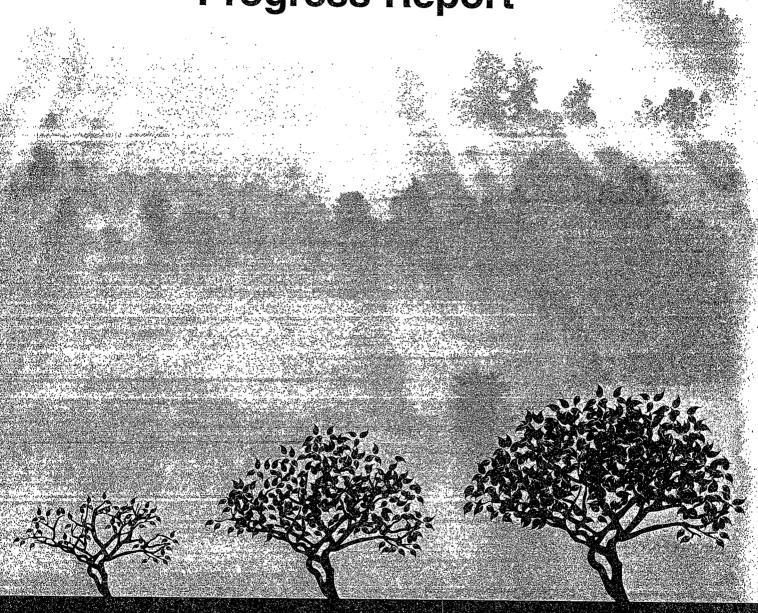
United States
Environmental Protection
Agency

Solid Waste and Emergency Response (5306W)

EPA530-R-00-007 August 2000 www.epa.gov/wastewise



WasteWise Sixth-Year Progress Report





Progress Report

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Waste Reduction Results

Vince the inception of the WasteWise program, partners have consistently reported strong waste prevention and recycling collection results, in many cases surpassing previous years' waste reduction figures.

Waste Reduction Reaches New Heights

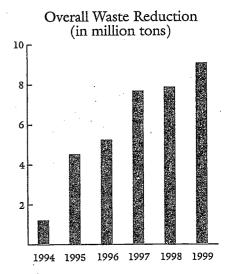
n the first six years of the WasteWise program, partners have removed more than 35 million tons of waste from the solid waste stream through waste prevention and recycling activities. In 1999, partners reduced 9 million tons of waste through these activities, surpassing 1998 waste reduction results by 15 percent.

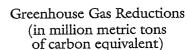
These impressive numbers are based on the reports partners voluntarily provide each year. To some extent, these results understate partners' waste reduction activities. For example, some do not include results from ongoing waste reduction innovations that were implemented and reported in previous years.

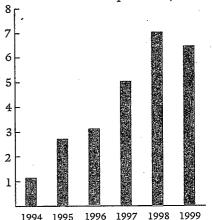
Waste Reduction Protects the Global Climate

ost people know that waste reduction conserves natural resources and has positive economic benefits. A lesser known impact is that reducing waste lowers atmospheric greenhouse gas emissions by decreasing fossil fuel consumption, minimizing methane emissions, and allowing vegetation to absorb carbon dioxide from the atmosphere. In 1999, partners' waste reduction activities were estimated to yield reductions of more than 6.5 million metric tons of carbon equivalent (MTCE), the standard unit of measure for greenhouse gas emissions.

Through practical and effective waste reduction activities, WasteWise partners have prevented the emission of 25 million MTCE since 1994—the equivalent of removing 19 million cars from the road for one year. **Anheuser-Busch Companies** made the







greatest contribution to the WasteWise greenhouse gas reduction total in 1999. **McDonald's** and **Louisiana-Pacific** also made outstanding contributions to reducing greenhouse gas emissions.

EPA developed the Waste Reduction Model (WARM), to help organizations estimate greenhouse gas reductions from their waste reduction activities. WasteWise provides WARM conversions for each reporting partner, enabling them to visualize the impact of their waste reduction activities. For more information about WARM, visit www.epa.gov/mswclimate.

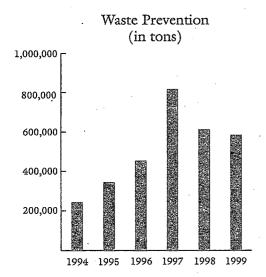
Preventing Waste Pays Off

Through waste prevention activities, organizations are drastically reducing the amount of waste they annually produce, as well as saving money, time, and resources.

- Allchem Services, Inc., repaired and reused 6.5 tons of pallets, skids, and totes, saving \$3,000. The company also reused 200 pounds of plastic packaging materials as filler for outgoing shipments.
- **Bell Atlantic** expanded the use of electronic purchasing orders and invoices, reducing nearly 29 tons of paper and saving more than \$60,000.
- Guardian Industries Ligonier, Indiana Facility laundered and reused gloves and wiping clothes, reducing waste by more than six tons and saving the company nearly \$30,000.
- **King County Department of Natural Resources,** located in Washington, recently moved into new offices furnished with 80 tons of refurbished carpet tiles. The agency also received more than \$9,000 in rebates for returning used shipping boxes to the moving company.

WasteWise Partners Maximize Waste Prevention Programs

WasteWise stresses to partners the importance of waste prevention—activities that eliminate waste before recycling, such as refurbishing products for reuse or onsite composting. Since EPA launched the WasteWise program 6 years ago, partners have prevented the generation of more than 3 million tons of waste.



Top Waste Prevention Practices

WasteWise partners' most frequently targeted items for waste prevention activities in 1999 included:

Office supplies

- Repairing, refurbishing, or reconditioning used supplies.
- Expanding electronic networks, including e-mail, Intranet, and electronic routing of documents.

Manufactured products

- Improving manufacturing processes to reduce raw material waste.
- Displacing virgin materials.

Manufacturing equipment or supplies

Reducing material consumption during the manufacturing process.

Transport packaging

- Switching from disposable to reusable products.
- Participating in packaging return programs.

Construction and demolition materials

- Deconstructing buildings and salvaging materials for reuse.
- Establishing donation programs for reusable materials.

In 1999, WasteWise partners' waste prevention activities removed 583,000 tons of material from the solid waste stream. These results fall slightly below the waste prevention data for 1998, indicating that some reporting partners have at least temporarily reached the limits of their current waste prevention activities. As new partners begin to report and veteran partners update WasteWise goals to further enhance their waste reduction programs, we hope to see increases in waste prevention figures.

Recycling Collection Soars

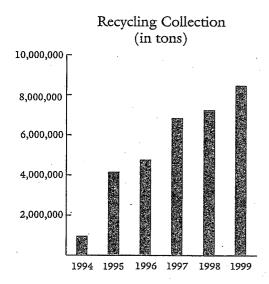
Recycling collection figures increased 1.2 million tons over 1998 results, bringing the total amount of materials collected by WasteWise partners to 8.4 million tons in 1999. This boost in recycling figures represents a 17 percent increase in 1999 compared with a 6 percent increase in 1998. Moreover, partners saved more than \$300 million in avoided disposal fees in 1999¹ by participating in recycling collection activities. Throughout the duration of the program, recycling collection has continuously risen, totaling more than 32 million tons since the program's inception.

Top Materials Collected for Recycling

In 1999, the following materials constituted the bulk of partners' recycling activities:

- Wood
- Corrugated cardboard
- Aluminum
- Mixed paper
- Steel

¹Disposal fees based on an average 1999 tipping fee of \$35.57. Source: Biocycle. April 2000.



Recycled-Content Purchases Double

WasteWise partners reported purchases of 962,330 tons of recycled-content products in 1999, doubling the amount purchased in 1998. Many partners purchased products that contained a higher percentage of recycled materials than their previous purchases while others incorporated a greater number of recycled-content products into their purchasing programs. The State of Ohio, for instance, spent more than \$2 million on recycled-content products in 1999, which is 54 percent greater than its 1998 purchases. Together,

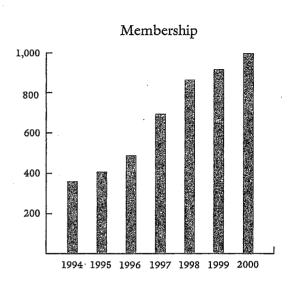
WasteWise partners reported spending \$4.9 billion on recycled-content products in 1999. Manufacturers concentrated on ways to use recycled materials in their products or to increase existing levels of recycled materials. Bethlehem Steel incorporated 36,500 tons of recycled steel and nonferrous metals into manufacturing processes, saving the company more than \$1.8 million in 1999.

WasteWise Membership & Program Accomplishments

partners in the year 2000. Since the program's inception, our partners have removed more than 35 million tons of waste from the solid waste stream, enabling them to save money and conserve natural resources.

WasteWise Welcomes its 1,000th Program Partner—The United States Postal Service-Sacramento District

ver the past 6 years, membership has grown by leaps and bounds, encompassing more than 50 industry sectors across the country. In 1994, WasteWise inducted 281 charter members into the program. Today, these program pioneers are joined by organizations that have committed themselves to conserving our natural environment through waste reduction. To support program partners, the WasteWise team provides personalized technical assistance, innovative publications, networking opportunities, cutting-edge resources, and recognition for outstanding accomplishments.



State Farm Mutual
Automobile Insurance
Company converted to
electronic cameras,
decreasing the use of
instant film by 12 percent and the use of
35mm film by 26 percent, and saving more
than 50 tons of film.

Partners Shape WasteWise Initiatives

1999 was a year of celebration for WasteWise—celebrations for past program successes as well as new program initiatives. Partners' favorable reactions to the Onsite Visit Program prompted WasteWise to continue conducting personalized waste reduction assessments for program partners. After successfully carrying out the Transport Packaging Challenge in 1999, WasteWise launched the second WasteWise Challenge, targeting electronics reuse and recycling in 2000. Enthusiastic response to a 1998 satellite

forum on waste prevention and a 1999 forum on buying recycled-content products inspired WasteWise to plan a third satellite broadcast targeting colleges and universities.

Russell Corp. recycled more than 14,500 tons of textiles, 3,850 tons of corrugated cardboard, nearly 1,000 tons of paper, and more than 500 tons of additional materials, including wood, plastics, aluminum, and oil, in 1999.

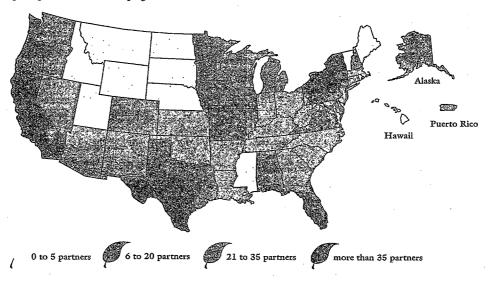
WasteWise also responded to partner comments provided through the 1999 Customer Satisfaction survey and the Partner Roundtable by creating the WasteWise E-Club, increasing the amount of personal interaction with partners, and updating the marketing strategic plan. The need to provide easy access to useful waste reduction information drove WasteWise to begin developing an online technical assistance database, which will allow users to locate answers to waste-related questions by searching an extensive list of organizations, publications, and Web sites.

Other 1999 WasteWise initiatives included:

• WasteWise introduced the E-Club, an initiative designed to prevent waste by notifying partners of the availability of recent publications on the WasteWise Web site via e-mail, rather than mailing hard copies.

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.



- WasteWise provided practical waste reduction information to partners through our publications, including the bimonthly WasteWise Bulletin, semiannual WasteWise Update, WasteWise Toolkit, and other publications.
- WasteWise honored 13 Partners of the Year and 20 Program Champions for their outstanding waste reduction achievements at the 1999 Awards and Recognition Ceremony. WasteWise representatives and senior EPA officials presented recycled-content glass awards to the winners, formally welcomed new partners to the program, and recognized Transport Packaging Challenge participants.

Ford Motor Company annually uses more than 60 million 2-liter plastic soda bottles in the manufacturing of grille reinforcements, window frames, engine covers, and trunk carpets. In 1999, this effort accounted for 3,750 tons of plastic.

 WasteWise continued to sponsor Regional Forums and Partner Network Meetings across the country. Meeting locations included Baltimore, New York, Washington D.C., Chicago, and Atlanta.

Walt Disney World
Company spent
\$600,000 on recycledcontent products,
including 3,000 pounds
of low density polyethelyne (LDPE) picnic
tables with an average
30 percent postconsumer content.

- WasteWise attended conferences and trade shows across the country in 1999 and 2000 promoting the WasteWise program to businesses, governments, and institutions.
- WasteWise welcomed the U.S. Postal Service-Sacramento District as the 1,000th program partner. To commemorate this achievement, WasteWise and the USPS issued a series of press releases, recognized the USPS-Sacramento District at the WasteWise 2000 Awards and Recognition Ceremony, and highlighted the milestone in WasteWise publications.

2000 WasteWise Award Winners

n 2000, Waste Wise named 14 Partners of the Year in 11 award categories. Waste Wise 2000 Partners of the Year are those partners that were judged to have accomplished and reported the most impressive waste reduction results for 1999. In addition, Waste Wise recognized 23 Program Champions that made noteworthy accomplishments in waste prevention, recycling collection, and buying or manufacturing recycled-content products in 1999.

2000 Partners of the Year

VERY LARGE CORPORATION (20,000+ employees)

Eastman Kodak Company

Eastman Kodak Company, headquartered in Rochester, New York, conserved 2,300 tons of cameras by increasing returns of its FUNSAVER cameras, allowing more parts to be reused for manufacturing of new cameras. Kodak also reused 31,500 tons of asphalt from construction and demolition projects as a conventional aggregate in road and building construction, saving \$2 million.



1999 WasteWise Accomplishments

Waste Prevented	39,835 tons
Recycling Collection	67,500 tons
Recycled-Content Purchases	24,000 tons
Manufactured Recycled Products	15,800 tons
Total Cost Savings	\$12,000,000

McDonald's Corporation

McDonald's, headquartered in Oakbrook, Illinois, continually works to reduce the weight, volume, and environmental impact of its packaging materials and explores new packaging alternatives. Switching to lighter weight packaging for two of the company's sandwiches conserved 3,200 tons of boxboard containers and saved \$3.6 million. The company also led the way in promoting the "buy recycled" message by spending \$300 million on more than 300,000 tons of recycled-content materials in 1999.



6,850 tons
1,684,850 tons
300,000 tons
\$3,600,000

VERY LARGE CORPORATION (CONT.)

Motorola, Inc.



Motorola, a major electronics equipment manufacturer with facilities located in Illinois, Texas, Georgia, New York, Iowa, Florida, and Arizona, conserved more than 500 tons of waste through activities such as: switching to reusable plastic packaging, working with suppliers to take back plastic packaging materials for reuse, and reducing the disposable corrugated packaging used to ship products to customers. The company also conserved 72 tons of mixed plastics by collecting clean room booties, gloves, product packaging, and wafer boxes for reprocessing and reuse.

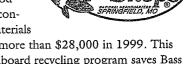
1999 WasteWise Accomplishments

Waste Prevented		1,637 tons
Recycling Collection	•	16,529 tons
Recycled-Content Purchases		899 tons
Total Cost Savings		\$521,438

LARGE CORPORATION (1,000 to 19,999 employees)

Bass Pro Shops

Bass Pro Shops, headquartered in Springfield, Missouri, implemented numerous innovative waste prevention activities at all its retail facilities. The company uses architectural salvage from building demolition products and trees reclaimed after forest fires in store offices and fixture construction. It also salvaged nearly 170 tons of transport packaging materials



through a shipping and receiving waste prevention program, saving more than \$28,000 in 1999. This program involved the reuse and sale of used wooden pallets. Its cardboard recycling program saves Bass Pro more than \$94,000 and generates more than \$14,000 in donations for a local nonprofit.

Waste Prevented	182 tons
Recycling Collection	1,370 tons
Recycled-Content Purchases	1,140 tons
Total Cost Savings	\$117,051

Virco Mfg. Corporation

Virco Mfg. Corporation located in Conway, Arkansas, implemented forward-looking and innovative waste prevention, recycling, and buying-recycled efforts. In 1999, the company initiated a program to eventually eliminate the use of wooden pallets as part of the Transport Packaging Challenge. The company repaired more than 9.5 tons of pallets for reuse



and mulched discarded boards. Virco also conserved 1,250 tons of plastic pellets and saved \$300,000 by selling scrap hard plastic for use as sandblasting material. The company reused 9,000 tons of wood dust as a soil amendment on its new building site, saving \$120,000.

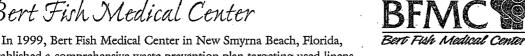
1999 WasteWise Accomplishments

Waste Prevented Recycling Collection Recycled-Content Purchases Total Cost Savings

10,760 tons 15,947 tons 1,025 tons \$430,800

MIDSIZE CORPORATION (500 to 999 employees)

Bert Fish Medical Center



established a comprehensive waste prevention plan targeting used linens and gowns no longer suitable for patients. The medical center saved nearly \$10,000 by switching from disposable to reusable hospital gowns. It also donated 1,300 pounds of used linens to a local charity and animal shelter for use as animal bedding and 4.420 pounds of food to a local food bank.

1999 WasteWise Accomplishments

Waste Prevented 4 tons Recycling Collection 125 tons Recycled-Content Purchases 1,100 lbs \$16,403 Total Cost Savings

SMALL BUSINESS (1 to 499 employees)

The Seydel Companies

The Seydel Companies in Pendergrass, Georgia, manufacture chemicals used in textile processing, including fabric preparation, dying, printing, and finishing, and garment laundering and finishing. The organization and its 109 employees conserved 500 pounds of paper by taking its business name off bulk mailings lists to reduce the amount of unwanted mail, donated 1,400 pounds of computer equipment to local schools, and cleaned and reused more than 3 tons of glass sample

jars, saving more than \$3,000. The Seydel Companies also returned more than 85 tons of plastic drums and totes to vendors in 1999, saving nearly \$70,000.

1999 WasteWise Accomplishments

Waste Prevented	396 tons
Recycling Collection	316 tons
Recycled-Content Purchases	646 lbs
Manufactured Recycled Products	125 tons
Total Cost Savings	\$435,287

FEDERAL GOVERNMENT

U.S. Postal Service— Northeast Area



The U.S. Postal Service Northeast Area's 76,854 employees and 3,200 post offices throughout New England and upstate New York continued to demonstrate their strong commitment to waste reduction in 1999. They reduced solid waste generation at 25 vehicle maintenance and 29 processing and distribution facilities by 50 percent compared with fiscal year 1992 generation rates. The Postal Service established a "Country Store" that reused 120 tons of various equipment and supplies from the 382 post offices in the Springfield District. It also repaired and refurbished 21 tons of steel mailboxes, saving \$85,000.

Waste Prevented	2,972 tons
Recycling Collection	54,534 tons
Recycled-Content Purchases	4,847 tons
Total Cost Savings	\$266,500

STATE GOVERNMENT

Tennessee Department of Correction

The Tennessee Department of Correction, located in Nashville, Tennessee, employs 5,776 people and oversees thousands of inmates throughout 21 centers, prisons, and other buildings. Many of the inmates participated in the department's waste prevention activities and helped conserve 65 tons of computers by refurbishing and repairing 2,332 PC units from three computer repair and reuse centers across the correction system. The computers were placed into public schools. The department also conserved more than 13 tons of textiles by repairing inmate clothing-8,422 pairs of blue jeans, 7,882 shirts, 1,077 jackets, and 38 sweatshirts. This activity saved more than \$90,573 in new clothing purchases. Activities also included composting 1,600 tons of



1999 WasteWise Accomplishments

Waste Prevented	1,691 tons
Recycling Collection	966 tons
Recycled-Content Purchases	208 tons
Total Cost Savings	\$551,000

TRIBAL GOVERNMENT

Blue Lake Rancheria

The Blue Lake Rancheria located in Blue Lake, California, made impressive inroads to developing a solid waste reduction program in its first year of WasteWise program participation. The tribal office, which had no solid waste reduction program before joining WasteWise, conserved 33 pounds of copier paper by double-siding all documents, and 49 pounds of printer paper by reusing single-sided copies for draft printouts and in the fax machine. The tribal office also implemented a new voice mail system that decreased handwritten phone messages, and an intraoffice mail network that allows employees to send memos and other documents to coworkers without printing them. These activities conserved 7 pounds of memo pads and internal memos.

organic materials on site and using the compost on the department's building grounds, saving \$460,433.

Waste Prevented	89 lbs
Recycling Collection	2,638 lbs
Recycled-Content Purchases	314 lbs



LOCAL GOVERNMENT

Washoe County Government

The Washoe County Government in Reno, Nevada, believes that government must lead by example and its doing just that by making itself an environmental role model for the community. The county implemented a carpet squares program that eliminates the use of broadloom carpeting throughout Washoe County facilities and in all new construction. Only worn and damaged carpet squares are replaced, and they are refurbished up to three times. This activity diverted 12 tons of carpeting and saved \$128,000 in 1999. The county also returned nearly 12 tons of worn tires to be retread for nonsteering wheels of trucks, saving approximately \$200,000.

1999 WasteWise Accomplishments

Waste Prevented	30 tons
Recycling Collection	81 tons
Recycled-Content Purchases	112 tons
Total Cost Savings	\$361,236

UNIVERSITY/COLLEGE

Seattle University

Seattle University has made a firm commitment to waste reduction. Through its innovative surplus store, for example, the university sold 71 tons of surplus furniture such as tables,



blackboards, computer equipment, and desks to community members, saving nearly \$24,000 in 1999 disposal costs alone. All sales revenue supports the university's recycling program. The university also collected more than 1 ton of clothes from students in a campus clothing drive to benefit a local charity for homeless youth.

Waste Prevented	72 tons
Recycling Collection	552 tons
Recycled-Content Purchases	150 lbs
Total Cost Savings	\$31,503

SCHOOL/SCHOOL DISTRICT

Alden Central School

Alden Central School, which educates children from kindergarten through 12th grade, implemented a comprehensive waste reduction program at all campus buildings: high school, middle school, intermediate school, and primary education buildings, and the grounds department. The Alden, New York, school and its 250 staff members eliminated 450 pounds of polystyrene cafeteria trays and dishes by switching to reusable products. It also composted 900 pounds of cafeteria waste and 150 pounds of yard trimmings for use as mulch on building grounds.

1999 WasteWise Accomplishments

Waste Prevented	2,650 lbs
Recycling Collection	3,400 lbs
Recycled-Content Purchases	2,500 lbs

TRANSPORT PACKAGING CHALLENGE

SST Trucking, LLC

SST Trucking, LLC, located in Garland, Texas, achieved substantial cost savings by utilizing reusable shipping racks, working with suppliers to reduce packaging, and establishing a transport packaging return program. The company saved more than \$55,000 and reduced packaging waste by nearly 180 tons through initiatives adopted as part of the Transport Packaging Challenge program.



Waste Prevented	180 tons
Recycling Collection	672 tons
Recycled-Content Purchases	6 tons
Total Cost Savings	\$55,630

Program Champions

Very Large Corporation

Anheuser-Busch
Companies, Inc.
Bell Atlantic
Lucent Technologies
Walt Disney World Company

Large Corporation

Allergan, Inc.
Battelle Memorial Institute
Canon USA, Inc.
Constellation Energy Group
Herman Miller, Inc.
Millipore Corporation
Pitney Bowes, Inc.

Midsize Business

Cytec Industries Inc.— Fortier Complex

Small Business

Accent Construction, LLC Calgene, LLC

Allchem Services, Inc. Guardian Industries, Ligonier Plant

University/College

Eastern Illinois University

Federal Government

Sandia National Laboratories
United States Postal Service—
Alabama District

State Government

The State of Ohio

Local Government

Polk County, Iowa
King County Department of
Natural Resources,
Washington

Tribal Government

Grand Traverse Band of Ottawa and Chippewa Indians

For More Information

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



United States Environmental Protection Agency (5306W) Washington, DC 20460

Official Business Penalty for Private Use \$300