

GRCA Green Report 2009



2564 18th Street South, Homewood, AL 35209

December 28, 2009



GREEN RESOURCE CENTER
FOR ALABAMA

The GRCA Green Report, produced by the nonprofit Green Resource Center for Alabama, highlights some of the year's important developments toward making Alabama a greener place to live, work and play. Here are some of the key green moments of 2009:

Government initiatives

Recycling grants – The Alabama Recycling Fund was created in 2008, supported by a \$1 per ton fee on the disposal of solid wastes in Alabama landfills. In 2009, the Alabama Department of Environmental Management (ADEM) awarded its first eight ARF grants – To Albertville/Boaz, Dothan, Eclectic, Elba, Florence, Lee County, Tuscaloosa and Vernon – totaling more than \$1.1 million, to help expand recycling efforts. The agency also held recycling workshops in conjunction with the Alabama Recycling Coalition and the Southeast Recycling Development Consortium.

In addition to these initiatives, a number of other cities, including Indian Springs, Irondale and Montevallo, either announced or expanded recycling programs. On the down side, a number of cities, including Chelsea and Montgomery, either delayed or cut back recycling because of lack of interest or budgetary issues.

Weatherization – More than 800 houses of low-income Alabamians were weatherized in 2009. Next year through 2012, thanks to an expansion of federal dollars, the number of weatherization projects is expected to top 6,500, according to officials with the Alabama Department of Economic and Community Affairs (ADECA). Weatherization helps consumers save money over the long run while improving the energy efficiency of their homes.

Attalla tire dump – After three years of work, ADEM and the city of Attalla announced in July that they had completed the cleanup of a massive dumpsite that contained 40,000 tons of scrap tire material and more than 4 million tires. The Attalla tire cleanup was made possible by the passage of the Scrap Tire Environmental Quality Act in 2003, which imposed a \$1 disposal fee on every tire sold in the state. More than 80 percent of the tires from the site were recycled.

Weapons destruction at Anniston Army Depot – In December 2008, workers safely destroyed the last land mine filled with VX nerve agent stored at the Depot. In July 2009, the third and final chemical agent-filled munitions disposal

campaign began with 4.2-inch mustard mortars. To date, more than 69,000 mortars and 34,000 mustard gallons have been destroyed. In 2006, workers at the Depot completed destruction of GB nerve agent and GB munitions. Depot officials hope to finish destroying the entire stockpile by 2012.

No-idling campaign – ADEM, the Alabama Department of Public Health and the Alabama Department of Education this year launched a no-idling campaign to reduce automobile emissions around schools. The initiative encourages parents and bus drivers to turn off their engines while waiting to pick up or drop off schoolchildren.

Energy-efficiency improvements at state prisons – A \$20.9 million federal grant will help the Alabama Department of Corrections upgrade facilities to make them more energy efficient. The planned upgrades include: installing biomass generators at Limestone Correctional Facility that will help provide power; constructing a biogas plant that can convert food waste and old cooking oil into methane for use as kitchen fuel; installing programmable thermostats; and replacing old kitchen equipment, air conditioners and heat pumps with more energy-efficient models.

Rebates for energy-efficient appliances – Alabamians will be eligible to receive up to \$4.5 million in rebates when they buy energy-efficient appliances, beginning in April 2010, ADECA announced this month. The rebates, ranging from \$25 to \$150, will be available on certain home appliances that carry the Energy Star label. The rebate program, funded with federal dollars, runs from April 19 through May 9, 2010, or until the money runs out.

Habitat and species protection

Little River, Bon Secour expansion – Congress in October approved an Interior Appropriations bill that included \$2 million from the Land and Water Conservation Fund to expand the Little River Canyon National Preserve and Bon Secour National Wildlife Refuge. Another \$640,000 was appropriated for the Cumberland Mountains Forest Legacy project in Jackson County.

Lease protects Wildlife Management Areas – Also in October, the state Forever Wild program announced a deal to protect more than 61,000 acres of Wildlife Management Area lands in Bibb, Tuscaloosa, Walker and Shelby counties for the next 93 years. The lease agreement preserves significant hunting, fishing, hiking and recreational areas within an hour's drive of nearly a quarter of Alabama's population.

Lookout Mountain land preserved – In December The Nature Conservancy acquired 2,186 acres atop Lookout Mountain and adjacent to Little River Canyon National Preserve in Cherokee County. The \$3.6 million purchase from Hancock Timber Resources Group is part of an ongoing effort to permanently protect sensitive freshwater and forest habitat in the Coosa River basin of northeast Alabama,

northwest Georgia and southern Tennessee. The Nature Conservancy plans to transfer the western third of the tract to the National Park Service for inclusion in the 14,000-acre Little River Canyon Preserve. The remaining land will be transferred to the state as part of the Little River Wildlife Management Area. For the last 20 years, the state has leased the property from Hancock Timber.

New oyster reefs – A \$2.9 million grant from the National Oceanic and Atmospheric Administration will result in two new oyster reefs being built in south Mobile County. The project, to be carried out by The Nature Conservancy in partnership with the Dauphin Island Sea Lab and the Alabama Department of Conservation and Natural Resources, involves building nearly a mile of underwater reefs in two locations: near Front Park in Mobile Bay and in Portersville Bay near Bayou La Batre. Along with its environmental importance, the project is expected to provide jobs to between 35 and 40 unemployed oyster and seafood workers.

Turkey Creek watershed protection – The U.S. Fish and Wildlife Service has proposed designating 13 stream miles as critical habitat for the endangered vermilion darter in the Turkey Creek watershed of Jefferson County. The agency is accepting public comments on the proposal until Feb. 1, 2010.

Freshwater Land Trust expands – The nonprofit Freshwater Land Trust, which is responsible for preserving more than 8,000 acres in the Birmingham region, is now expanding its focus to eight counties in central Alabama. The Land Trust is developing a 10-year conservation plan, with public input, designed to pinpoint the “places that matter” across the region, and how to best preserve them for future generations.

Green buildings, green cities

Green buildings:

Alabama continues to see significant growth in the number of LEED (Leadership in Energy and Environmental Design) certified green building projects. With costs for green building supplies and products declining, the long-term savings for constructing energy-efficient green buildings can be substantial. For example, Auburn University’s Gorrie Center, a LEED Gold building, uses about 40 percent less electricity compared to nine other, similar-use buildings on campus. If the other buildings were as efficient, the university would save an estimated \$400,000 in energy expenses per year.

Here’s a list of some of the Alabama green building projects that were either announced, completed or certified LEED in 2009:

- Alabama 4-H Environmental Science Education Center, Columbiana
- Alabama Power Credit Union headquarters, Birmingham
- Alabama Power training building, Shelby County

- Alabama Power engineering building, Trussville
- Benjamin Russell Hospital for Children (formerly Children's Hospital), Birmingham
- Dauphin Island Sea Lab addition, Dauphin Island
- Habitat for Humanity community, Athens
- Habitat for Humanity, Fairhope
- Kohl's department stores, Baldwin County
- Phelan Flats, Birmingham
- RPD Catalyst office developments, Huntsville
- Ruffner Mountain Nature Center, Birmingham
- Stewart Perry corporate headquarters, Birmingham
- Turtleback residential development, Enterprise
- Vestavia Hills Public Library, Vestavia Hills

In addition to these structures, Auburn University, the University of North Alabama and the University of South Alabama all have green building projects under way.

Greening existing buildings:

Other projects are also under way around the state to make existing buildings more energy efficient. They include a \$2.5 million project in the City of Birmingham that will replace heating systems in eight city recreation center gymnasiums with geothermal ground-source heat pumps. The new systems are expected to save the city about \$250,000 a year in heating and cooling costs.

Other projects under way around the state are designed to reduce the use of potentially toxic materials or cleaning products within buildings. For example, in February, the Wachovia Tower in downtown Birmingham announced that it was the first office building in the state to be designated a *Clean Zone* through a certification program operated by Alabama-based JanPak, Inc.

Zero-waste-to-landfill manufacturing:

Another positive trend in the state is for manufacturing facilities to reduce or completely eliminate the need to send waste to landfills. Honda Manufacturing of Alabama's plant in Lincoln was the first major industrial facility in the state to produce no waste that goes to landfills. In November, Mercedes-Benz U.S. International's plant in Vance also achieved zero-waste-to-landfill status. Other plants around the state are also working toward the zero-waste goal.

Green cities, green events:

A number of communities and organizations across Alabama have launched local or regional green initiatives to encourage sustainable practices and design that can save energy and water, promote recycling, reduce waste, reduce traffic and expand opportunities for walking and biking.

Here are some of the projects already under way:

- Alabama Green Initiative, Birmingham regional area
- Birmingham Charter, Birmingham
- Green 13 initiative, Huntsville
- Green Futures initiative, Association of Builders and Contractors, North Alabama chapter
- Sustainable City Commission, Birmingham

In addition, the number of major events and conferences in Alabama that focus on sustainability continues to increase each year. Among the major events in 2009: The Green Building Focus Conference and Expo, the Clover Crawl green expo, and the Moss Rock Festival, all in Birmingham; the EcoMAX Sustainable Living Expo in Montgomery; and the Green U festival in Huntsville.

Faith community and sustainability

Also, more faith-based organizations and institutions are joining the dialogue about sustainability and the need to be responsible stewards of the Earth. This trend was highlighted in October at an energy forum held in Birmingham by the recently formed Interfaith Environmental Alliance of Alabama. Learn more about the alliance at <http://www.interfaithenvironmental.org/>.

Alternative energy, transportation and biofuels

Diesel retrofit – ADEM and the Alabama Department of Transportation are moving forward on plans to retrofit approximately 185 diesel vehicles to reduce particulate pollution. The diesel retrofits will occur in areas of the state that are exceeding, or close to exceeding, the National Ambient Air Quality Standards. The project is being funded with a \$1.7 million grant through the American Recovery and Reinvestment Act (ARRA) of 2009.

Wood waste to biofuel – The nation's first program to recycle municipal wood waste into automotive biofuel kicked off this year in Hoover. Tree limbs collected curbside by the city were converted to E-85 ethanol at a startup wood-to-ethanol plant in Livingston and returned to the city for use in fleet vehicles.

Recycling cooking oil – Hoover has also been a leader in collecting household cooking oil for use by the city's fleet. This year, Jefferson County joined the effort, launching its own voluntary campaign to collect cooking oil from residents. The oil is recycled, but the program has an added benefit: it helps keep oil from being deposited down sinks, where it can ultimately clog sewer lines.

Natural gas cars – Alagasco this year introduced four Honda Civic GX natural gas vehicles (NGVs). NGVs produce significantly less carbon monoxide,

nitrogen oxide and carbon dioxide than conventional gasoline-powered vehicles, and are particularly practical for fleet use. About 20 percent of new transit bus orders are NGVs.

Plug-in electric hybrid vehicle research – Alabama Power is partnering with Ford Motor Company, the Electric Power Research Institute and others to test a prototype plug-in hybrid electric vehicle (PHEV) and gauge how it interacts with the company’s electrical system. PHEVs hold great promise for cutting emissions from the automotive sector while reducing U.S. reliance on imported oil.

Mercedes hybrid – Mercedes-Benz in November unveiled its first full hybrid vehicle, which is being built at the plant at Vance. The hybrid version of the M-Class sport utility is powered by two electric motors and a V6 gasoline engine. It offers better mileage and lower emissions than the non-hybrid versions. Last year, the Vance plant began producing cleaner diesel versions of its M-, R- and GL-Class vehicles, featuring Mercedes’ BlueTEC diesel technology.

Water conservation and quality

Clean water upgrades – ADEM will oversee installation of almost \$12 million in green infrastructure thanks to funding received under the ARRA of 2009. The department received almost \$60 million in ARRA funding to support installation or upgrades of drinking water and wastewater treatment systems. Approximately 20 percent of the ARRA funding, or \$12 million, will support installation of green infrastructure to ensure Alabama citizens receive clean, safe drinking water and to ensure proper treatment of wastewater prior to discharge into Alabama waterways.

Center of Excellence in Watershed Management – ADEM worked with EPA to officially designate Auburn University and Alabama A&M University as Centers of Excellence in Watershed Management. Alabama is the only state with two universities to achieve this designation, and Alabama A&M is the first historically black college to receive the honor. The designation allows these universities to assist communities and organizations in addressing water quality issues.

Magnolia River, Outstanding Alabama Water – The state Environmental Management Commission voted this month to classify the Magnolia River in Baldwin County as an Outstanding Alabama Water. The classification, which must be confirmed by a state legislative panel, would add protections to this important waterway. Meanwhile, the town of Magnolia Springs this summer passed what some describe as the strongest water quality regulations in Alabama. The regulations, which establish a 75-foot protective buffer around the town’s creeks, rivers and intermittent streams, will help preserve water quality in the Magnolia River watershed.

Alabama Rain Barrel Project – This project is transforming 55-gallon “secret syrup” barrels donated by Coca-Cola into rain barrels for homeowner water harvesting and stormwater control. Training workshops also provide information about water

harvesting and conservation, and ways individuals can impact water quality. The project, which kicked off with enthusiastic sessions in Montgomery and Auburn, will expand across the state in 2010 through the Alabama Clean Water Partnership with support of the Alabama Cooperative Extension System's Master Gardener Program. Other partners include ADEM, Coca-Cola Enterprises, Inc., Rain Catchers, Legacy, the World Wildlife Fund, and the Soil and Water Conservation Society.

Monofilament recycling – The Tennessee River Basin Clean Water Partnership, Alabama's Mountains Rivers and Valleys Resource Conservation & Development Council, Norcross Wildlife Foundation, and Legacy collaborated on a monofilament fishing line recycling program for the 15-county Tennessee River valley in North Alabama. Fishing line is non-biodegradable and can last 600 years in the environment. Wildlife can become entangled in discarded fishing line, which is also a litter issue and can cause problems for recreational users of state waters. To combat the problem, 100 monofilament disposal bins were installed at public fishing areas throughout the Tennessee River basin. Now the Alabama Clean Water Partnership, with support from the Alabama Department of Conservation and Natural Resources, the National Oceanic and Atmospheric Administration, Auburn University Marine Extension and Research Center, Berkley Conservation Institute and assorted basin partners, are taking the project to lakes and reservoirs statewide.

River basin newspaper inserts – The Alabama Clean Water Partnership in 2009 distributed more than 900,000 copies of educational materials through local newspapers and other means to boost awareness about water and water quality issues in eight Alabama river basins. Project partners included ADEM, Resource Conservation and Development Councils, and multiple sponsors.

Alabama Coastal Cleanup 2009 – More than 4,400 volunteers participated in this year's event, covering 300 miles of shoreline and collecting 93,000 pounds of litter.

Parks, trails and greenways

Omnibus Public Lands Management Act – Signed into law by President Obama, the act established the following in Alabama:

- Newly adjusted and expanded boundaries for the Little River Canyon National Preserve;
- Creation of the Shoals National Heritage Area;
- Creation of the Chattahoochee Trace National Heritage Area

Each National Heritage Area carries limited financial and technical assistance from the National Park Service.

Walls of Jericho expansion – Forever Wild announced in November it plans to add 500 acres to the important Walls of Jericho Preserve in Jackson County, in the northeast corner of the state. The land, along Estill Fork, is owned by The Nature Conservancy. The purchase may allow the state to build a second, western entrance to the preserve.

Forever Wild also completed the purchase of 1,343 acres of hardwoods, pine and rolling fields in Lowndes County, expanding the Lowndes Wildlife Management area; and 40 acres of forest and wetlands to be added to the Weeks Bay Reserve in Baldwin County. Forever Wild also completed the purchase of the important Old Cahawba Prairie Tract in Dallas County. This 3,007-acre parcel of rare Black Belt prairie and pine forest adjoins the historic grounds of Old Cahawba, Alabama's first state capital. It was originally secured by The Nature Conservancy's Alabama chapter. To date, Forever Wild has preserved more than 200,000 acres of important habitat, hunting and recreation lands across Alabama.

Alabama Bluebird Trail – In 2006, volunteers began placing bluebird boxes along Highway 14 in Autauga County. This year the effort expanded to Elmore County. Today, more than 230 bluebird boxes can be found along the highway. Supporters are now working to expand the Bluebird Trail across the state on Highway 14, from Georgia to the Mississippi line. Learn more at <http://www.ataugabluebirdtrail.com/>

Protected lands, greenways, expand in Huntsville area – In late 2008 The Land Trust of Huntsville & North Alabama closed deals protecting more than 100 acres in Madison County. It added 97 acres to its Green Mountain holdings near the mountain's southern tip, and purchased nearly six acres on the west slope of Monte Sano. In September, the Land Trust took control of another 69 acres in the town of Harvest, in the northwest Madison County. To date, the Land Trust protects and maintains nearly 6,000 acres.

Also in Huntsville, the nonprofit Alpha Foundation in December committed \$1.6 million toward developing a greenway to run the entire length of the nearly mile-long Cummings Research Park Biotech Campus.



**The GRCA Green Report is produced by the
Green Resource Center for Alabama
2564 18th St. South, Homewood, AL 35209**

Special thanks to:

Pat Byington Wilderness Society and Bama Environmental News

Casi Callaway Mobile Baykeeper

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