



State of Recycling in Arkansas—2006

Recycling's Crystal

Arkansas reached the crystal anniversary of recycling legislation in 2006, marking fifteen years since the Arkansas Legislature passed Act 749 of 1991. The first subchapter in that Act states “it is the policy of the State of Arkansas to encourage and promote recycling....” It also sets recycling goals for 1995 and 2000. Act 94 of 2001 added goals for 2005 and 2010. Thanks to the efforts of Arkansas’s elected officials and citizens, the state exceeded every goal through 2005’s.

In addition, Arkansas is well on its way to reaching the current goal of recycling 45 percent of our solid waste stream by 2010. The 2006 recycling rate was 42.13 percent. This means that 42.13 percent of the waste generated in the state was collected, marketed and returned to consumers as usable products through business and community recycling programs.

To calculate the recycling rate, we add the amount of waste sent to landfills from the state to the amount of material recycled by programs in the state to get the total waste stream for the state. Then we divide the amount of material recycled by programs in the state by the total waste

stream. This number is multiplied by 100 to get the percentage of waste recycled in the state or the recycling rate. (For more on how this number is calculated, see “Where the Numbers Come From” on page 6.)

If you look at how the number is calculated, we can increase our recycling rate in a couple of ways. First, we can increase the amount of material we recycle. Second, we can decrease the amount of material we landfill. We’re doing a good job on the first – the total tonnage recycled continues to increase each year. The second needs improvement – the total tonnage landfilled also continues to increase each year.

Think how much quicker we could reach our recycling goal if the amount of materials recycled continued

to increase, and the amount of materials landfilled decreased. It’s not hard to do. If every Arkansan recycled just one additional aluminum can, we’d move nearly 41 tons from the landfilled number to the recycling number. If every Arkansan bought one less drink in a disposable cup each month, we’d reduce the material landfilled by 500 tons. Isn’t our state worth this effort?



$$\text{Recycling Rate} = 100 \times \frac{\text{Tons Recycled}}{\text{Tons Landfilled} + \text{Tons Recycled}}$$

As used in this report, “2006” means the period from July 1, 2006, to June 30, 2007.

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Recycling/Market Development Activities

The Arkansas Department of Environmental Quality, specifically the Solid Waste Management Division, is charged with administering solid waste management programs in the state. The Recycling/Market Development Branch focuses on recycling and other waste reduction activities. The Branch provides technical assistance and educational programs throughout the state, as well as administering the Recycling Equipment Tax Credit Program.

On the Recycling side, major projects for the year included discussions to initiate recycling in prisons and Veterans Administration hospitals in the state, improvements to the state electronic waste recycling program, and the beginning of a project to develop a statewide solid waste management curriculum. Recycling staff members gave more than 350 educational

presentations reaching at least 5,000 Arkansans. This included conducting 10 full- or half-day environmental education workshops for teachers. Other presentations were made at schools, businesses, community group meetings, and special events.

On the Market Development side, the major work focused on the Recycling Equipment Tax Credit Program which helps Arkansas businesses invest in recycling. More than 225 companies have invested nearly \$436 million since the recycling tax credit program began 15 years ago. In 2006, the section certified 71 tax credit applications totaling \$17.8 million, a 13 percent increase over last year's dollars. A sample of projects approved include a new facility that reclaims wood waste to produce fuel pellets and state-of-the-art eddy current and

shredder systems installed at two scrap metal processors allowing the processing of a greater amount of material more effectively.

In addition, the Solid Waste Management Division's Programs Branch administers two grants programs that enhance recycling in Arkansas. The Solid Waste Management and Recycling Grants program provides funding for a variety of recycling, composting and other waste reduction programs and projects throughout the state. In 2006, nearly \$3.35 million was distributed through 128 grants. The Computer and Electronic Recycling Fund provides grants to fund the development and promotion of environmentally responsible methods of managing electronic waste. In 2006, ADEQ distributed \$180,578 to 13 e-waste recycling projects.

Branding Recycling?

What comes to mind when you hear the term "branding?" If you're a fan of westerns or come from cattle country, you might think of hot metal permanently marking livestock. Although he comes from "out west" (Arizona to be exact), Dale Alimena, director of the Sebastian County Regional Solid Waste Management District (RSWMD), has a slightly different concept of branding in mind.

We all know brands; although today they are more likely to be names like Coca-Cola® and McDonald's® than Flying J or Rocking R. But branding is more than just a name or a logo; it is the association between these items and the thoughts and feelings they evoke in a person. Therefore, everything the brand is and does – the attractiveness of its logo, the quality of its products, the helpfulness of its people, the effectiveness of its policies – is part of branding in today's terms.

Soon after he became director, Alimena became frustrated because always having to explain the district name and purpose took time away from the environmental conservation message

he wanted to convey. One problem was the name itself; Sebastian County Regional Solid Waste Management District doesn't exactly roll off the tongue. Also, the term solid waste is more likely to evoke thoughts of trash and landfills than environmental conservation.

The company printing his business cards introduced him to the concept of branding and Alimena took it from there. For education and outreach issues, the district took on a name – EccoPartners – that was easier to remember and related to what it hoped to accomplish. Ecco is close enough to "eco" to evoke environmental or ecological thoughts in the mind, but it is also an acronym for Environmental Conservation and Community Outreach. And because the district can't solve solid waste or other environmental issues on its own, Partners to show we all need to work together.

Sebastian County isn't the first RSWMD in the state to use a different name for its public face. West River Valley RSWMD calls its recycling facility and satellite drop-offs Recycle Works. But, Sebastian County is the first RSWMD to consciously and actively pursue branding as explained above. Branding takes time, money and resources, but according to Alimena, it is worth it if you have a vision to fulfill. "Now when I speak to groups, I tell them I'm from EccoPartners and they know I'm going to talk about the environment."

It will take some time before EccoPartners reaches its full potential as a brand and there will be some adjustments to be made. (For example, the District name is still used for administrative and enforcement activities. This led to confusion when the office phones were answered with just the EccoPartners name. Now you'll hear both names if you call.) However, the District Board is excited about where EccoPartners is going and looks forward to the day when EccoPartners is as well known in Sebastian County and surrounding areas as McDonald's® is worldwide.



Certifying the Future: Craighead County's Environmental Educators Program

A poet once said that "In the end, we conserve only what we love. We will love only what we understand. We will understand only what we are taught."

Training a force of educators who will enter classrooms fully armed with environmental information, Craighead County Regional Solid Waste Management District (RSWMD) is well on its way to creating a generation that understands its impact on the environment. "We saw the need to give teachers the resources to help our students understand that individual actions affect the entire community," said Judith Long, recycling education coordinator.

The Craighead County RSWMD created the Environmental Educators (EE) certification program about seven years ago with the education coordinator's hiring and the creation of a support board, C.R.A.I.G. The Cooperative Recycling and Incentive Group's (C.R.A.I.G.) top mandate was education.

"Our intent in certifying teachers was to provide trained educators with information and equipment they need to maintain successful waste reduction programs in their schools, and to recognize them for their achievements," Long said recently.

By offering the certification, Craighead County RSWMD bounded into uncharted territory. The District was the first in Arkansas to develop a program for educating and training teachers in recycling and environmental issues toward becoming certified Environmental Educators.

Through the development process, organizers established that educators must meet two requirements to be certified:

1. Completion of 12 hours of instruction offered through the RSWMD, the Arkansas Department of Environmental Quality and Crowley's Ridge Educational Cooperative, and
2. Participation in two recycling activities at their schools

Each of the EEs practices a recycling program at his school. The District furnishes containers and supplies to the EEs to implement their school projects. An informal newsletter and information shared via e-mail help support the EEs, and most recently continuing education about recycling trends was offered.

"In the end, we conserve only what we love. We will love only what we understand. We will understand only what we are taught."

In addition to being part of recycling in their schools, teachers have had art contests with "sculpture" made of recyclable products; conducted Earth Day and America Recycles Day events at their schools; and had special speakers come to their classrooms. Many have continued with their environmental education training by attending other workshops and conferences, including the North American Association of Environmental Educators national convention.

To date, the District has certified 40 Environmental Educators representing more than 62 percent of Craighead County school districts. Others with certified Environmental Educators include the Jonesboro Area Tech Center, ASU Education Department and Craighead County Jonesboro Public Library.

The EE program has been so successful that the District has now created an Environmental Schools Program. Criteria have not been finalized; yet the District determined a school would be eligible to apply for the status when it has six certified EEs on staff. Two Jonesboro School District schools already have this distinction: the Health/Wellness/Environmental Magnet School and Math/Science Magnet School.



Educators may tour recycling facilities and manufacturers who use recycled materials, Arkansas Glass Container Corporation in this case, as part of their training.



Educators may participate in hands-on workshops, ADEQ's "Connecting the Links" in this case, as part of their training.

Help for Rural Recycling Programs

While many take community recycling programs as a given these days, it wasn't so long ago that they were hard to find in Arkansas. Grassroots efforts in the 1970s and 1980s gave rise to some of the state's most successful recycling programs, as well as the non-profit most know simply as ORE. Without ORE – Ozark Recycling Enterprise, Inc. – there to help, fewer communities would have been able to start and sustain recycling programs. Today, an offshoot of ORE (ORE-Recovered Materials) still helps two or three new programs get started each year.

ORE was formed to provide recycling related technical assistance in northwest Arkansas. Incorporated in 1988, the non-profit was a cooperative venture which included seven counties, six cities and seven private and non-profit recyclers serving a population of 370,000. Funding came from companies – such as Wal-Mart and Weyerhaeuser – well known to Arkansans, as well as governmental grants from the U.S. Environmental Protection Agency and the Arkansas Department of Pollution Control and Ecology (now the Arkansas Department of Environmental Quality). Winthrop Rockefeller and Bill Clinton both lent their support.

Sandy Garcia, the first executive director of ORE, focused on making recycling a possibility for rural communities in northwest Arkansas. One way she found to do this was cooperative marketing. In this case, cooperative marketing involved consolidating loads from several recycling centers to make a full truckload of materials. By doing this, the materials bring a better price and communities get their materials to market quicker. ORE also provided training and information to help communities start and improve their recycling programs.

Martha Treece, named ORE's executive director in 1998, continued and expanded the work of her predecessors, taking the cooperative marketing method statewide. One of the real successes under her watch has been the rise of programs at facilities for developmentally challenged adults – the Ashley County Sheltered Workshop, Abilities Unlimited in Magnolia, and the Polk County Developmental Center, to name a few. These programs are win-

win-win situations, providing the facility's clients with gainful employment, the community with recycling opportunities, and ORE with more ways of making a full truckload of materials. Treece estimates that about 30 percent of her business currently comes from these facilities.

And recycling is a business. That's one message Treece wants the facilities she works with to understand. She provides the recycling programs she works with – whether they are run by volunteers, governmental agencies, developmentally challenged adults, or anyone else – with ideas for improving their end product at a cost the program can afford. "By helping the facilities do good business, I'm actually helping myself." Treece says, "The markets I deal with know that our centers are easy to work with and provide good quality materials. That makes moving loads much easier."

By the time Treece had been with ORE for several years, the business had grown to the point that both she and ORE's Board of Directors realized the activities really weren't appropriate for a non-profit. The solution? Split into two different entities. So in 2002, Martha and her husband split off the brokerage and logistic duties, forming the for-profit ORE-Recovered Materials. (Which spawned another business, Getter Done Trucking.) Most people never noticed the difference.

While Treece is no longer executive director of the non-profit Ozark Recycling Enterprises, Inc., she still serves on its Board of Directors. With the formation of the for-profit company, ORE has shifted its focus to become more of an "ombudsman" for rural recycling programs. Specifically, ORE is trying to find solutions for items – such as electronics – that are difficult to recycle, especially in rural areas.

Recycling in Arkansas has come a long way since early grassroots efforts, thanks in part to Ozark Recycling Enterprise, Inc., and its offshoots. While much remains to be done in the effort to bring recycling to all parts of Arkansas, with the commitment of dedicated organizations such as ORE, community recycling programs should continue to sprout and grow in the years to come.

A Sampling of Programs

ORE Has Helped

Abilities Unlimited—Magnolia
Abilities Unlimited's recycling program took off after they partnered with ORE. In three years, they nearly tripled the tonnage of materials recovered and sold.

Bella Vista
ORE helped the recycling center in Bella Vista, run by AARP Chapter 109, find a way to add magazines to their program. ORE markets split loads of magazines and sorted office waste for the center, so their materials get to market quicker.

Madison County
Madison County's recycling center has been working with ORE to market its materials for more than a decade. The amount of material they recycle each year has steadily increased—from 470 tons in 1996 to 1127 tons in 2006.

Polk County Developmental Center
Polk County Developmental Center started recycling by donating many of the recovered materials to other recyclers. Today they sell two loads of mixed materials a month, earning money for their programs.

Stone County
Stone County Recycling Center Coordinator Nell Harrelson says "We used to sort every kind of paper. Then Martha pitched the #6 paper mix and our volume increased immensely. In fact, the increased volume offsets the lower value of the paper."

Materials Recycled 2006

Material	Weight in tons
Batteries—Lead Acid	357
Computers/Electronics	23,211
Cooking Oil	5,265
Glass	2,646
Metals	806,978
Aluminum Cans/Non-ferrous—Aluminum, Brass, Copper	76,293
Oil	
Filters (Steel)	308
Ferrous—Steel & Iron	658,113
White Goods (Ferrous)	72,264
Motor Oil	60,292
Pallets and Other Wood Waste	910,518
Paper	148,851
Cardboard	40,030
Mixed	11,230
Newsprint	22,977
White Ledger	72,987
Magazines	106
Other (including computer printout)	1,521
Plastic	33,876
HDPE (High Density Polyethylene)	1,648
LDPE (Low Density Polyethylene)	3,283
PET (Polyethylene Terephthalate)	1,374
Poly Pipe	25,517
Other	2,054
Sawdust	5,800
Textiles & Leather	472
Tires & Rubber	34,508
Yard Wastes	79,068
Total	2,111,842

2,900,689.13 tons landfilled in 2006

2,900,689.13 + 2,111,842 = 5,012,531.13 tons total municipal solid waste stream in 2006

2,111,842/5,012,531.13 = 42.1325 percent recycling rate

Where Do the Numbers Come From?

When it comes to solid waste management—including recycling—in Arkansas, the Legislature passes statutes which the Arkansas Department of Environmental Quality (ADEQ) administers. The Legislature also gives the Arkansas Pollution Control and Ecology Commission (APC&EC) the authority to pass regulations to help the department do that.

Several of these regulations require reporting of activities to ADEQ. These include:

1. Regulation 11 which requires all landfills and solid waste transporters to provide quarterly reports
2. Regulation 14 which requires all waste tire collectors and transporters, as well as processing and disposal facilities, to provide annual reports
3. Regulation 28 which requires all recycling collection centers and systems to provide annual reports

These reports provide the raw data for the numbers furnished on page 5 of this document.

Per APC&EC Regulation 28, recycling facilities—whether municipal, non-profit or for profit—are asked to complete an annual report which includes the materials they recycled during the past 12 months, including amounts recycled and where they were marketed. (The survey period currently runs from July 1 to June 30.) The market information assures materials that move through two or more recyclers in the state are only counted once. The amounts from all the reports are added together to get the numbers listed in the Materials Recycled table on page 5. The exception is tires.

Tires listed on the Regulation 28 reports are not used to calculate tires recycled in the state (although they are used for calculating how much material a particular facility recycles) because we can get a more accurate figure from the annual reports required by APC&EC Regulation 14. Collectors and transporters take waste tires to a processor or disposal facility, and processors generally send the recycled tires to an end-user, not another processor. Therefore, to make sure recycled tires are not double counted, the numbers reported by waste tire processors are used as a base for the tons of tires recycled. To ensure all tires are counted, tires reported as going out of state are added to the base to get the total tonnage of tires recycled. The “Tires & Rubber” number in the Materials Recycled table comes from adding the rubber total from the Regulation 28 reports to the tire number.

The reports filed under APC&EC Regulation 11 requirements provide the tonnage of solid waste landfilled in the state. As with the reports filed pursuant to the other two regulations, the numbers aren't just added together. The base number is taken from the reports from landfills. If a transporter takes Arkansas solid waste to a landfill in another state, that is added to

the base. This gives us the total tonnage of waste landfilled.

“Recycling’s Crystal” (page 1) explains how these numbers are used to calculate the recycling rate.

In the past, Arkansas numbers have been compared to national figures in the State of Recycling report. However, the national figures, provided by the U.S. Environmental Protection Agency (EPA), are calculated much differently than the process used in Arkansas. For instance, EPA uses industry production and recycling data instead of surveying waste disposal and recycling facilities. In addition, Arkansas figures include some materials, such as sawdust, that EPA does not include. (For details on how EPA calculates its figures, see MSW Characterization Methodolgy at www.epa.gov/msw/pubs/06numbers.pdf.) Therefore, comparing the Arkansas and national numbers is like comparing apples to oranges.

To continue the tradition of reporting these numbers (and to satisfy curiosity), Arkansas and National statistics are listed in the table below. For more national statistics, including those from previous years, explore the EPA documents at www.epa.gov/msw/msw99.htm.

Comparing Apples to Oranges*

	Arkansas	United States
Solid Waste Generation (pounds/person/day)	9.77	4.6
Recycling Rate (percentage)	42.13	32.5

**See “Where Do the Numbers Come From” (above) for an explanation of why these figures shouldn't really be compared.*



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