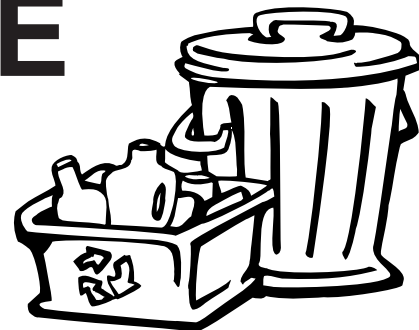




REUSABLE NEWS



Join the Club With EPA's New Education Tools!

By joining EPA's Planet Protectors Club, kids can assume the role of an ace detective or an "Environaut" from outer space to learn about solid waste and recycling. This new educational activity kit from EPA tasks kindergarten and elementary school children with investigating environmental missions, solving mysterious stories on the Web, pledging to reduce waste, and exploring the land of reuse and recycling.

Released this winter, the Planet Protectors Club kit is a solid waste curriculum supplement that can be used in the classroom, as an afterschool activity, or at home. With these tools, kids learn how to prevent and reduce waste, buy recycled products, and recycle and compost. The brightly colored, illustrated materials build on other educational items created by EPA in the early 1990s.

(Continued on page 6)

SPECIAL FOCUS

Across America, students of all ages are learning the importance of reducing, reusing, and recycling solid waste. With this in mind, this issue of *Reusable News* highlights solid waste education, with articles featuring EPA programs as well as other successful initiatives at the national, state, and local level.

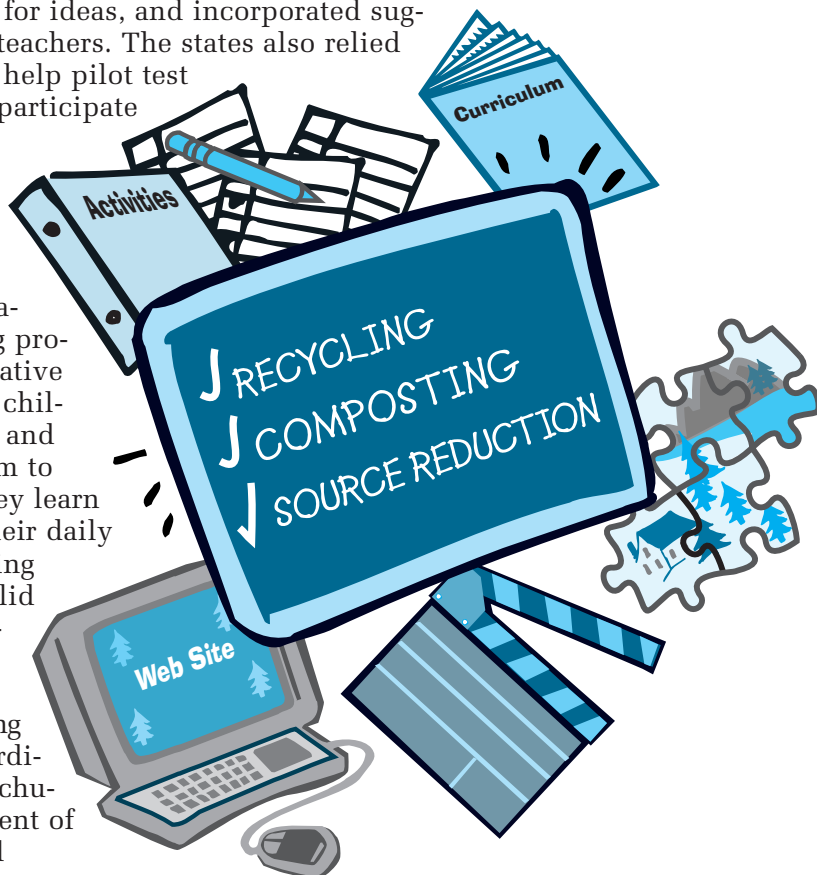
States Lead by Example

Many states throughout the nation are doing their part to educate kids about the importance of responsible solid waste management. Leading the charge are Massachusetts, Wisconsin, and California—three states with active and innovative education programs.

Not surprisingly, all three states share similar tools and approaches to solid waste education. Each state developed a curriculum and/or activity guides to provide teachers with the materials they need. These materials include suggested activities, stories, poems, puzzles, worksheets, and plays that teach recycling, composting, and source reduction concepts. In developing the curricula and activity guides, program organizers from all three states networked with educational associations, looked to other states for ideas, and incorporated suggestions from teachers. The states also relied on teachers to help pilot test curricula and participate in training.

The goal, naturally, is a well-educated and motivated student population. "A strong program finds creative ways to pique children's interest and encourage them to apply what they learn in school to their daily lives, developing responsible solid waste management habits," said Nicole Cirillo, Recycling Education Coordinator of Massachusetts' Department of Environmental Protection.

(Continued on page 5)



Investing in the Future

As a result of recycling investment forums, companies have secured more than \$50 million in financing. Since 1995, a total of eight investment forums have been held around the country, with four alone occurring in 1998. As a sponsor of these events, EPA played an important role in making each one a success.

Investment forums are designed to help new and expanding recycling businesses overcome perhaps their biggest hurdle—securing adequate financing. To help meet this challenge, investment forums bring recycling entrepreneurs together with investors, financiers, and economic development officials. During the 1-day events, recycling businesses make presentations to and network with potential investors.

In addition to assisting with financing, investment forums offer a range of other advantages to recycling businesses. Companies benefit by honing their business plans, increasing their credibility in the investment world, obtaining press coverage, and learning valuable information from investors about what strikes their interest most.

The actual event is typically just one step in a well-planned process. For example, the Northeast Recycling Council (NERC), a nonprofit recycling organization that has organized three investment forums to date, begins by putting together a group of investors to select the companies that will participate. NERC then requires these companies to attend a 1-day training seminar where they present their business plans and are critiqued by another group of investors. After receiving this first-hand feedback, companies then have a month to practice their 10-minute presentations. By the time the event occurs, each company has pre-

pared a polished presentation forecasting business needs and growth potential.

“Preparing for the investment forum demanded that I focus on developing a strong business plan and presentation,” said Chuck Cooper, president of Polymer Reclaim and Exchange, a processor and distributor of postindustrial plastics. “I had to present my plan to a group of investors in a practice session before the event. The concrete input from venture capitalists, bankers, and private investors made my business plan more concise and compelling.”

Other companies have benefited as well. As a direct or indirect result of NERC’s investment forums, six companies obtained funding totaling \$12.5 million. At the first two Southeastern Recycling Investment forums, six participant companies secured more than \$37 million in total financing.

See the box below for a list of investment forums scheduled in 1999. For more details on these events, visit the Jobs Through Recycling Web site at <www.epa.gov/jtr/news.htm>.

1999 Forums

Southwest—Phoenix, Arizona

March 29

Northeast—Boston, Massachusetts

May 5

San Francisco, California

May 17

Irvine, California

July 12

Southeast—Kiawah Island, South Carolina

August 22-24

Midwest—Cincinnati, Ohio

September

Conservation: It’s in the Bag

Since 1990, four grocery store chains have been raising



money and awareness for conservation efforts in several states, one purchase at a time. By donating 2 to 5 cents for every bag reused by customers, the grocery store chains have raised a half a million dollars for The Nature Conservancy. The money supports land acquisition and wildlife preservation efforts in New England, Washington, Idaho, and Ohio.

How does the program work? Quality Food Centers, Stop & Shop, Buehler Foods, and Atkinsons provide customers with reusable bags imprinted with The Nature Conservancy’s name and logo, along with details on how to participate and prevent waste. Each time a customer reuses the paper, plastic, or canvas bags, the store contributes money to the Conservancy’s programs for that area.

“This program offers a win-win-win situation. It helps the environment by reducing the amount of waste in landfills, supports conservation programs, and allows participating stores to cut costs,” said Karen Browning, director of cause-related marketing for the Conservancy.

To publicize the program, stores have created in-store displays, run articles in their newsletters, and made announcements over their in-house radio systems. Stores benefit from the program by saving up to thousands of dollars in reduced plastic and paper bag expenditures, not to mention fostering positive community and media relations.

According to Browning, a large portion of the money generated through the Bag Reuse Program is used to preserve threatened land areas and protect critical wildlife habitat. In particular, Washington’s Quality Food Centers have donated more than \$240,000 since 1990, which helped complete the successful Washington Wildlands and Endangered Washington campaigns.

For more information on the program, contact Alexis Beshara of the Conservancy at 703 841-4524.

Discover Black Gold With Food Recovery

Businesses and institutions throughout the country—from supermarkets and hospitals to government offices and schools—are designing programs to help redirect food discards from the national waste stream. Leftovers, spoiled fruits and vegetables, and old bread are only a few of the items these programs put back to good use every day. In doing so, they help communities reap a wide variety of benefits, from economic savings to resource conservation.

To promote food discard recovery programs, the Institute for Local Self-Reliance (ILSR), under an EPA grant, developed the fact

sheet packet, *Don't Throw Away That Food: Strategies for Record-Setting Waste Reduction*.

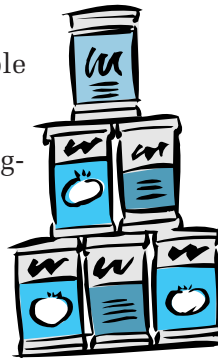
The packet, part of ILSR's Waste Reduction Record Setters Project, is geared toward commercial and institutional food discard generators and highlights record-setting food recovery programs. It contains nine case studies and a fact sheet that discuss food recovery methods and benefits, as well as costs, implementation, and maintenance. The case studies document record setters recovering 70 to 100 percent of their food discards. Overall, the packet provides food-related establishments and recycling coordinators the facts and "know-how" to establish their own record-setting food recovery plan.

"Food recovery is essential to achieving high waste reduction levels," said Brenda Platt, director of Materials Recovery Research at

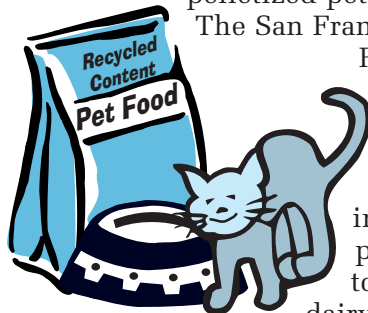
ILSR. "By linking food-related industries and haulers to food banks, compost operators, and farmers, we can turn garbage into 'black gold.'"

In particular, the fact sheets highlight the following food recovery methods and examples:

- **Food Donations:** Nonperishable and unspoiled perishable food can be donated to food banks, soup kitchens, shelters, and other charitable organizations. Larry's Markets in Seattle, Washington, for example, donates canned goods and other items to a church or food bank each week.



- **Animal Feed:** Some types of food discards, such as inedible produce, can be used as animal feed or can be converted into a high-quality, pelletized pet food.



The San Francisco Food Bank regularly gives inedible produce to a local dairy.

- **Rendering:** Meat products can be used in the rendering industry and converted into animal food, cosmetics, soap, and other products. The New York State Department of Correction Facilities' kitchen staff donate materials biweekly.
- **Composting:** This method offers a range of options, from aerated windrows, where organics are formed into rows or long piles, to in-vessel composting, where waste is enclosed in a temperature and moisture-controlled chamber. Vermicomposting—which uses worms to break down the materials—is another option. Middlebury College in Middlebury, Vermont, recovers 75 percent of its food discards from dining halls, snack bars, and special events through onsite windrow composting.



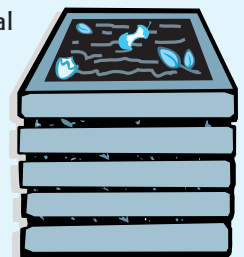
The fact sheet packet (EPA530-F-98-023) is available from the RCRA Hotline at 800 424-9346.

Benefits of Food Recovery

Food recovery programs not only benefit the environment by reducing the waste stream, but they also offer social and economic benefits:

- Reducing trash collection and disposal fees.
- Providing food to the needy.
- Recovering the nutrient value of the food as compost or animal food.

- Helping communities meet local and state waste reduction goals.
- Sustaining local industries and jobs.
- Creating an improved public image for businesses.



Recycling, One Campus at a Time

Recycling coordinators at colleges and universities face a myriad of challenges—from increasing recycling rates despite an ever-changing student body to finding markets for used items such as old computers. In 1992, these recycling officials had few available resources or networks through which to share information. To remedy this, a small group of pioneers established the College and University Recycling Council (CURC) later that year.

Today, CURC operates as a technical council of the National Recycling Coalition (NRC) and brings together more than 150

college and university waste management officials. CURC offers its members educational and professional development regarding solid waste reduction and recycling.

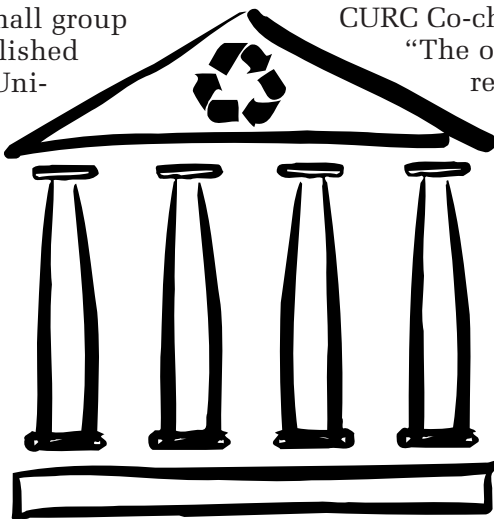
“CURC enables key players of university recycling programs that are in similar situations to network with each other, sharing obstacles and successes,” said

CURC Co-chair Pete Pasterz.

“The organization links representatives from all different types of colleges and universities—large and small, urban and rural, public and private.”

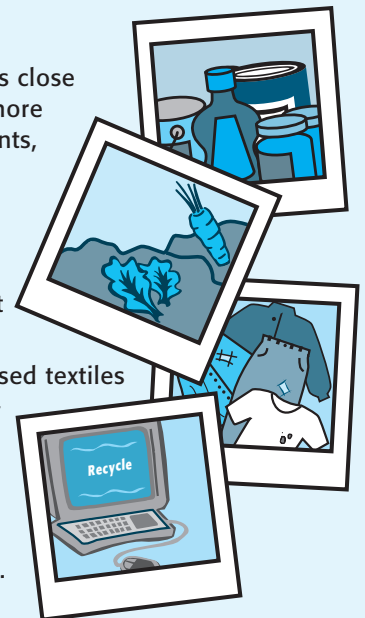
To expedite networking, CURC offers the following resources:

- Through an e-mail list server, *RECYC-L*, members can access other college and university recycling coordinators around the country to discuss their recycling programs and related topics. The University of Iowa, for example, used the list server to find a market for nine-track tapes discarded from the campus’s main frame computers.
- Through its *Campus Recycling Series*, CURC sponsors regional campus events to provide practical, goal-oriented information to attendees. Workshops are scheduled at Stanford University, Northeastern University, and Miami University of Ohio in 1999.
- The CURC Web site, <earthsystems.org/curc/curc.html>, offers the *RECYC-L* archives, campus program profiles, and a virtual shopping mall where visitors can search for recycled-content product information.



CURC Recycling Program Snapshots

- **George Mason University** in Fairfax, Virginia, might not recycle everything, but it sure comes close with one of the most comprehensive recycling programs in the country. In addition to the more traditional items, the university recycles automotive parts, yard trimmings, refrigerator coolants, and paint solvents. For more information, visit <www.gmu.edu/gmu/recycling>.
- Deemed the Vermont “School Recycler of the Year” in 1996 by the Association of Vermont Recyclers, **Middlebury College** diverted an impressive 64 percent of its waste stream through recycling and composting that year. An active student body coupled with a strong recycling program, which includes a recycling center and environmental coordinator, doesn’t let much go to waste. For more information, visit <www.middlebury.edu/~recycle>.
- Rather than throwing away old clothes, students at the **University of Michigan** send their used textiles and clothing to a company that distributes them for reuse in developing countries or manufactures new items such as rags, padding, and stuffing. For more information, visit <www.plant.bf.umich.edu/grounds/recycle/materials/textiles.html>.
- At the forefront of solid waste technology, the **University of Washington** developed a computer program, “Lab Safety System,” that facilitates comprehensive programs to share, recycle, and substitute hazardous materials and chemicals in classroom or research libraries. For more information, visit <www.washington.edu/computing>.



States Lead by Example

(Continued from page 1)

Massachusetts

Massachusetts offers a voluntary program for educators. Implemented in 400 schools, the program—Recycling Education Assistance for Public Schools (REAPS)—hires environmental educators to visit schools and lead students in hands-on activities such as making recycled paper from paper scraps generated in the classroom and compost from items collected on school grounds.

“Students are enthusiastic and excited when learning about waste reduction, reuse, and recycling,” said Michelle Walker, an environmental educator with Applied Pro-Active Technology. “Because students remember me on return visits, I believe they also remember the concepts I teach.”

Wisconsin

In Wisconsin, Act 335 requires municipalities to establish effective recycling programs that include a public education component. School districts also need to meet the new recycling requirements; therefore, the law directed the Wisconsin Department of Natural Resources (DNR) to develop and distribute recycling and waste reduction education materials for grades K-12. While there is no set curriculum or program for municipalities and school districts to follow, they have access to a wide variety of teaching resources developed by the DNR.

DNR focuses on developing effective and interesting teaching resources and notifying schools about the law. State outreach efforts include making presentations at schools and conferences,

maintaining a kids’ Web site, conducting direct mailings, and helping municipalities work with schools.

The state also measures the program’s success through surveys. “Our surveys show that through state and local efforts, students not only learn about the importance of responsible solid waste management, but they bring this knowledge home and teach their families,” said Joel Stone, Wisconsin DNR Recycling Education Coordinator. “We are proud of the many state and national awards we’ve received for our efforts.”

California

California legislation requires all cities and counties in the state to divert 50 percent of their waste by 2000. To help meet this goal, the state’s lead agency on solid waste education, the California Integrated Waste Management Board (CIWMB), established an instructional program with diversion assistance for K-12 schools. The program includes teacher training workshops, curriculum development, a newsletter, and technical assistance to school districts developing waste prevention and recycling programs.

The program’s strength lies in its partnerships at both the state and local level. At the state level, CIWMB leverages the resources of other agencies through the California Environmental Education Interagency Network (CEEIN), a state government consortium of environmental educators representing departments, boards, and commissions. CIWMB and other CEEIN members partner with the Walt Disney Company, for example, to produce a statewide annual environmental education contest in which “kids design their own projects, which gets them out into

the community solving real environmental problems,” said Tricia Brodrick of CIWMB.

Partnering on the local level, CIWMB works with science associations, private industry, and haulers, piggybacking on existing activities and tapping into these groups’ local expertise. CIWMB works closely with these organizations to tailor its outreach to local needs and circumstances. Depending on demographic and geographic factors, for example, CIWMB staff might emphasize different solid waste issues—waste prevention and vermicomposting in one area and traditional and oil recycling in others.

As other states embrace solid waste education they can look to the successful models in Massachusetts, Wisconsin, and California for guidance. “State programs should ensure that our children understand and practice the basic principles of waste reduction, reuse, and recycling,” said Stone. “Their support and leadership are key to our future.”

State Contacts



For more information on these state programs, contact the individuals listed below:

Massachusetts

Nicole Cirillo
Phone: 617 574-6865
E-mail: ncirillo@state.ma.us

Wisconsin

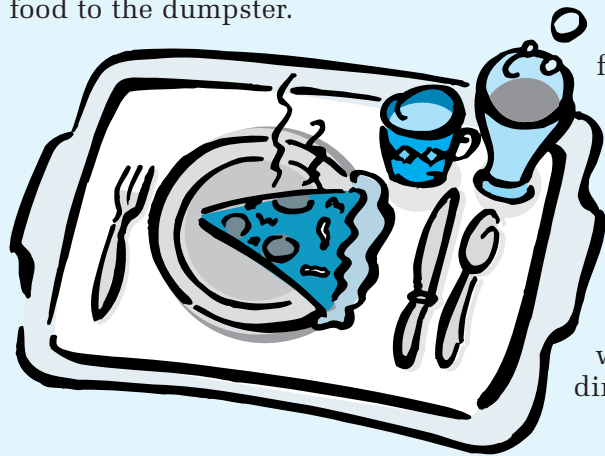
Joel Stone
Phone: 608 266-2711
Web site: www.dnr.state.wi.us/eeek

California

Tricia Brodrick
Phone: 916 255-2389
E-mail: tbroddri@ciwmb.ca.gov
Web site: www.ciwmb.ca.gov/wpe/schools

Food for Thought

It sounds hard to believe, but almost 4.5 million pounds of food scraps are generated *per meal* on college campuses around the country. From the kitchen to the serving table, consumers, food service operators, and retailers could all play a role in sending less food to the dumpster.



In an effort to reduce the amount of food and food-related waste generated, INFORM, Inc., recently completed *Getting an 'A' at Lunch: Smart Strategies to Reduce Waste in Campus Dining*. The report, just one of many technical documents produced by the environmentally minded organization, looks at the food service sector of colleges and universities and its specific contributions to the campus waste stream. It also provides tips and strategies for both students and food service directors on reducing food and other waste generated in college dining halls.

Below are a few key tips from the report:

- **Know what the students want.** By giving students a chance to contribute to menu planning, the more unpopular food items can be eliminated in the first place. Offer suggestion boxes or conduct surveys to find out what types of food students prefer.
- **Use smaller servings for self-serve items.** Setting out too much food not only generates unnecessary waste, but it is costly as well. Place less food at salad bars and buffets and replenish more often. This will avoid having untouched food go to waste and will allow food consumption to be managed more efficiently.

Join the Club

(Continued from page 1)

To ensure the kit would be educational and “kid-friendly,” EPA convened several focus groups in 1997 and 1998 with teachers and students in grades 4 through 6. Their valuable input was used to refine and improve the materials. When kids enthusiastically said they wished for copies of the board game as a holiday gift, EPA knew the activities had hit the mark!

The kit contains a Planet Protectors Club poster, certificate, badge, and pocket guides with instructions for kids and adults. Tools include:



- *Follow That Trail!*, an activity guide focusing on the concepts of conserving, recycling, and composting. The guide takes “young detectives” through an imaginary house with matching, decoding, drawing, and coloring exercises.
- *The Case of the Broken Loop*, an activity guide that looks at product life cycles, “closing the loop,” and other solid waste topics via crossword puzzles, word boxes, and other games.
- *Drop, Swap, & Roll: The Game of Reuse and Recycling*, a board game that helps

players learn the basics of recycling, composting, and reuse. Students also answer trivia questions relating to solid waste issues in science, math, history, and social studies.

- *The Environauts Mission to Earth* and other Internet activities, located at <www.epa.gov/epaoswer/osw/kids.htm>, allow students to study waste reduction practices on Earth through the eyes of an alien from another planet in a series of challenging, interactive computer exercises.

New missions and assignments will be added periodically. In addition, EPA plans to update its solid waste curriculum in 1999. To order the complete Planet Protectors Club kit, contact the RCRA Hotline at 800 424-9346 and request document number EPA530-E-98-002.

- **Offer reusable cups and mugs.** Several colleges around the nation have implemented reusable cup or mug programs that dramatically reduce the use of single-use cups. Offer an incentive for students to participate, such as discounts on beverages.

INFORM also produced the report *Making Less Garbage on Campus* in 1995, which contains case studies of different campuses' approaches to waste prevention. To obtain copies of the reports, visit its Web site at www.informinc.org or call Whitman Book Distribution at 800 353-3730. For more information, contact Nevin Cohen of INFORM at 212 361-2400.

Kids Champion Recycled-Content Products

Could it be that kids are paying as much attention to “buying recycled” as the latest fashion and music trends? At least among fifth- and eighth-graders at Smyser Elementary School in Chicago, Illinois, that seems to be the case. Concerned about the demand for recycled-content products, students at this school decided to take matters into their own hands.

“Our students realized that you are not really recycling unless you buy recycled-content products,” said Sherry Weinberg, Smyser Elementary School teacher. “With this in mind, they took on a project to make recycled products more marketable.”

As a research component of the project, students performed quality and cost comparison tests on numerous recycled- and nonrecycled-content products such as napkins, paper towels, and tissues. Students found the products made with recycled materials were equal in quality and similar in price to the nonrecycled products. As a related project, students worked with grocery stores, surveying consumers about their habits and attitudes regarding recycled-content products.

Students also participated in a variety of outreach efforts such as writing and designing flyers for the community that explained why consumers should buy recycled. Students suggested ways grocery stores could increase the visibility of their recycled-content products, from clearly labeling products to consolidating products under a “recycled products” sign. They even communicated ideas to recycled product manufacturers, such as offering special coupons for some products.

To conclude the project, students made presentations to teachers, classmates, and the community at a local environmental festival. At the event, students showed off a variety of items they made from scratch, including vases made from cereal boxes, picture frames made from scrap cloth, and robots made with soda cans.

Through participation in the project, students learned the importance of closing the recycling loop and how to initiate change through government, private companies, and the community. “The project was a tremendous success and really affected the community, making it more aware of how and why people should purchase recycled-content products,” said Weinberg.

For more information on the project, contact Sherry Weinberg of Smyser Elementary School at 773 534-3710.



Universities and Schools Get Wise About Waste



Recognizing the tremendous opportunities for waste prevention and recycling, EPA's WasteWise program expanded its focus to target schools and universities. Already, 79 educational institutions are saving thousands of dollars while also serving as environmental role models by participating in the WasteWise Program.

Below are just a few examples:

- **Sligo Adventist School**, in Takoma Park, Maryland, switched to bulk juice dispensers and reusable plastic cups, started a vermicomposting program for its food scraps, and reduced paper use in the school's office. As a result, the school recycled 96,000 pounds of paper and 2,500 pounds of food scraps. The school also recycled more than 2,000 pounds of each of the following materials: plastic, metal, and glass.
- **Seattle University** operates a surplus store to sell office furniture, computer equipment, and other used items rather than

disposing of them. In addition, the school's recycling program collected more than 876,000 pounds of material in 1997, saving nearly \$50,000 in disposal fees.

- **Desert Sands Unified School District**, in La Quinta, California, saved \$123,000 in 1 year by donating 3 tons of old textbooks to developing countries and selling used cooking oil for reprocessing into animal feed.

These stories are impressive given the host of challenges that must be overcome by educational institutions in developing a successful waste reduction program. In many ways, a university or school district operates like a large business, coordinating a mix of facilities, cafeterias, outside contractors, and of course, students. Gaining support for a new program, reaching a consensus about the kind of program to implement, and informing the institutional community about how to

How Can WasteWise Help My School?

WasteWise is an EPA voluntary partnership program through which businesses, governments, and institutions reduce waste, benefitting their bottom lines and the environment. Partners set their own goals and report their accomplishments in three areas: waste prevention, recycling, and buying/manufacturing products with recycled content.

Through WasteWise, educational facilities become part of a network of WasteWise partners who share extensive knowledge of school- and campus-specific waste prevention strategies. A WasteWise account representative helps generate ideas and provides technical assistance. WasteWise also offers many helpful publications and resources, a Web site, a list server that allows members to ask each other questions, and a toll-free Helpline. Partners also receive national recognition for their waste reduction successes through an awards program and numerous outreach efforts.

participate are just a few obstacles schools and universities typically face.

Over time, EPA hopes to help educational institutions achieve the same level of success as private sector WasteWise partners. With support from WasteWise, partners can save money and prevent material from being disposed of—not only leaving more money available for education, but also encouraging environmentally conscientious decision-making for future generations.

For more information, contact the WasteWise Helpline at 800 EPA-WISE (372-9473) or visit the program's Web site at <www.epa.gov/wastewise>.



Desert Sands Unified School District bales its boxes on site for recycling

A Federal Government Giveaway

Federal agencies are reaching out to schools and practicing reuse through the "Computers for Learning" program. All executive federal agencies participate in the program, which is coordinated by the U.S. General Services Administration (GSA). Agencies donate hundreds of thousands of pieces of surplus computer equipment, such as central processing units, printers, modems, routers, and servers, to schools and nonprofit educational organizations. Special consideration is given to those with the greatest need.

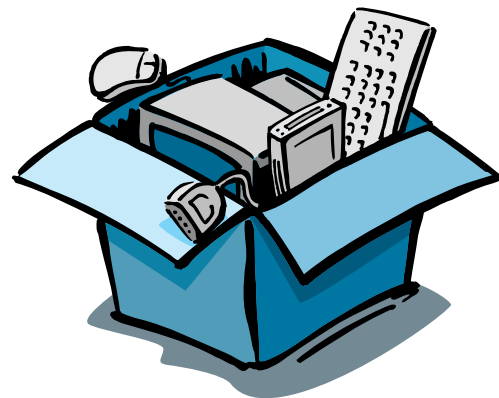
The program saves the federal government significant resources by reducing paperwork and minimizing the time surplus computers stay in government inventories.

Established in April 1996 by President Clinton, Computers for Learning assists in making modern computer technology an integral part of every classroom. The program is part of the President's broader efforts to help children advance their technological skills in preparation for the challenges of the next century.

So far, the program is drawing rave reviews from schools and teachers. "This will not only be an invaluable resource to our students but also to the communities impacted by the contributions of our graduates," said John Traynor, President of Gonzaga Preparatory School in Spokane, Washington, after his school received a shipment of computers.

Schools and educational nonprofits can easily register to request computer equipment through the Computers for Learning Web site.

The Web site also includes information on how to find assistance if computers require upgrading and how to contact volunteers with technical computer knowledge. Members of the Computers for Learning Partnership will ship computers to schools free of charge. For more information about Computers for Learning, call the toll-free hotline at 888 362-7870 or visit the program's Web site at <www.computers.fed.gov/doe/school/general.htm>.



Getting a Head Start on Solid Waste Education

Reading, writing, and arithmetic aren't the only lessons children are learning in school these days. Thanks to Keep America Beautiful, Inc. (KAB), students can add the importance of solid waste management to the list, as more and more schools adopt KAB's innovative educational curriculum.

The curriculum is actually divided into two parts: *Waste in Place* and *Waste: A Hidden Resource*. *Waste in Place* is geared towards children in grades K-6 and fosters a basic understanding of litter prevention and responsible solid waste management practices such as

source reduction, recycling, composting, waste-to-energy, and sanitary landfilling.

Waste: A Hidden Resource targets grades 7-12 and reinforces the waste management topics learned in *Waste in Place* by encouraging students to develop critical thinking and problem-solving skills. Through activities such as role-playing, students pretend to be elected officials, environmentalists, and business leaders and address solid waste issues together, such as siting a landfill.

Both portions are interdisciplinary and can be integrated with existing classes such as math, social studies, or science. Each is the result of extensive research on changing attitudes

and practices related to proper waste management. In addition, each was written and field-tested by a group of 350 teachers drawn from 21 states.

Waste in Place and *Waste: A Hidden Resource* are available for teachers and school systems from KAB and its affiliates nationwide. The curriculum is promoted through 1-day workshops taught by professional trainers with an educational background and classroom experience. In 1997, more than 10,000 teachers attended training sessions conducted by KAB and its affiliates.

KAB is a national, nonprofit public education organization concerned with improving waste handling practices in American communities. For more information regarding the curriculum or the organization, contact KAB's Sue Smith at 815 725-5897 or Mara Neville at 203 323-8987. You can also visit <www.kab.org/old/teachers.html>.



Whirlwind of Activity Increases Recycling

Recyclone Man swept through Aberdeen, Maryland, recently, handing out recycled-content products and encouraging residents to recycle. The recycling superhero was the key figure in a 2-month challenge to boost the city's recycling rate, reward citizens for their efforts, and educate them about the importance of closing the loop.

Dressed in an eye-catching red and white outfit, Recyclone Man marched through neighborhoods ahead of a recycling truck and left behind prizes at households with recyclables bagged for collection. Recycled-content prizes included 16-roll packs of 60 percent postconsumer content bathroom tissue and 900-count packages of paper napkins. In addition, Recyclone Man left behind a tip sheet, reminding recyclers that, among other things, bottle caps and jar lids are not recyclable and that only #1 and #2 plastic bottles are recyclable in Aberdeen.

Where no recyclables were set out, households received basic recycling instructions and were notified that prizes were awarded to others in their neighborhood. The information advised residents to tune in to a participating radio station for details on the challenge.

The challenge originated after 11 Aberdeen citizens weighed their recyclables for a year and found they could recycle up to 50 percent of their household waste (not including yard trimmings). To cover the challenge's



Where no recyclables were set out, households received basic recycling instructions and were notified that prizes were awarded to others in their neighborhood.

costs, Aberdeen used surplus funding from its pay-as-you-throw program, which requires prepaid 40- or 80-cent stickers on each trash bag set out for collection. If a household's bagged trash weighs less than the maximum amount allowed per sticker, surplus funding accumulates. "It seemed only fair to give it back to citizens," said Jim Litke, recycling coordinator for the city of Aberdeen.

Both the community and city officials enthusiastically supported the Recyclone Challenge. "I would certainly recommend it to other communities," said Litke. Based on its success, Aberdeen residents can look forward to another recycling challenge in April 1999, since surprising things happen when Recyclone Man pays a visit. "It won't be exactly the same," says Litke. "I am thinking of a new twist."

For more information on the challenge, contact Jim Litke of Aberdeen at 410 273-2087.

What's New Around the World

More than 3,800 international solid waste professionals from the public and private sectors attended WASTECON® 1998. The conference was a joint effort between the Solid Waste Association of North America (SWANA) and the International Solid Waste Association (ISWA).



A major strength of the conference was its solid waste trade show. More than 245 exhibitors displayed and demonstrated a large variety of composting, grinding, and recycling equipment, in addition to collection, transfer, and landfill equipment. In addition, technical sessions covered topics ranging from global solid waste management issues and trends to solutions for developing countries to collection efficiency innovations. Some attendees even toured a compost and mulch processing center and a construction and demolition debris facility.

It's not too early to start planning for this year's event; WASTECON® 1999 will be held in Reno, Nevada, from October 18 to 21, 1999. For more information, or to order the WASTECON® 1998 proceedings (\$65 for members, \$75 for non-members), contact SWANA at 301 585-2898 or visit its Web site at <www.swana.org/>.

RESOURCES



Setting Great Rates

EPA's new *Rate Structure Design: Setting Rates for a Pay-As-You-Throw Program* (EPA530-R-99-006) can help take the mystery out of setting effective rate structures for trash collection services. In communities with pay-as-you-throw (PAYT) programs, residents are charged based on the amount of trash they throw away rather than a set fee. The booklet details two strategies for setting PAYT rates: (1) using existing data from communities similar to your own and (2) following six basic steps to generate your own data. A hypothetical sample town helps planners go through each step, from forecasting the amount of municipal solid waste generated to projecting PAYT revenues and program costs for your own community. Case studies of successful programs across the country are also provided. To obtain your copy, call the PAYT Helpline at 888 EPA-PAYT (372-7298).

Extended Product Responsibility

Extended product responsibility (EPR) is an emerging environmental principle designed to help businesses spark product innovation, cut costs, and enhance customer loyalty, while expanding market share at home and abroad. Under EPR, all actors along the product chain are challenged to share responsibility for reducing the lifecycle environmental impacts of product systems, including upstream, production, and downstream impacts. To help explain this new approach, EPA pub-

lished *Extended Product Responsibility: A Strategic Framework for Sustainable Products* (EPA530-K-98-004). This eight-page booklet describes the benefits of EPR, explains how it works, and lists references with additional information and model programs. EPA is playing an active role in advancing the understanding and implementation of EPR principles in the United States by working with businesses, research institutions, consumers, federal agencies, and state and local governments. To order a copy, call the RCRA Hotline at 800 424-9346.

Preventing Illegal Dumping

In vacant lots and abandoned buildings or along alleys and roadways, illegal dumping is a major problem in many communities throughout the United States. To help cities and counties deal with this issue, EPA's Region 5 recently prepared a comprehensive document entitled *Illegal Dumping Prevention Guidebook* (EPA905-B-97-001). It contains general information about illegal dumping and guidance for developing a prevention program. It also includes a "tool kit" of strategies that have proven effective in combating illegal dumping, reinforced by case studies detailing how these strategies can be implemented. To order a copy of the guidebook, please write to: U.S. EPA Region 5; Waste, Pesticides, and Toxics Division; 77 West Jackson Boulevard (PA-19J); Chicago, IL 60604. The guidebook also is available on the Pay-As-You-Throw Web site at www.epa.gov/payt/research.htm.



Climate Change and Waste Reduction

[<www.epa.gov/mswclimate>](http://www.epa.gov/mswclimate)

Did you know that throwing away less waste can have an impact on global climate change? To find out more, visit EPA's new Web site on climate change and waste reduction. Through a series of informative links and pages, the site details EPA's efforts to address global climate change through waste reduction, as well as information on related programs, grant projects, and frequently asked questions. In addition, the site offers several tools, including a new software program and corresponding user's guide, intended to help organizations estimate the greenhouse gas emissions resulting from their solid waste management activities.

Environmental Careers on the Web

[<www.epa.gov/epaoswer/osw/careers/index.htm>](http://www.epa.gov/epaoswer/osw/careers/index.htm)

EPA's Office of Solid Waste (OSW) recently launched an environmental careers page. The page links to environmental job and internship opportunities and educational institutions with concentrations in environmental studies. It also provides a glimpse into the daily activities of OSW employees. In addition, the page links to EPA's Students and Teachers Page, a site with teacher resources and tools, recycling and waste reduction information for students, and a kids' page. Visitors also can link to EPA's Web site for environmental education and learn about Agencywide initiatives.

New Executive Order Builds Markets for Recycled Products

A new Executive order (E.O.) renews the federal government's commitment to waste prevention, recycling, and the purchase of recycled-content and other environmentally preferable products. Signed last September by President Clinton, E.O. 13101, "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition," strengthens E.O. 12873, passed in 1993.

One of the key tenets of E.O. 13101 is increasing the purchase of recycled-content paper. Since 1993, the federal government has quadrupled its purchases of recycled-content printing and writing paper. E.O. 13101 builds on this success and directs federal agencies to ensure that, as of January 1, 1999, they purchase only printing and writing paper containing 30 percent postconsumer fiber. If agencies are unable to do so, they must purchase paper containing at least 20 percent postconsumer fiber.

In addition, the new E.O. calls for EPA's Comprehensive Procurement Guidelines (CPG) program to continue designating recycled-content products for governmental purchase and recommend

recycled-content levels for these items. The CPG program already has designated 36 items and has proposed 19 additional items in CPG III. E.O. 13101 requires EPA to update the CPG every 2 years or as appropriate, rather than annually.

Federal agencies also are encouraged to purchase environmentally preferable products and services, including biobased products, to harness the tremendous purchasing power of the federal government and spur markets for these items. Biobased products are commercial or industrial products (other than food or agricultural feed) that utilize biological products or renewable domestic agricultural or forestry materials. Examples include vegetable oil-based transmission fluids and architectural products, such as cabinets, made from organic materials.

E.O. 13101 also directs EPA to finalize its guidance on the

acquisition of environmentally preferable products and services. Agencies are required to work with EPA on pilot projects to test and evaluate EPA's guidance. The guiding principle of environmentally preferable procurement is that multiple environmental attributes and life-cycle analysis are taken into consideration before product purchase.

Agencies also are directed by E.O. 13101 to establish waste reduction, recycling, and recycled products purchasing targets.

The Council on Environmental Quality chartered the White House Task Force on Waste Prevention and Recycling to work with the Federal Environmental Executive as chair of the task force to implement the E.O. EPA representatives will serve on this task force. For more information on E.O. 13101, contact the Office of the Federal Environmental Executive at 202 260-1297.



This issue of *Reusable News* is also available on the Internet. Access this and other EPA publications through the World Wide Web, at www.epa.gov/epaoswer/non-hw/recycle/reuse.htm.



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Environmental Protection Agency
(5305W)
Washington, DC 20460

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