AR KA NS A S
Department of Environmental Quality

November 8, 2012
The Honorable Mike Beebe
Governor
State Capitol Building
Little Rock, AR 72201
The Honorable Mary Anne Salmon
Senator
The Honorable Tommy Lee Baker
Representative
Arkansas Legislative Council
Room 315, State Capitol Building
Little Rock, AR 72201
Dear Governor Beebe, Senator Salmon and Representative Baker:
The enclosed CD contains this year's progress report on the assistance provided through the Solid Waste Management and Recycling Grants Program. This report provides information about the 2007 - 2011 grant rounds (distributed between FY2008 and FY2012).

The files on the CD include:

1. An overview of recycling activities and results during the 2012 fiscal year.
2. An introduction to the recycling grants program and the data files.
3. Files for each of the 18 regional solid waste management districts detailing recycling grants received and progress made. See item number 2 for information (including a graphic) to better understand the report layout.

Should you or your staff wish to discuss the enclosed report, or discuss recycling issues more broadly, please contact me at your earliest convenience.

Sincerely,


Teresa Marks
ADEQ Director

Enclosure: State of Recycling - 2012 CD

# State of Recycling in Arkansas-2012 

 Arkansas Department of Environmental QualityNOVEMBER 2012

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

## Inside This issue:

| Recycling Grants Program Update |  |
| :---: | :---: |
| Program Statistics for Last five years | 2 |
| 2011 Grant Round <br> SUMMARY bY RSWMD | 3 |
| Market Movements | 4 |
| MAterials Recycled 2012 | 5 |
| New Programs SupPORTED BY RECYCLING GRANTS | 6 |
| E-WASTE Grants UpDATE | 6 |

## 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.

## 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,

|  | 2012 <br> (Tons) | 2011 <br> (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 | 5,991,981 | 5,105,972 | 886,009 | 17.35 |

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 Spring-dale-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 facili-ties-one business in Pine Bluff and two in northwest Arkan-sas-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 

Dollars Awarded by Grant Category

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 (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 $=170$


2007-2011
Transfer Station with


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 |

## 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, lowerpriced 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 | Wel | Tons |
| :---: | :---: | :---: |
| Batteries |  | 9,652 |
| Electronic Waste |  | 4,404 |
| Glass |  | 2,779 |
| Household Hazardous Waste |  | 1,111 |
| Metals |  | 2,018,378 |
| Aluminum Cans/Non-ferrous-Aluminum, Brass, Copper | 124,539 |  |
| Ferrous-Steel and Iron | 901,217 |  |
| White Goods (Ferrous) | 197,800 |  |
| Other (combined metals, steel slag, mixed metals, etc.) | 794,822 |  |
| Oil (Motor, Cooking) |  | 28,840 |
| Paper |  | 183,929 |
| Cardboard | 94,465 |  |
| Magazines/Mixed Paper | 30,305 |  |
| Newsprint | 24,236 |  |
| Sorted Office Paper | 2,783 |  |
| Sorted White Ledger | 1,037 |  |
| Other (rolls of paper, consumer board, paper board, etc.) | 31,103 |  |
| Plastic |  | 45,142 |
| HDPE (High Density Polyethylene) | 3,307 |  |
| LDPE (Low Density Polyethylene) | 10,992 |  |
| PET (Polyethylene Terephthalate) | 1,109 |  |
| Poly Pipe | 20,046 |  |
| Other (poly logs, electronics plastics, chemical jugs, barrels, etc.) | 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 $100=$

ADEQ
$\begin{array}{llllllll}A & R & K & A & N & S & A & S\end{array}$ Department of Environmental Quality

Arkansas Department of Environmental Quality
5301 Northshore Dr.
North Little Rock AR 72118-5317
DIRECTOR Teresa Marks

Chief Deputy Director
Recycling/Market Development Branch Manager

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:

| Center Point | Glenwood | Lockesburg | Sherwood |
| :---: | :---: | :---: | :---: |
| Delight | Horatio | Maumelle <br> Curbside | Texarkana |
| Dierks | Kirby | Murfreesboro | Tollette |



Fairfield Bay Faulkner Co. Fayetteville Pulaski Co. Outdoor Edu- Expanded W. North St. Expanded cation Center Curbside Drop-off Curbside

## 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 | $\$ 258,209$ |



2012 in the report title refers to Arkansas's fiscal year (i.e., July 1, 2011, to June 30, 2012). However in the grant reports the same period would be the 2011 reporting period (i.e., reporting period runs from July1 of the year listed to June 30 of the next year or one year behind the state fiscal year).

NOVEMBER 2012

## 2012 Annual Report

Section 8-6-609 of Arkansas code describes "a grant program of assistance for districts and local governments ... to develop solid waste management plans, programs and facilities that integrate recycling as a functional part of the solid waste management system... ." This section also requires the Arkansas Department of Environmental Quality to prepare an annual progress report on the grant assistance made under this section. The files on this CD are submitted as the recycling grants program annual report for 2012.

Recycling grant funds are allocated to each of the state's 18 regional solid waste management districts (see next page for a district map) based on a formula in the above statute. At the beginning of the grant round, districts submit information about potential projects. While ADEQ determines which of the potential projects are eligible for funding, district boards decide which of the eligible projects will be funded and the amount of funding for each. District boards are also responsible for reporting on the grants as required by statute and regulation. Because of this, the report is divided into a separate file for each district.

## How to Read the Recycling Grants Report

1. Click to open Bookmarks
2. Click on a Bookmark to look at records for a specific recipient
3. The first reference of a grant recipient (underscored by a double line)
4. Materials may be processed by another facility, listed here
5. Tons \& revenue reported by year
6. Each grant is listed with the purpose, amount funded, balance and annual reports. (Grants separated by a single line; annual reports separated by dotted lines.)


## Regional Solid Waste Management Districts



