

United States
Environmental Protection
Agency

Solid Waste and
Emergency Response
(5306W)

EPA530-R-99-035
August 1999
www.epa.gov/wastewise



WasteWise Fifth-Year Progress Report





Fifth-Year Progress Report

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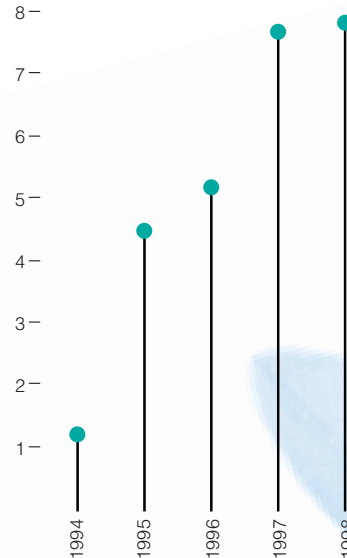
WASTE REDUCTION RESULTS

1999 marks the fifth year of WasteWise, EPA's voluntary partnership program to reduce municipal solid waste. Since the program's inception in 1994, WasteWise membership has grown to more than 900 businesses, government agencies, universities, hospitals, and other organizations committed to cutting costs and conserving natural resources through solid waste reduction.

OVERALL WASTE REDUCTION INCREASES SIX-FOLD FROM 1994

During the first 5 years of the WasteWise program, waste reduction (waste prevention and recycling collection) reported by partners has increased six-fold. Cumulatively, partners have reduced more than 26 million tons of municipal solid waste. In 1998, partners reduced more than 7.8 million tons of waste through waste prevention and recycling activities, a slight increase over 1997 results. This outcome continues the upward trend in waste reduction since the program began in 1994.

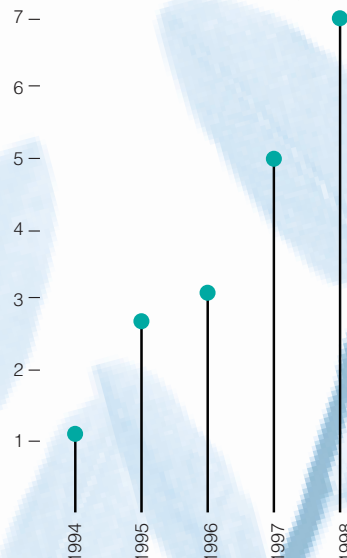
OVERALL WASTE REDUCTION
(IN MILLION TONS)



INCREASED WASTE REDUCTION LEADS TO CORRESPONDING GREENHOUSE GAS REDUCTIONS

In addition to its other benefits, waste reduction cuts emissions of greenhouse gases into the atmosphere by reducing the amount of fossil fuels burned, reducing the amount of methane released from landfills, and leaving more trees to absorb carbon dioxide from the atmosphere. In 1998 alone, our partners' actions reduced emissions by an estimated 7 million metric tons of carbon equivalent (MTCE), the standard unit of measure for greenhouses gas emissions.

GREENHOUSE GAS REDUCTIONS
(IN MILLION METRIC TONS
OF CARBON EQUIVALENT)



Since 1994, WasteWise partners have eliminated more than 2.4 million tons of material through waste prevention.

Since the program's inception, WasteWise partners have prevented the emission of an estimated 19 million MTCE—equivalent to taking 14 million cars off the road for 1 year. **General Motors Corp.** made the single largest contribution to the WasteWise greenhouse gas reduction total in 1998. Other large contributors in 1998 included the **Anheuser-**

Busch Companies, Louisiana-Pacific Corp., and Crown Cork & Seal Co., Inc.

EPA developed the Waste Reduction Model (WARM) to help organizations estimate greenhouse gas reductions from their waste reduction activities. See <www.epa.gov/mswclimate> for more information.

WASTE PREVENTION FIRST

*E*ven simple waste prevention actions can help improve an organization's bottom line and help justify waste reduction programs to management.

- **AIRPAX**, for example, conserved more than 10 tons of paper and saved \$5,500 in 1998 by removing the names of people who no longer worked for the company from bulk mail mailing lists and by eliminating duplicate mailings.
- **Alcatel USA** reused 10 tons of polystyrene shipping containers, saving \$550,000. By using CD-ROM-based rather than paper-based manuals, the company saved paper and an additional \$1.2 million.
- **Seattle University** composted nearly 200 tons of food and yard waste, sold 4 tons of furniture and office supplies for reuse, and eliminated more than 2.5 tons of paper cup waste by distributing reusable mugs to students.
- **First National Bank & Trust Co. of the Treasure Coast** eliminated more than 3 tons of paper by expanding Internet-based transactions and mailings and computer-based manuals, reports, and procedures. The bank also donated more than 1.5 tons of computers and office furniture in 1998.

TOP WASTE PREVENTION MATERIALS

The most popular materials targeted and sample activities conducted for waste prevention by partners in 1998 included:

Office supplies or equipment

- Double-sided copying to reduce office paper.
- Donating computers to schools.

Transport packaging

- Reusing wood pallets.
- Replacing corrugated containers with reusable plastic containers.

Manufacturing supplies, equipment, or raw materials

- Improving manufacturing processes to reduce raw material waste.

Cafeteria supplies

- Switching to reusable cafeteria trays and plates.
- Composting food scraps.

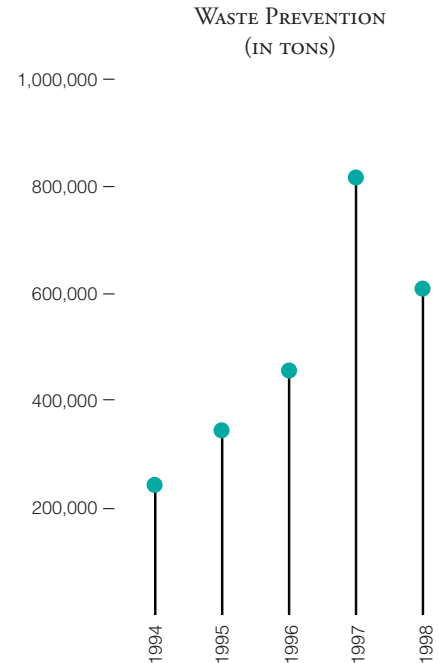
Manufactured products

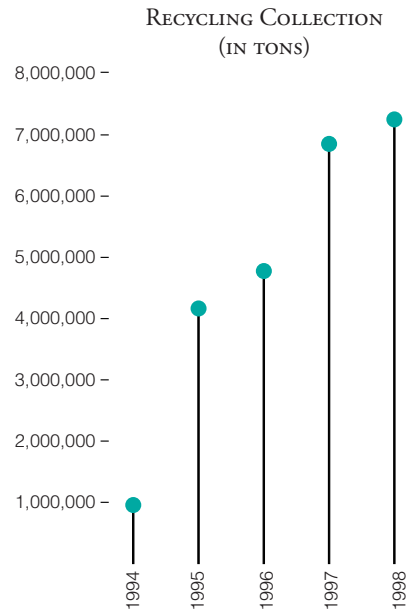
- Lightweighting products.
- Remanufacturing used products.

WASTE PREVENTION DIPS, BUT LONG-TERM TREND CONTINUES UPWARD

Since 1994, WasteWise partners have eliminated more than 2.4 million tons of material through waste prevention—efforts taken to abolish waste *before* recycling, such as removing unnecessary packaging or refurbishing products for reuse. In 1998, partners reported preventing 611,000 tons of materials from entering the waste stream. Although this represents a 1-year decrease from 1997, the overall waste prevention trend across the full 5 years is consistently upward. (Substantial one-time activities by a few partners caused a spike in the 1997 waste prevention results.)

Waste prevention activities result in real cost savings for partners including, in 1998, \$20 million in avoided disposal fees.¹ Moreover, WasteWise estimates that avoided paper and corrugated purchasing costs for all reporting partners could be as high as an additional \$20 million.²





RECYCLING COLLECTION ON THE RISE

Recycling collection by WasteWise partners increased by 396,000 tons in 1998 for a total of 7.2 million tons, continuing the annual growth trend since 1994. In fact, partners reported recycling more than 7.5 times the amount of material they were recycling when WasteWise began—24 million tons over all 5 years. Collecting recyclables helped partners save \$244 million in avoided disposal fees in 1998.³

Top Five Materials Collected for Recycling

What materials do partners recycle most often? In 1998, partners most often recycled (by number of partners):

- Mixed Paper
- Corrugated
- Aluminum
- High-Grade Paper
- Steel

Newly Added Materials

Several partners also reported recycling the following less-commonly recycled products for the first time in 1998:

- Building Materials
- Carpets and Rugs
- Stretch Wrap
- Toner Cartridges
- Transparencies
- Yarn

PARTNERS CLOSE THE LOOP BY BUYING AND MANUFACTURING RECYCLED

WasteWise partners reported purchasing 458,000 tons of products with recycled content in 1998, worth \$4.7 billion. Partners conducted a variety of activities from purchasing new products with recycled content to increasing spending on products made from recycled materials. **Anheuser-Busch Companies**, for example, increased purchases of recycled-content paper to 1,635 tons as part of its WasteWise commitment. Manufacturers focused on ways to use recycled materials in their products or increase existing levels of recycled materials. **Marko Foam Products**, for example, increased the postconsumer recycled content of its polystyrene packing peanuts from 5 percent to 25 percent. The company manufactured more than 6 tons of this material in 1998.

BATTELLE DEVELOPS WINNING BUY-RECYCLED STRATEGY

Battelle Memorial Institute continually seeks out products with recycled content that meet the organization's "CAP" requirements (reasonable Cost, Availability, and good Performance). Whenever possible, Battelle drives down the cost of recycled products by soliciting competitive bids for products they purchase in large quantities, by establishing preferred customer agreements with key suppliers, and by allowing staff to purchase products from other suppliers to maintain competition.

In addition to these ongoing activities, each year Battelle targets a particular commodity for improvement in recycled-content purchasing. Battelle focused on remanufactured toner cartridges in 1997 and recycled construction products in 1998.

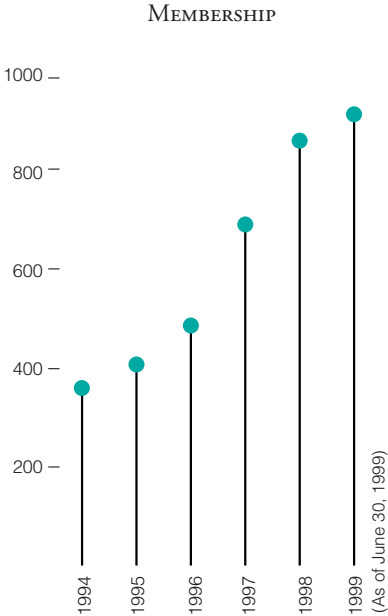
In total, the organization purchased 96 tons of products with recycled content in 1998, worth \$534,000.

WASTEWISE MEMBERSHIP AND PROGRAM ACCOMPLISHMENTS

WasteWise membership continues to grow, including more and more businesses, governments, and institutions each year. For each of these partners, the WasteWise team at EPA provides access to many services including technical assistance, publications, networking opportunities, electronic resources, and recognition for outstanding accomplishments.

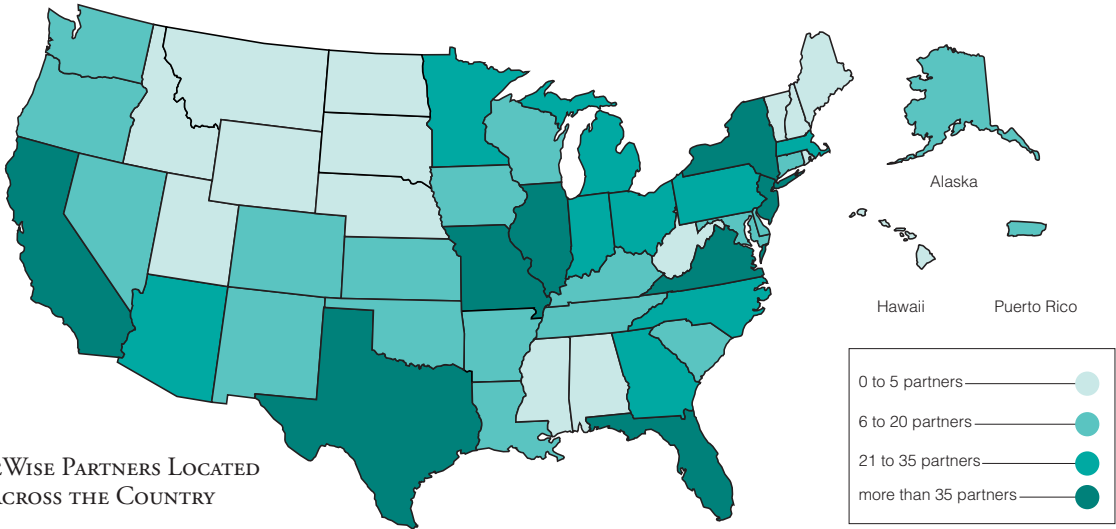
WASTEWISE MEMBERSHIP
CONTINUES TO CLIMB

WasteWise membership increased by nearly 20 percent in 1998. A total of 918 partners joined the program through June 30, 1999. Membership continues to increase in 1999 through WasteWise marketing efforts and through the work of 81 WasteWise endorsers who have committed to spread the WasteWise message and recruit new partners.



WasteWise PARTNERS LOCATED
ACROSS THE COUNTRY

Businesses, institutions, and governments from all states, the District of Columbia, and Puerto Rico participate in the WasteWise program.



THE YEAR IN REVIEW: WASTEWISE ACCOMPLISHMENTS

WasteWise initiated new projects in 1999 to complement technical assistance and recognition services. WasteWise piloted a new program to visit a limited number of partners at their facilities to help them measure results and identify new waste reduction opportunities. WasteWise also kicked off a Transport Packaging Challenge and developed the *WasteWise Transport Packaging Reduction Guide*. Together the Challenge and the *Guide* will help partners tap into the significant savings potential associated with packaging reduction.

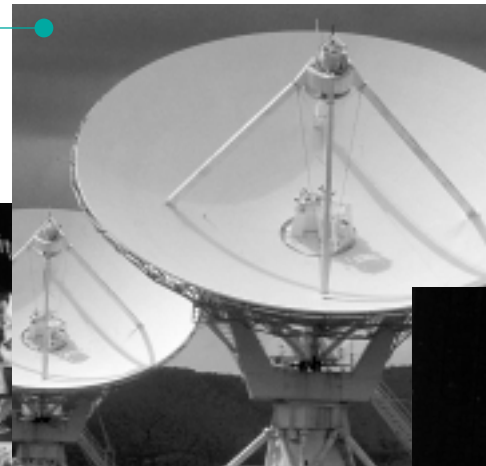
EPA also developed other tools to help partners measure progress, including the WARM model, a software application designed to help organizations estimate greenhouse gas reductions from their waste reduction activities.



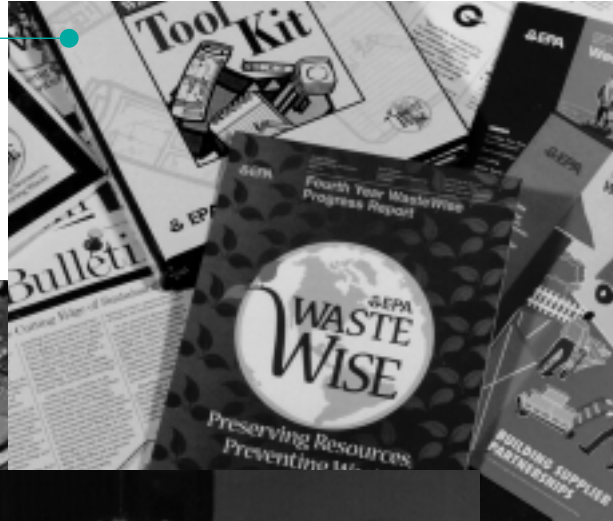
WasteWise sponsored satellite forums enabling partners from across the country to share waste reduction results. The 1998 satellite forum highlighted waste prevention, while the 1999 forum focused on buying recycled products.



WasteWise attended conferences and trade shows across the country in 1998 and 1999 promoting the WasteWise program to businesses, governments, and institutions.



WasteWise informed partners about waste reduction issues through our publications, including the bimonthly *WasteWise Bulletin*, semi-annual *WasteWise Update*, *WasteWise Toolkit*, and other publications.



WasteWise continued sponsoring Regional Forums and Partner Network Meetings across the country. Meeting locations included Columbus, Boston, San Francisco, and New York.

More than 100 people from 60 organizations attended the WasteWise Awards and Recognition Ceremony and National Forum held on September 9 through 10, 1998, in Washington, DC. EPA recognized 8 Partners of the Year and 20 Program Champions for their outstanding waste reduction achievements and welcomed new partners.





1999 WASTEWISE AWARD WINNERS

Following a competitive award process,

WasteWise named 13 Partners of the Year in 10 award categories. WasteWise 1999 Partners of the Year are those partners who were judged to have accomplished and reported the most impressive waste reduction results for 1998. In addition, WasteWise recognized 20 Program Champions who made noteworthy accomplishments in waste prevention, recycling collection, and buying or manufacturing recycled-content products in 1998.

1999 PARTNERS OF THE YEAR

**VERY LARGE CORPORATION
(20,000+ EMPLOYEES)**

Eastman Kodak Company



Eastman Kodak, headquartered in Rochester, New York, sold 4,200 tons of coated paper liners for reuse as label backings, saving \$250,000. Kodak also conserved 1,550 tons of plastic and printed circuit boards by increasing the return of its FUNSAVER cameras, allowing more parts to be reused for the manufacture of new cameras.

1998 WasteWise Accomplishments

Waste Prevented	23,000 tons
Recycling Collection	47,900 tons
Recycled-Content Purchases	10,650 tons
Manufactured Recycled-Content Products	20,500 tons
Total Cost Savings	\$3,000,000

**LARGE CORPORATION
(1,000 TO 19,999 EMPLOYEES)**

Herman Miller, Inc.



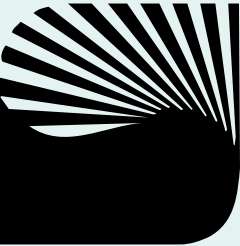
Herman Miller, a Zeeland, Michigan, furniture manufacturer, reduced the volume of packaging materials for finished goods by switching to returnable packaging and changing packaging design. This activity resulted in the reduction of 270 tons of corrugated containers and boxes and nearly 8 tons of polystyrene packaging filler, saving \$422,000. Herman Miller also eliminated 40 tons of panel textiles and 27.5 tons of textiles for chairs through a lifecycle analysis process and saved \$407,300.

1998 WasteWise Accomplishments

Waste Prevented	725 tons
Recycling Collection	10,273 tons
Recycled-Content Purchases	37,423 tons
Total Cost Savings	\$91,059,300

MIDSIZE CORPORATION
(500 TO 999 EMPLOYEES)

Southern Mills, Inc.



Southern Mills, a textile company of 575 employees in Senoia, Georgia, manufactures thermal protective fabrics with end-use applications such as outer shells of firemen's turnout coats and garments used in the petroleum, electrical, and gas utilities industries among other products. Southern Mills saved 8.5 tons of corrugated material by switching to reusable plastic cones and tubes and by initiating a plastic tube return program with customers. The company also reduced 1,100 pounds of coated paper drums by switching to a tote and delivery system for dyes and chemicals.

1998 WasteWise Accomplishments

Waste Prevented	10 tons
Recycling Collection	450 tons
Recycled-Content Purchases	7.5 tons
Total Cost Savings	\$9,500

Schlegel Systems, Inc.



Schlegel Systems, a Rochester, New York, manufacturer of foam weather stripping, EMI shielding devices, and plastic trim for automobiles, worked with suppliers to reuse incoming pallets for outgoing shipments, conserving more than 12.5 tons of wood pallets and \$6,500. The company also conserved more than 20 tons of fiber board, steel, plastic, and boxboard by switching from single-use cores and spools to reusable materials, saving more than \$13,000.

1998 WasteWise Accomplishments

Waste Prevented	36 tons
Recycling Collection	570.5 tons
Total Cost Savings	\$22,850

SMALL BUSINESS (1 TO 499 EMPLOYEES)

Guardian Industries—Ligonier Plant



Guardian Industries' Ligonier Plant in Ligonier, Indiana, a manufacturer of vehicle glass and exterior trim systems for the automotive industry, eliminated more than 2 tons of textiles from the waste stream by laundering intact used gloves for reuse and instituting a glove return program. These activities resulted in a cost saving of \$39,600. The company also switched from paper towels to reusable wiping clothes, saving 1.5 tons of paper towels and \$7,200 in purchasing costs. Guardian also prevented the incineration of 100 tons of scrap wood by reusing it as animal bedding.

1998 WasteWise Accomplishments

Waste Prevented	107 tons
Recycling Collection	125 tons
Recycled-Content Purchases	2 tons
Total Cost Savings	\$87,900

The Seydel Companies



The Seydel Companies in Pendergrass, Georgia, manufacture chemicals used in textile processing including fabric preparation, dyeing, printing, and finishing, and garment laundering and finishing. The organization and its 100 employees reduced 500 pounds of copier paper and saved \$500 by encouraging double-sided copying, setting up phone lists and edits on e-mail, and using overheads in meetings instead of distributing handouts. The Seydel Companies also conserved 500 pounds of catalogs by contacting vendors who mail multiple catalogs and circulating magazines and articles instead of making personal copies.

1998 WasteWise Accomplishments

Waste Prevented	4 tons
Recycling Collection	191 tons
Manufactured Recycled-Content Products	120 tons
Total Cost Savings	\$4,150

FEDERAL GOVERNMENT

U.S. Postal Service—Northeast Area



The U.S. Postal Service Northeast Area's 74,135 employees in 3,114 post offices throughout the New England states and upstate New York continued to demonstrate their strong commitment to reducing the generation of undeliverable standard mail throughout 1998. The Postal Service reduced 1,087 tons of bulk mail and saved \$76,000 by promoting the national change of address program to major mailers. It also reduced the generation of solid waste at 25 vehicle maintenance and 29 processing and distribution facilities by 50 percent over fiscal year 1992 generation rates.

1998 WasteWise Accomplishments

Waste Prevented	1,087 tons
Recycling Collection	44,175 tons
Recycled-Content Purchases	415 tons
Total Cost Savings	\$2,378,700

STATE GOVERNMENT

State of Ohio



The State of Ohio, with 56,000 employees participating statewide, reduced paper usage by 10 tons and saved \$47,700 through numerous paper prevention activities such as database development and form consolidation. Other accomplishments, spearheaded by recycling coordinators in Columbus, Cleveland, Akron, and Toledo, included refurbishing 18 tons of toner cartridges and 94.5 tons of computers.

1998 WasteWise Accomplishments

Waste Prevented	123 tons
Recycling Collection	1,487 tons
Total Cost Savings	\$47,900

Tennessee Department of Correction



The Tennessee Department of Correction employs 5,776 people and supervises more than 16,000 inmates throughout its 13 prisons. Many of the inmates participate in the department's waste prevention activities. The inmates helped eliminate 13 tons of computer waste by refurbishing and repairing 475 PC units at three computer repair centers located in the prisons. The department also conserved nearly 28 tons of textiles by repairing inmate clothing, saving more than \$100,000 in avoided new clothing purchases. Activities also included composting 837 tons of organic materials and using the compost on the grounds of the department's buildings.

1998 WasteWise Accomplishments

Waste Prevented	878 tons
Recycling Collection	985 tons
Recycled-Content Purchases	125 tons
Total Cost Savings	\$500,100

TRIBAL GOVERNMENT

Blue Lake Rancheria



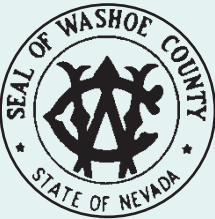
The Blue Lake Rancheria, Blue Lake, California, made impressive inroads to developing a solid waste reduction program in its first year of participation in the WasteWise program. The tribal office, which had no solid waste reduction program prior to joining WasteWise, conserved 25 pounds of copier paper by double siding all new documents, and 44 pounds of printer paper by using the back side of single-sided copies for draft printouts and in the fax machine. The tribal office also reduced 60 pounds of secondary packaging by switching from nonrecyclable PVC/vinyl plastic bags to recyclable PET containers.

1998 WasteWise Accomplishments

Waste Prevented	129 lb
Recycling Collection	2,500 lb
Recycled-Content Purchases	396 lb

LOCAL GOVERNMENT

Washoe County Government



The Washoe County Government in Reno, Nevada, believes that government must lead by example and is doing just that by making itself an environmental role model. Its 2,500 employees reused thousands of large mailing envelopes for internal mail, saving approximately \$50,000. The county agency also conserved 900 cases of tires by returning worn tires to be retreaded for nonsteering wheels of trucks and saved approximately \$250,000.

1998 WasteWise Accomplishments

Recycling Collection	45 tons
Total Cost Savings	\$625,000

UNIVERSITY/COLLEGE

Eastern Illinois University



Eastern Illinois University, located in Charleston, Illinois, is committed to saving natural resources through the volunteer efforts of the university's 2,000 faculty and staff and 10,790 campus residents. The university also hires young adults with learning disabilities to help with its environmental program. The university composted 94.5 tons of yard trimmings onsite and used it to mulch flower beds and around trees, reduced the amount of computer paper used on campus by 10 percent, and reused 13 tons of office supplies through an internal exchange among employees.

1998 WasteWise Accomplishments

Waste Prevented	163 tons
Recycling Collection	385 tons
Recycled-Content Purchases	8.5 tons
Total Cost Savings	\$33,300

SCHOOL/SCHOOL DISTRICT

Alden Central School



Alden Central School, which educates children from K through 12 and is located in Alden, New York, implemented a comprehensive waste reduction program at all campus buildings: high school, middle, intermediate, and primary education buildings, and the grounds department. Students and 250 staff members eliminated 400 pounds of polystyrene cafeteria trays and dishes by switching to reusable products and composted 850 pounds of cafeteria waste and 100 pounds of yard trimmings for use as mulch on building grounds.

1998 WasteWise Accomplishments

Waste Prevented	2,450	lb
Recycling Collection	2,900	lb
Recycled-Content Purchases	2,250	lb

1999 PROGRAM CHAMPIONS

Very Large Corporation

Bell Atlantic
Target Stores
Walt Disney World Co.

Large Corporation

Allergan, Inc.
Amgen, Inc
Baltimore Gas & Electric Co.
Battelle Memorial Institute
Crown Cork & Seal Co., Inc.
Dow Corning Corp.
Florida Power & Light
Millipore Corp.
Pitney Bowes, Inc.

Russell Corp.
Public Service Electric & Gas
Company
UTC Carrier Corp.
Virco Manufacturing

Midsize Corporation

AIRPAX
Grolier, Inc.

Small Business

First National Bank & Trust Co.
of the Treasure Coast

University/College

Seattle University

NOTES

1. Disposal fees based on an average 1998 tipping fee of \$33.60. Source: *Biocycle*. April 1999.
2. Avoided purchasing costs are based on the 1998 average costs of \$777.50 per ton of high-grade office paper and \$322.92 per ton of medium-weight corrugated. Source: *Pulp and Paper Week* 1998 price histories.
3. Disposal fees based on an average 1998 tipping fee of \$33.60. Source: *Biocycle*. April 1999.

FOR MORE INFORMATION

- WasteWise Helpline: 800 EPA-WISE (372-9473)
- WasteWise E-mail: ww@cais.net
- WasteWise Web Site: www.epa.gov/wastewise



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