



State of Recycling in Arkansas—2012

Arkansas Department of Environmental Quality

NOVEMBER 2012

Recycling Rate Rebounds

After falling to near record lows in 2010 and 2011, the recycling rate for Arkansas increased to 40.6% in 2012. The 2011 report noted that while recycling tonnage increased, the recycling rate fell because the tonnage landfilled increased faster. Recycling easily topped landfilling this year, showing an increase of 806,228 tons (50.4%) versus 13,337 tons (0.4%) for landfilling.

	2012 (TONS)	2011 (TONS)	DIFFERENCE	
			TONS	%
LANDFILLED	3,518,294	3,504,957	13,337	0.38
RECYCLED	2,407,243	1,601,015	806,228	50.36
WASTE STREAM	5,925,537	5,105,972	819,565	16.05

As used in this report, “2012” means the period from July 1, 2011, to June 30, 2012.

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Textiles and Leather

Out of the eleven major categories of materials reported on page 5 of this report, tons recycled increased in five. The most dramatic percentage increase, 1,436%, was in the Textiles and Leather category. Several facilities reported this material for the first time in 2012. One of these facilities, a non-profit based in Little Rock, accounted for 83% of the total tonnage reported. Without their contribution, Textiles and Leather would have seen an 8% decrease.

Metals

Looking at other percentages, the increase in metals (87%) was less dramatic. However, the Metals category still takes the top spot in tonnage collected. Facilities reported 939,367 more tons collected in 2012 than in 2011. One subcategory,

Other, accounted for 84% of this increased tonnage. As with the Textiles and Leather category, one facility reporting for the first time explained most of the increase.

A Blytheville business recycled 99% of the material reported in this subcategory which showed a change of 16,964% over 2011. Without this business's contribution, Metals-Other would have seen a 2% decrease over 2011 and the Metals category increase would have been cut to 14%.

Plastics

While collections in the Plastics category saw a 34% decrease from 2011, one subcategory saw an 1,100% increase. Collections of Low Density Polyethylene (LDPE), a plastic commonly used in stretch wrap and retail bags, increased by more than 10,000 tons. As with

the other two increases, one facility—a business in Springdale—accounted for the majority (66%) of the increase.

Even without this business, the increase in this subcategory would still be 307%. Increased collections from three facilities—one business in Pine Bluff and two in northwest Arkansas—account for most (94%) of this. These facilities recycled from two to eight and a half times more than in 2011.

ADEQ appreciates all the facilities that measure and report the materials they recycle to provide data for this report. However, there is more to the recycling rate than that. All Arkansans have a part to play by utilizing available recycling opportunities and other ways of reducing the amount of waste being sent to landfills. Please continue the good work in 2013 and beyond.

Recycling Grants Program Update

There were many changes to the recycling grants program noted in the 2011 “State of Recycling” report. This past year was less about change and more about tying up loose ends.

One change that was made, due to Act 819 of 2011, was the addition of a new grant category. Waste Reduction Activities, projects that divert materials away from landfills and into beneficial use, are now eligible under the recycling grants program. The first grants in this new category were given in the 2011 grant round (awarded in 2012).

ADEQ staff also worked with regional solid waste management districts to help them fulfill their obligations under the

grants program. District staff and grant recipients worked diligently to spend old funds, provide all required information about expenditures and maintain or reach compliance with all statutory and regulatory requirements.

ADEQ disbursed \$2,891,701 covering 113 projects worth \$7,420,998 in this grant round. Slightly more than half of these funds were spent in the first reporting period. (See chart on next page for details.) Using these numbers, the state received \$2.57 in benefits for every state dollar invested in the recycling grants program.

During 2012, community recycling centers collected and processed 267,128 tons

of recyclable materials and received \$7,764,420 by selling them. That means the grant recipients received an additional \$2.68 in benefits for every state dollar invested in the recycling grants program. Plus, these programs will continue to collect and sell materials in future years.

The true benefit per dollar awarded is much higher, however. This \$5.25 combined benefit doesn't include benefits that are harder to measure, such as conserving resources, providing jobs and community good will.

Nearly \$4 million has been allocated for the 2012 grant round which runs from July 1, 2012, to June 30, 2013.

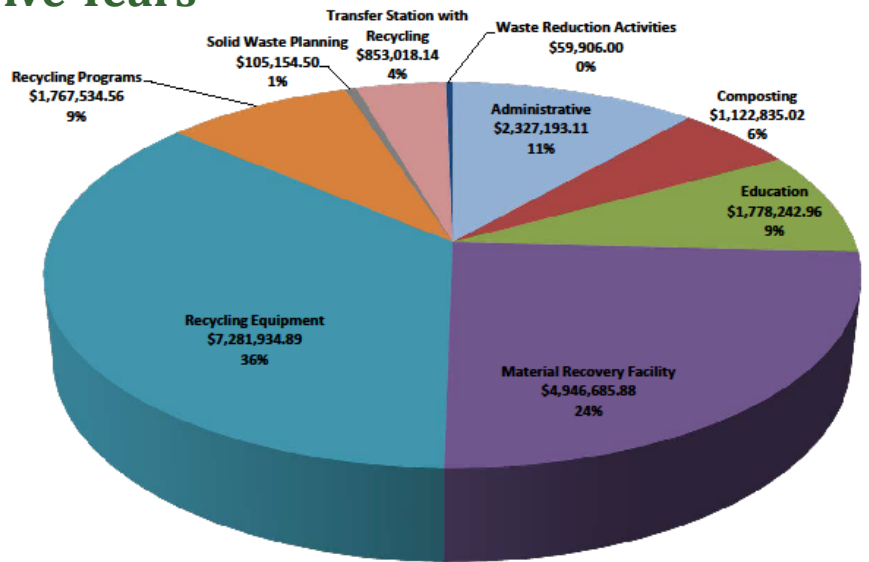
Program Statistics For Last Five Years

Recipients of recycling grant funds are required to report on expenditures and benefits for a minimum of five years, longer if there are still funds remaining. (All grants that must be reported on are considered “active.”) The following statistics cover all grants active during the last five years (2007 through 2011 grant rounds).

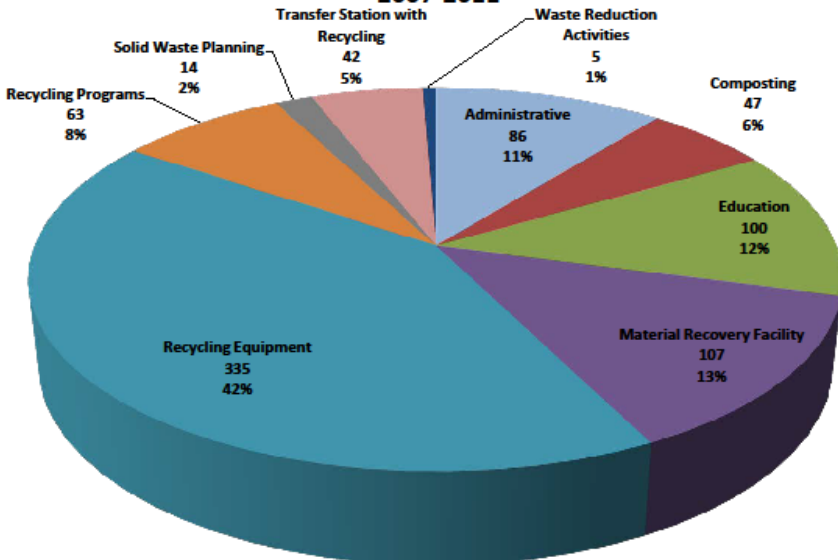
Number of active grants = 799

Number of different recipients = 170

**Dollars Awarded by Grant Category
2007 - 2011**



**Grants Awarded by Grant Category
2007-2011**



Total cost of projects = \$52,654,392

Total grant funding = \$18,460,156

Using just these last two numbers and ignoring the other benefits of the program gives a return on investment of more than 185% over this five year period.

2011 Grant Round Summary by Regional Solid Waste Management District

RSWMD (NUMBER OF COUNTIES)	DISTRICT POPULATION (2010 CENSUS)	NUMBER OF GRANT PROJECTS	TOTAL COST OF PROJECTS	GRANT AMOUNT RECEIVED	GRANT AMOUNT REMAINING	MATERIAL COLLECTED (TONS)	REVENUE FROM SALE OF MATERIALS
Benton County (1)	221,339	5	\$457,388.00	\$182,729.00	\$96,774.61	6,630.48	\$856,780.78
Boston Mountain (2)	218,782	9	\$479,433.00	\$180,618.00	\$65,558.00	25,098.54	\$1,061,401.50
Central Arkansas (3)	85,220	6	\$90,180.00	\$66,554.00	\$29,947.17	727.44	\$37,697.90
Craighead County (1)	96,443	4	\$184,200.00	\$94,504.00	\$94,504.00	2,282.41	\$65,603.25
East Arkansas (6)	153,794	5	\$367,198.00	\$144,850.00	\$142,760.94	2,368.18	\$219,268.39
Faulkner County (1)	113,237	3	\$258,373.45	\$87,758.00	\$31,558.25	16,722.26	\$410,185.29
Mississippi County (1)	46,480	4	\$53,252.00	\$45,545.00	\$16,460.74	2,150.57	\$0.00
Northeast Arkansas (4)	93,557	3	\$193,239.00	\$91,676.00	\$39,333.05	220.39	\$9,169.00
Ozark Mountain (6)	139,040	9	\$441,081.00	\$114,786.00	\$63,450.90	4,565.53	\$396,111.90
Pulaski County (1)	382,748	8	\$970,153.00	\$296,626.00	\$98,576.74	97,009.02	\$1,376,653.70
Saline County (1)	107,118	4	\$536,256.00	\$83,015.00	\$24,043.48	2,454.29	\$28,361.35
Sebastian County (1)	125,744	6	\$272,172.00	\$153,088.00	\$122,809.56	10,297.56	\$131,929.81
Southeast Arkansas (10)	213,808	12	\$541,547.51	\$235,078.42	\$182,849.23	3,521.7	\$186,567.31
Southwest Arkansas (6)	149,257	11	\$406,991.81	\$194,172.00	\$72,446.99	31,203.33	\$47,1034.39
Southwest Central (3)	151,942	2	\$273,955.00	\$166,376.00	\$84,995.70	23,189.93	\$534,640.59
Upper Southwest (9)	124,709	2	\$400,000.00	\$156,220.00	\$268.00	4,993.03	\$572,054.65
West River Valley (9)	254,856	3	\$1,090,856.00	\$292,913.00	\$97,116.98	8,100.51	\$857,403.26
White River (10)	237,844	17	\$404,722.00	\$305,193.00	\$191,797.98	25,592.82	\$549,556.65
Total for State (75)	2,915,918	113	\$7,420,997.77	\$2,891,701.42	\$1,455,252.32	267,127.99	\$7,764,419.72

... supply and demand determine the value and movement of recovered commodities ...

Market Movements

Once looked at as simply a “hippy” movement or a passing fad, recycling is now mainstream with direct ties to the local and global economies. Recycling is no longer just “the right thing to do;” it makes good economic sense, especially in today’s down-sized economy. For business and industry, it can mean dollars to the bottom line; for communities, it can mean added jobs and tax revenue.

Because supply and demand determine the value and movement of recovered commodities, local recycling programs feel the impact of slow economies and enjoy the surge of growing markets. Foreign markets, even in small-town America, affect how materials move. For example, when China created a demand that increased commodity prices, new recycling programs started. However, when European ordering declined and the Chinese economy slowed while the U.S. economy continued its recovery, slow-moving, lower-priced commodities resulted.

Ferrous scrap and aluminum prices have plummeted due to struggling economies with little construction activity, according to some reports. While all this makes the recycling market outlook appear bleak, there is good news. “With the exception of the late 2008 crash, the overall value for recyclables has remained at historic highs,” says Jerry Powell, editor of industry trade magazine *Resource Recycling*.

For community programs, it’s not always how much revenue the product brings in. In the last year, Arkansas communities have been able to tap into a new glass market, satisfying the consumers’ desire to recycle a heavy, low-value commodity while easing economic concerns for pub-

lic entities. Arkansas communities have searched for years to find ways to recycle glass. The cost was always too high due to transportation, safety and pricing issues. Today, however, many are able to recycle glass without worrying about specialized equipment, sorting, staff time or safety.

Working with Ripple Glass in Kansas City, all three colors of glass can be collected together, stored outside in a bunker and shipped for free (within a limited area) to the Ripple Glass plant. Using high tech optical sorters and screens, the glass is processed into different sizes and even colors of cullet, ready for manufacturers to use to make new glass products.

Glass market pricing is the least volatile of all post-consumer commodities. The raw materials used to make glass – sand, lime and soda ash – are readily available in most regions of the world and are inexpensive. Recycled glass pricing is greatly influenced by these abundant raw materials.

Although we’ve seen the scrap metal prices fluctuate, the industry as a whole has evolved to sustain itself for more than a hundred years. An example is the scrap metal industry’s focus on expanding electronics recycling.

“E-Recycling” is a rapidly growing segment of the private sector scrap recycling industry. The potential role of the scrap metal industry in E-Recycling is important since it has the existing strength, capability and infrastructure to utilize greater amounts of electronics in an environmentally sound manner. Further, the Institute of Scrap Recycling Industries, Inc. (“ISRI”) has guidance such as the

Scrap Specifications Circular which has been useful in controlling the quality of electronic scrap.

The Arkansas scrap metal industry continues to expand its output from both the domestic and foreign standpoint. All five Arkansas steel mills utilize Arkansas scrap metal to varying degrees. Further, the ISRI has estimated that approximately 4% of the scrap metal materials processed in Arkansas are exported to other countries for manufacturing new products. This activity is estimated to generate \$23 million in economic benefits in Arkansas and contribute \$843,000 in tax revenues for Arkansas and its local governments.

ISRI also estimates that 1,200 jobs are currently being supported by the manufacturing and brokerage operations that the scrap recycling industry provides in Arkansas. Two thousand thirty jobs are indirectly supported by the scrap recycling industry to suppliers in an indirect impact of the industry’s expenditures.

While the markets continually fluctuate, recyclers throughout Arkansas monitor and adjust to keep afloat. Many have weathered economic storms in the past and are putting their experience to the test now. By implementing new technologies, streamlining operations and searching for new markets, successful recycling programs will continue.

(Contributors to this article: Martha Treece with ORE Recovered Materials; Donna Utter with Ripple Glass; and Walter G. Wright, Jr. with Mitchell, Williams, Selig, Gates & Woodyard, P.L.L.C.)

Materials Recycled 2012

MATERIAL	WEIGHT IN TONS
Batteries	9,652
Electronic Waste	4,404
Glass	2,779
Household Hazardous Waste	1,111
Metals	2,018,378
<i>Aluminum Cans/Non-ferrous—Aluminum, Brass, Copper</i>	124,539
<i>Ferrous—Steel and Iron</i>	901,217
<i>White Goods (Ferrous)</i>	197,800
<i>Other (combined metals, steel slag, mixed metals, etc.)</i>	794,822
Oil (Motor, Cooking)	28,840
Paper	183,929
<i>Cardboard</i>	94,465
<i>Magazines/Mixed Paper</i>	30,305
<i>Newsprint</i>	24,236
<i>Sorted Office Paper</i>	2,783
<i>Sorted White Ledger</i>	1,037
<i>Other (rolls of paper, consumer board, paper board, etc.)</i>	31,103
Plastic	45,142
<i>HDPE (High Density Polyethylene)</i>	3,307
<i>LDPE (Low Density Polyethylene)</i>	10,992
<i>PET (Polyethylene Terephthalate)</i>	1,109
<i>Poly Pipe</i>	20,046
<i>Other (poly logs, electronics plastics, chemical jugs, barrels, etc.)</i>	9,688
Textiles & Leather	10,857
Tires & Rubber	12,562
Yard Wastes	89,589
TOTAL	2,407,243

Tons Landfilled = 3,518,294

Tons Recycled = 2,407,243

Total Waste Stream (Tons) = Tons Landfilled + Tons Recycled = 5,925,537

Tons Recycled/Total Waste Stream x 100 =

Recycling Rate = 40.6%

Arkansas also recovered items for beneficial use including 26,600 tons of Tire Derived Fuel, 91,081 tons of asphalt, 8,469 tons of shingles, 132,447 tons of road material and 108,341 tons of wood waste for fuel (not included in above totals).

DIRECTOR Teresa Marks
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RECYCLING/MARKET DEVELOPMENT BRANCH MANAGER Robert Hunter

The Market Movements article mentions a new glass market that has allowed a number of Arkansas communities to introduce or reintroduce glass to their recycling programs. Recycling grant funds are being used to buy bins, build bunkers and otherwise assist this effort. In 2012, recycling grant funds also helped provide recycling to unserved or underserved communities including:

<i>Center Point</i>	<i>Glenwood</i>	<i>Lockesburg</i>	<i>Sherwood</i>
<i>Delight</i>	<i>Horatio</i>	<i>Maumelle Curbside</i>	<i>Texarkana</i>
<i>Dierks</i>	<i>Kirby</i>	<i>Murfreesboro</i>	<i>Tollette</i>
<i>Fairfield Bay</i>	<i>Faulkner Co.</i>	<i>Fayetteville</i>	<i>Pulaski Co.</i>
<i>Outdoor Education Center</i>	<i>Expanded Curbside</i>	<i>W. North St. Drop-off</i>	<i>Expanded Curbside</i>



E-Waste Grants Update

In 2012, the ADEQ began a grants program for recycling unwanted electronic equipment. The Arkansas Computer and Electronic Equipment Recycling Program is similar to the Solid Waste and Recycling Grants program with pre-applications, applications, reporting and extended spending time. However, there are important differences. For instance, while the recycling grants program has a category for Administrative grants, there is no administrative funding in the new program. Complete details can be found in Chapter 5 of proposed changes to Arkansas Pollution Control and Ecology Commission Regulation 11.

A total of \$2.5 million was available to the eighteen regional solid waste management districts. Seventeen solid waste districts applied for their allocations to fund a total of 100 grant projects.

2012 GRANT ROUND AMOUNTS AWARDED

RSWMD	Amount	RSWMD	Amount
Benton County	\$154,598	Saline County	\$70,235
Boston Mountain	\$152,812	Sebastian County	\$129,453
Central	\$55,877	Southeast	\$247,906
Craighead County	\$79,955	Southwest	\$164,280
East	\$127,502	Southwest Central	\$140,763
Faulkner County	\$74,248	Upper Southwest	\$132,171
Northeast	\$77,563	West River Valley	\$247,819
Ozark Mountain	\$97,115	White River	\$258,209
Pulaski County	\$250,961		
		TOTAL	\$2,461,467