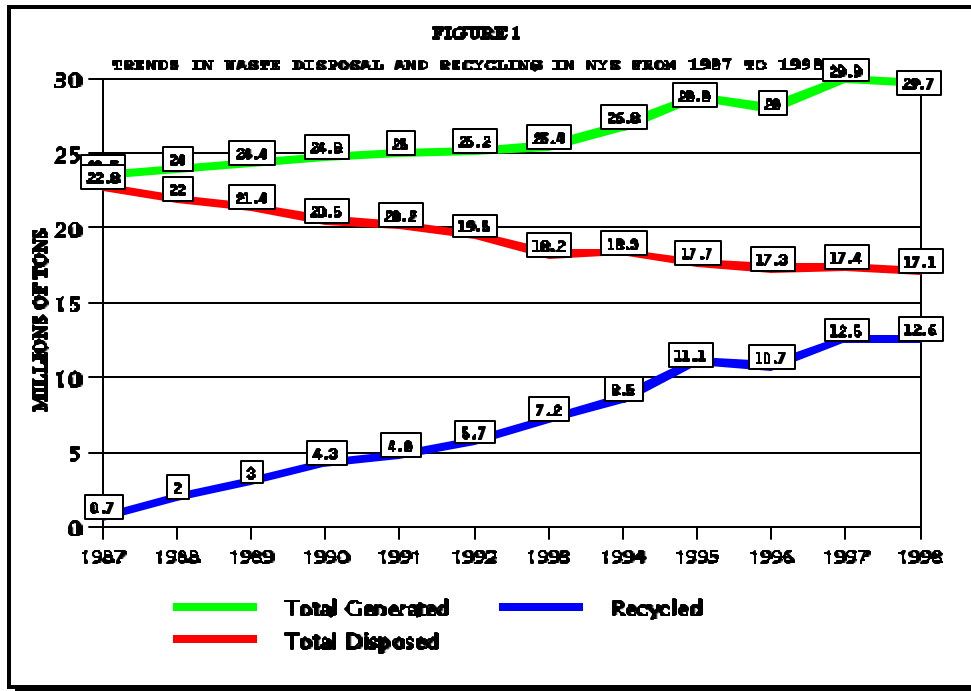


Figure 1. *Trends in Waste Disposal and Recycling*, shows the tonnages for waste disposal and recycling from 1987 through 1998. Materials disposed plus materials recycled equal the total waste generated.

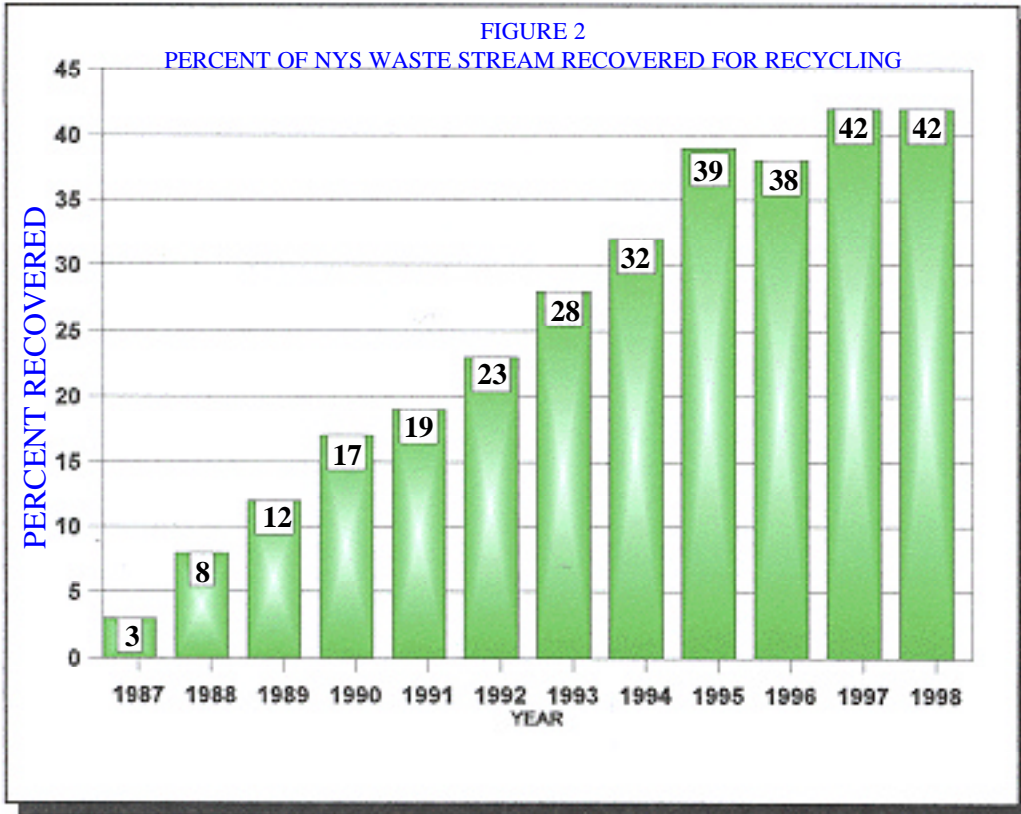


Figure 2. *Percent of NYS Waste Stream Recovered for Recycling*, depicts the recycling rates in percentages from 1987 to 1998.

Figure 3. *Percentage by Weight Recycled*, displays each specific material recycled based on the total amount of materials being recovered from the waste stream in 1998 as reported by New York State planning units.

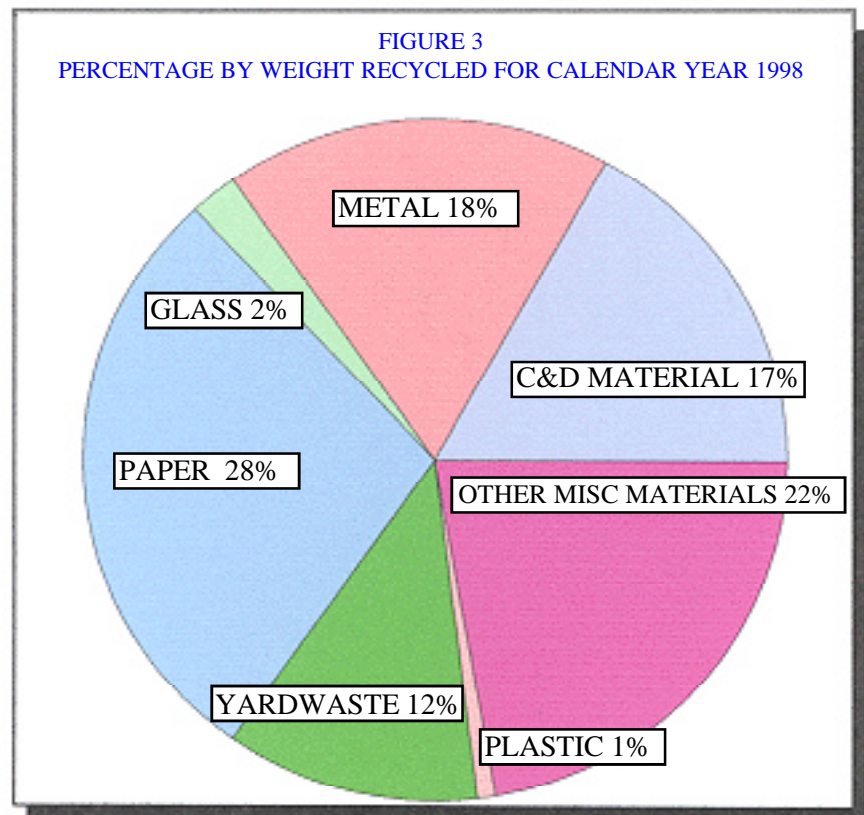


FIGURE 4
MATERIALS RECYCLED (TONS PER YEAR)
(AS REPORTED BY NEW YORK STATE MUNICIPALITIES)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
Paper	314,453	563,195	799,828	1,167,571	1,398,464	1,874,721	2,023,403	2,103,598	2,053,889	12,299,122
Yard Waste	149,329	392,788	467,858	590,301	649,568	557,625	742,334	900,544	915,405	5,365,752
Metals	175,177	293,620	408,100	493,674	552,274	1,100,964	1,184,615	1,368,692	1,424,868	7,001,984
C&D	94,730	48,849	451,488	516,916	598,448	1,346,198	1,320,096	1,236,203	1,179,803	6,792,731
Glass	31,302	103,380	139,395	208,992	78,433	183,509	179,012	180,636	166,871	1,271,530
Plastics	4,145	17,843	22,571	55,992	50,559	57,450	50,330	49,804	40,451	349,145
Tires	9,954	11,754	13,628	14,674	15,180	24,721	14,710	22,824	17,177	144,622
Other	-	-	497,132	1,151,880	1,557,074	802,739	1,092,779	1,569,815	1,616,391	8,287,810
TOTAL	779,090	1,431,429	2,800,000	4,200,000	4,900,000	5,947,927	6,607,279	7,432,116	7,414,855	41,512,696

Figure 4. Materials Recycled, displays the amount of materials recycled each year between 1990 and 1998. Totals identify the cumulative amount of materials recycled, as reported by New York State municipalities from 1990 through 1998.

Recommended Actions and Directions

Much has been accomplished in the areas of waste reduction, reuse and recycling, but there is room to do more. The following activities will help us continue to meet and exceed goals:

- S Target higher recovery for specific components of the waste stream, such as glass, paperboard, textiles and organic materials, and improve quality and participation rates;
- Continue initiatives to substantially increase backyard composting;
- Target educational efforts toward specific sectors of the community such as government agencies, schools, industrial and commercial entities, offices, institutions, food service establishments, etc.;
- S Continue to promote the benefits of reducing, reusing, and recycling wastes by New York State residents and businesses. Highlight the successes and learn from the past;
- Encourage and promote pay-as-you-throw programs;
- S Continue to work with others to maximize waste reduction, reuse and recycling opportunities;
- Continue to work on enhancing, expanding and creating markets for recyclable materials.
- S Encourage and promote the remanufacturing of products. The identification of such efforts and the transfer of technology will be important elements of our waste reduction and recycling program; and
- Encourage businesses to make a commitment to source reduce and reuse. This can provide a competitive advantage to businesses by helping them save money through reduced purchases, increased efficiency, greater energy conservation and a reduction in the amount of waste that needs collection and disposal.

If you wish to receive a copy of the 1999 edition of the Recycling Bulletin, or if you would like more information about recycling, please contact:

Bureau of Waste Reduction & Recycling
Division of Solid & Hazardous Materials
New York State Department of Environmental Conservation
50 Wolf Road - Room 212
Albany, NY 12233-7253
(518) 457-8829
Fax: (518) 457-1283

The Recycling Bulletin

1999 Edition

(COVERS CALENDAR YEAR 1998)

INTRODUCTION

The Recycling Bulletin is intended to provide the most up-to-date information on recycling in New York State in a functional format. The Bulletin is generated through a database developed and maintained by the Bureau of Waste Reduction & Recycling, Division of Solid & Hazardous Materials, NYSDEC. The municipal recycling data is organized by county or solid waste management planning unit. Summaries of recycling information have also been provided in the Executive Summary for a quick overview of recycling progress Statewide. Additional recycling program information, such as data on local programs, is available from the Bureau of Waste Reduction & Recycling or local recycling contacts, a listing of which is provided in the back of the Bulletin.

We thank municipal recycling coordinators and other local solid waste program officials who have responded to our request for municipal recycling program information. We look forward to a continuing cooperative relationship, as we strive together to improve upon our waste reduction and recycling achievements.

The recycling data in this report is a compilation of the materials reported to be recovered from the municipal solid waste stream through municipal recycling programs. A complete picture of recycling in New York State is obtained when this municipal recycling data is combined with other sources of data, such as from the Port Authority of New York and New Jersey (PANY/NJ); the American Forest & Paper Association (AFPA); New York State's Returnable Container Act (NYSRCA) Survey of Deposit Initiators; and Beneficial Use Determinations (BUDs) approved by this Department in compliance with 6 NYCRR Part 360.

To compile data from various sources, certain assumptions have to be made. For the data received from the Port Authority and beneficial use determinations, we have made the following assumptions:

- 1) All materials shipped from the Port of Ogdensburg and the Port of Buffalo originated within New York State. The materials are primarily lower grades of waste papers. The high costs of transportation, combined with the desire of most municipalities to deal with local markets, make it reasonable to assume that materials recovered for

recycling in New York State were used as secondary materials in the State to the extent that the capacity for such utilization exists. We assumed that only the remainder were exported.

- 2) Based on information provided by PANY/NJ, we assumed that 70 percent of the recovered recyclables shipped from the Port Authority of New York originated within New York State.
- 3) All materials that were recovered for recycling in New York State were used as secondary materials in the State to the extent that the capacity for such use exists. Any excess materials were considered to be exported as reported by the PANY/NJ and AFPA. To determine the amounts unaccounted for by the municipal collection programs (i.e., collected and/or utilized by private concerns), the tonnages reported by municipalities were deducted from the tonnages exported. If we knew material was being used in the State, credit was given for that use. Since we did not know what percentage of the materials reported as exports by PANY/NJ and AFPA was also reported by municipalities, this assumption eliminates any potential “double-counting.” This results in a conservative estimate that does not inflate the recycling rate.
- 4) Prior to 1994, the estimates of materials recovered through the BUD program were rough estimates only. Numbers are now based on a written survey conducted by Department staff. For this report, 298 BUD program participants were contacted with 208 participants responding.

An estimated total of 29.65 million tons of solid waste was generated in New York State during 1998. Of this total, approximately 12.55 million tons of materials were determined to be recovered for recycling in 1998, including approximately 0.49 million tons of ferrous metal scrap exported internationally through the PANY/NJ; 1.63 million tons of newsprint/waste paper exported internationally as reported by the AFPA; 2.79 million tons of material reused through the BUD program; and 0.22 million tons of material recovered under the NYSRCA, resulting in a 42 percent recycling rate. Of the remaining 17.1 million tons of solid waste generated in New York State, it was reported that 9.4 million tons were landfilled; 3.6 million tons went to waste-to-energy facilities; and 4.1 million tons were exported.

In September 1997, the United States Environmental Protection Agency (USEPA) published *Measuring Recycling: A Guide for State and Local Governments*, intended to provide a consistent methodology to compare recycling achievements of states and localities. This method differs from that developed by the NYSDEC in 1991. New York State continues to use its current methodology which better serves to accurately track and

measure the progress of recycling in New York State. Further information on the application of USEPA's standard methodology to New York and nine other northeastern states can be found on the Northeast Recycling Council's web site at www.nerc.org.

The Department of Environmental Conservation remains committed to the continued improvement of reduction/reuse/recycling programs within New York State to further reduce the amount of municipal solid waste requiring disposal. With the diligent efforts of local recycling coordinators and recycling businesses, the Department remains confident that it will continue to meet these valuable goals.

Stephen Hammond, P.E.
Director
Division of Solid & Hazardous Materials