

GRCA

Green Progress Report

2010



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The GRCA Green Progress Report, compiled 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 best green moments of 2010:

Government initiatives

Rebates for energy-efficient appliances – Alabamians took advantage of more than \$4.4 million in federal rebates in 2010 when they purchased energy-efficient appliances. The rebates, ranging from \$25 to \$150, were available on certain home appliances that carry the Energy Star label.

Alabama Saves – This month, the Alabama Department of Economic and Community Affairs (ADECA) launched Alabama Saves, a program that will provide low-interest loans for energy-efficiency and renewable-energy projects at existing Alabama businesses and industries. The program is funded through the American Recovery and Reinvestment Act. For more information, go to <http://alabamasaves.com>.

Weatherization – Nearly 3,000 homes of low-income Alabama families have received energy-efficiency upgrades this year, with the support of federal stimulus dollars. Upgrades include weather-stripping, insulation and compact fluorescent bulbs, according to ADECA. In addition to helping reduce energy bills and power demand, the initiative provided work for contractors across the state during the economic downturn.

Reducing diesel emissions – The Alabama Department of Environmental Management (ADEM) is partnering with companies and municipalities to help reduce diesel emissions and particle pollution. Among those partnering with ADEM to retrofit diesel engines, install pollution-control devices and implement idle-reduction programs are: U.S. Steel and its subsidiary Birmingham Southern Railroad Company; U.S. Pipe; American Cast Iron Pipe Company (ACIPCO); and Phenix City.

Weapons destruction, Anniston Army Depot – Workers are getting very close to completing the destruction of all chemical weapons at the Anniston Army Depot. If all goes as planned, destruction should be complete in June 2011. Since 2003, workers have safely destroyed all land mines filled with VX nerve agent, all GB nerve agent and GB munitions, and more than 80 percent of mustard-filled munitions at the depot. For more information, go to <http://www.cma.army.mil/anniston.aspx>

Cleanup of illegal dumps – This year, ADEM provided funding and oversight to support the remediation/cleanup of 72 illegal dumps across Alabama. The agency provided more than \$1.5 million to support the remediation efforts, which are conducted by private contractors as well as local governments.

Recycling

State recycling grants – ADEM this year awarded more than \$1.7 million to enhance recycling in local municipalities across the state. Fifteen grantees will use the money to purchase recycling trailers and bins, collection trucks and other equipment. Grantees are: East Alabama Recycling Partnership; Jefferson County Partnership; City of Montgomery; City of Tuscaloosa; Calhoun County; City of Montevallo; Scottsboro Solid Waste Department; Albertville/Boaz Recycling Authority; City of Tuskegee; City of Prattville; City of Demopolis; City of Gardendale; Shoals Solid Waste Authority; Athens/Limestone Recycling Center; and Helena Middle School.

Recycling scrap tires – ADEM and the Alabama Department of Conservation and Natural Resources (ADCNR) teamed up this year to use recycled scrap tires at state parks. The recycled material is being used as landscaping mulch and to provide a soft cushion underneath playground equipment. The effort also reduces the amount of scrap tire material going to landfills.

More recycling initiatives – A host of nonprofit organizations, government agencies, businesses, universities and individuals are continuing their efforts to broaden recycling's reach in Alabama. For example:

- In metro Birmingham – The Alabama Environmental Council renovated its drop-off center in downtown Birmingham; Waste Pro opened a 100,000-square-foot recycling-sorting facility in Tarrant; and in west Jefferson County 18-year-old Taylor Cate organized a volunteer task force that will pick up, free-of-charge, recyclable items from area homes. Learn more about Cates' project at www.recycleyourstuff.org.
- In Huntsville – Green Mountain Glass is collecting its namesake material from a variety of locations and businesses and recycling it to make a range of products, from landscaping mulch to countertops.
- In Gulf Shores – The city approved an innovative recycling program that also gives residents the option of signing up for *recyclebank.com* to earn points toward discount coupons at area businesses. The more the city and its residents recycle (measured by weight), the more points residents receive.
- Statewide – more cities are holding periodic recycling days to collect a variety of materials, from waste oil to electronics.

Habitat/species protection and restoration

Bringing back the Gulf – The BP oil spill focused attention on the need for a long-term strategy for restoring the environmental health of the Gulf of Mexico that goes beyond the immediate cleanup and restoration efforts. The “Gulf 20/20” report, issued by the Nature Conservancy, outlines key actions that can begin to reverse the long years of damage and restore the natural infrastructure – the bays and estuaries, the rivers, forests and reefs – that is the foundation of all life in the Gulf. To read the report, go to http://www.nature.org/pressroom/files/gulf_20_20.pdf.

Gulf study under way – Meanwhile, more than 100 scientists from 14 universities across Alabama have launched a series of studies focusing on the impacts of oil-related pollution in the Gulf. The effort, which involves Alabama’s Marine Environmental Science Consortium, will include a detailed assessment of current conditions. John Valentine, senior marine scientist and chairman of University Programs at the Dauphin Island Sea Lab, helped organize the effort. The project is being funded with \$5 million in no-strings-attached, “RAPID Response Research” dollars from BP.

100-1000: Restore Coastal Alabama – Local organizations played a key role in responding to the BP disaster in coastal Alabama. In recognition that significant amounts of critical coastal habitats have been lost, both before and after the oil spill, the Alabama Coastal Foundation, Mobile Baykeeper, The Nature Conservancy and the Ocean Foundation formed the 100-1000: Restore Coastal Alabama partnership with a goal of building 100 miles of oyster reefs, and planting and supporting more than 1,000 acres of coastal marsh and seagrass in Mobile Bay over the next five years. For more information, go to <http://www.100-1000.org/>.

Snail recovery – The U.S. Fish and Wildlife Service (FWS) in June proposed removing the tulutoma snail from its endangered species list because the freshwater mollusk has made “major strides on the road to recovery.” The proposal would move the snail, found in pockets of the Coosa River and its tributaries, to the “threatened” list, where it would remain under protection. FWS cited changes in the way Alabama Power operates its Coosa River dams, and the work of others, including the Alabama Clean Water Partnership and state and federal agencies, in helping improve the snail’s outlook.

Whooping crane comeback – They’re still extraordinarily rare, but whooping cranes are starting to be seen again in Alabama. Earlier this month, four cranes were sighted at a small pond in the Birmingham suburb of Indian Springs. The same week, the nonprofit group Operation Migration guided a flock of young cranes, raised in captivity, across Alabama on their way to their winter home in Florida. It’s the third year Operation Migration has led young cranes, using ultralight aircraft, through the state to teach them how to migrate. Meanwhile, a lone crane appears to have settled in for the winter at Wheeler National Wildlife Refuge near Decatur, along with thousands of sandhill cranes. As recently as the 1940s, only 15 birds were known to exist in the wild. Today, through conservation efforts, nearly 500 survive in wild populations and captive breeding centers. To learn more, visit www.operationmigration.org.

Aquatic Biodiversity Center – In October the state officially opened its \$3 million Aquatic Biodiversity Center, the largest state-operated recovery center for mollusks in the nation. The laboratory, hatchery and nursery in Perry County is already propagating 12 species found on the federal threatened and endangered lists, with plans to expand its operations. Learn more at <http://www.outdooralabama.com/research-mgmt/aquatic.cfm>

Alabama Cave Shrimp – The Land Trust of North Alabama is working with the Southeastern Cave Conservancy to preserve and protect Muddy Cave in Madison County, one of the few identified homes of the endangered Alabama Cave Shrimp. Learn more about the shrimp at <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=K01V>

Forever Wild adds more than 12,800 acres – During 2010, the state Forever Wild program continued its important work in preserving lands across Alabama for wildlife and recreation. The additions during the past year bring Forever Wild's holdings to more than 220,000 acres. Among the significant acquisitions in 2010 are:

- 3,866 acres of pine and hardwood forest habitats in Barbour and Bullock counties. The acquisition expands the Barbour Wildlife Management Area, one of the state's oldest and largest public hunting areas.
- Two tracts in Monroe County totaling nearly 4,300 acres that are critical habitat for the federally listed red hills salamander. The tracts were purchased in partnership with The Nature Conservancy, Alabama Chapter, and the U.S. Fish and Wildlife Service.
- 537 acres in Jackson County, adjoining the Skyline Wildlife Management Area. Purchased in partnership with the Nature Conservancy, Alabama Forestry Commission, Alabama Forest Resource Center and U.S. Forest Service.
- 3,225 acres in Jackson County adjoining the Tennessee Valley Authority's Raccoon Small Wild Area.
- 553 acres in Jefferson and Bibb counties, adjacent to Tannehill Ironworks Historic State Park.
- 8.8 acres in Madison County adjacent to land owned by the city of Huntsville. The tract is being managed as an addition to Monte Sano State Park and contains the Mountain Mist Trail that winds around Monte Sano Mountain.

Forever Wild faces a critical test in the coming months. The program will cease operations in 2012 without reauthorization by the Alabama Legislature. The constitutional amendment establishing Forever Wild and its funding method was approved by 83 percent of voters in 1992. Despite the program's popularity, Forever Wild holdings still represent only about one half of 1 percent of all land in Alabama. Alabama has the lowest percentage (4.4 percent) of public lands compared to other Southeast states. Learn more about Forever Wild at <http://www.dcnr.state.al.us/public-lands/stateLands/foreverwild/>.

Cahaba River Refuge and Paint Rock River Watershed – The Nature Conservancy, Alabama Chapter, purchase two important parcels totaling 95 acres along the Little Cahaba River for inclusion in the Cahaba River National Wildlife Refuge. The Nature Conservancy also added 175 acres to its Sharp and Bingham Mountains Preserve in the Paint Rock River watershed in northeast Alabama. The preserve, the conservancy's largest, now totals 3,400 acres.

Expanded darter habitat – The U.S. Fish and Wildlife Service this fall expanded the protected habitat of the vermilion darter, an endangered fish known to be found only in Jefferson County. Officials designated 13 miles of stream in the Turkey Creek watershed near Pinson as critical habitat for the species.

Old growth forest protection – The National Forests of Alabama this year amended their management plan to add old growth survey and protection standards. It's the first time that old growth in the National Forests of Alabama has received formal legal protection. The change was made following a request by the Alabama nonprofit group WildLaw. According to the group, the legally enforceable standards could protect up to 222,500 acres of the best and wildest forests in the state.

Outdoor classrooms expand – More than 250 schools across the state are now incorporating outdoor conservation education in their learning plans through the Alabama Wildlife Federation's Outdoor Classroom Program. The initiative helps schools create sustainable wildlife habitats and outdoor classroom sites on their grounds. Learn more at <http://www.alabamawildlife.org/>.

Green buildings, green communities

Local food – Alabama has seen extraordinary growth in the number of farmer markets, community and urban farms in recent years. According to Edwin Marty, executive director of Jones Valley Urban Farm in Birmingham, in the past decade more farmer markets have been developed in Alabama than anywhere else in the United States. The Alabama Sustainable Agriculture Network (ASAN), meanwhile, has grown to represent more than 800 farms, ranches, homes, non-profit organizations and government agencies across the state. Just how prominent the movement has become was evident Nov. 24 when officials broke ground on a new community garden on 3 acres in downtown Montgomery along the Alabama River. Local sponsors have already raised about \$100,000 – double the initial goal – for the project, which will be operated by the nonprofit Hampstead Institute. For more information about Jones Valley Urban Farm, go to www.jvuf.org. For details about ASAN, visit www.asanonline.org. To learn about the Hampstead Institute, visit www.hampsteadinstitute.org.

Green buildings – Alabama continues to see significant growth in the number of LEED (Leadership in Energy and Environmental Design) certified green building projects, as well as other developments that are built to be more energy efficiency and to have a reduced

impact on the environment. Here are a few of the Alabama green building projects announced or completed in 2010:

- Alabama Power Service Organization green Habitat for Humanity home, Birmingham
- Alagasco Center for Energy Technology, Birmingham
- John L. Borom Center at Faulkner State Community College, Baldwin County
- The Shops of Grand River, Leeds.
- T.K. Davis Justice Center addition, Lee County
- Tennessee Valley Authority training center, Hollywood
- Vestavia Hills Library

Green church, care of creation movement – Montevallo Presbyterian Church has earned the U.S. Environmental Protection Agency’s Energy Star label for houses of worship. It’s the first congregation in the state to receive the recognition and one of just 12 nationwide. It’s also the first Presbyterian Church (USA) congregation to receive the award. The honor means the church scored in the top quartile of EPA’s National Energy Performance Rating System. Helping communities of faith and others be better stewards of the environment is a goal of the Interfaith Environmental Initiative of Alabama (IEIA), which holds events that brings together advocates, businesses and faith leaders to discuss issues such as energy efficiency, waste reduction and water conservation. Visit <http://www.montevallopcusa.org/> for more about Montevallo Presbyterian Church. Go to www.interfaithenvironmental.org for more about IEIA.

Green schools and colleges – Alabama’s public and private schools and colleges continue to make strides toward making their campuses greener. For example, during fiscal 2010, the University of Alabama at Birmingham reported savings of \$1 million and an additional \$1 million in avoided costs by making energy-efficient lighting and air conditioning system improvements across campus. The Elmore County public school system, meanwhile, achieved nearly \$650,000 in savings and cut energy use 27.5 percent during its first full year of a new energy conservation program. According to the Princeton Review’s guide to green colleges, three schools in the state – Auburn University, Birmingham-Southern College and the University of Alabama in Huntsville – stand out for having “demonstrated an exemplary commitment to sustainability.” Learn more at <http://www.princetonreview.com/green-guide.aspx>.

Green bridge – In August officials celebrated the opening of the new Little River Canyon Bridge linking Cherokee and DeKalb counties. The \$7.6 million project replaced the old State Highway 35 bridge. Among the green features: a single support pier to limit impact to the river, beams and rebar made from recycled steel, and recycled asphalt on the paving surface. Materials from the old bridge were recycled for reuse in

future road projects. The new bridge has a pedestrian lane and three viewing areas with benches overlooking Little River Canyon and falls.

Green 13 – After more than a year of study, Huntsville Mayor Tommy Battle in February unveiled the “Green 13” Sustainability Report, a 101-page blueprint for making Huntsville one of the greenest cities in the nation. The report contains 44 recommendations and 99 potential actions addressing a variety of issues, from building codes to energy, transportation, parks/greenspace, even local agriculture. To read the full report, go to www.hsvcity.com/green.

New Jefferson County zoning rules – Years in the making, the state’s most populous county in October approved “SmartCode” amendments to its zoning rules, which allow development of walkable, village-style, mixed-use neighborhoods that conserve land, energy and natural resources, reduce traffic congestion and sprawl.

By-Product Synergy, Central Gulf Coast – Under the leadership of Mobile-based Partners for Progress, By-Product Synergy, Central Gulf Coast (BPS-CGC) has created a diverse network of businesses that are seeking opportunities to turn one company’s waste or by-product into raw materials for another. During its first full year the initiative has resulted in:

- \$1.6 million in savings for participating companies
- Another \$3.2 million in local economic impact
- The equivalent of 50 jobs saved or created
- The diversion of more than 8,200 tons of material from landfills
- 5,300 tons of hydrochloric, hydrofluoric and nitric acids diverted from waste treatment plants or deep injection wells
- More than 8,800 tons of avoided carbon dioxide emissions

For more information about Partners for Progress and BPS-CGC, go to <http://www.pepmobile.org/>.

Alabama E3 Project – It stands for “Economy, Energy and Environment.” The coordinated program involves state, federal and private sector partners working together to help improve the efficiency of Alabama manufacturing operations so that they can improve their environmental performance and maintain a competitive edge. The effort kicked off this year with a focus on west Alabama industries but is expected to expand statewide.

Water conservation and quality

Green infrastructure improvements – ADEM provided local municipalities in 2010 with almost \$12 million to support green infrastructure associated with the installation and/or upgrade of drinking water and wastewater treatment systems. The funding is

provided through Alabama's State Revolving Loan Fund Program and supports efforts to conserve Alabama's water resources.

North River Watershed – Efforts are under way to develop a watershed management plan for the North River Watershed of the Black Warrior River. The plan will focus on improving water quality; protecting and expanding wildlife habitat, particularly for endangered species; and community outreach. The watershed includes areas of Fayette, Tuscaloosa and Walker counties.

Buxahatchee Creek Watershed – Efforts are also under way to improve water quality in the Buxahatchee Creek Watershed, which encompasses about 70 square miles in Shelby and Chilton counties. Buxahatchee Creek is impaired for nutrients and organic enrichment/dissolved oxygen. The project will identify landowners interested in installing agricultural and urban best-management practices to address nonpoint source pollution. It also provides funds to help raise awareness about issues facing the creek.

Little Shades Creek restoration – The Cahaba Clean Water Partnership and Cawaco RC&D worked in cooperation with the City of Vestavia Hills and the Ashley Woods Homeowners Association to address a severe erosion condition on Little Shades Creek. An ADEM grant paid for stream restoration using natural channel design. The grant also provided resources for education and outreach about nonpoint source pollution and to develop a management plan for the Little Shades Creek watershed.

D'Olive Bay management plan – In 2007 the Geological Survey of Alabama, in partnership with the Alabama Department of Conservation and Natural Resources, State Lands Division, launched an assessment of land-use changes and their impact on the D'Olive Creek, Tiawasse Creek and Joe's Branch watershed in Baldwin County. This study showed a two- to over 200-fold increase in sediment loads in these streams compared to natural erosion rates. A management plan for the watershed was completed this year and implementation is slated for 2011.

Rainwater harvesting – More businesses, industries and homes are incorporating rainwater harvesting systems that collect and filter rainfall from rooftops for irrigation and other purposes. The systems also help reduce stormwater runoff that can pollute waterways. Here are a few recently completed rainwater harvesting projects:

- Birmingham-Southern College has installed a 15,000 gallon underground rainwater system that collects and filters water from the roofs of two new dormitories and stores it for irrigation. The system is expected to save about 300,000 gallons of potable water a year while reducing runoff. This college partnered with Birmingham companies ArchitectureWorks and Nature's Tap on the project.
- Alabama Power is now collecting rainwater from the roof of its central utilities plant at the company's downtown Birmingham headquarters and using it to irrigate the company's refurbished employee park. The park was updated to environmentally friendly LEED standards.

- In the first project of its kind in Alabama, farmer Ken Taylor of Blountsville is collecting and filtering rainfall from the roof of his four-house poultry farm to water his birds and cool the facilities. The project reduces the farm's water costs and reduces stormwater runoff and pollution. Partners include the Alabama Mountains, Rivers and Valleys RC&D Council (AMRV-RC&D), CAWACO RC&D and Auburn University. Learn more at <https://sites.aces.edu/group/comm/sustainability/default.aspx>.

Water Works Environmental Education Center – What was an old treatment plant in Hartselle is now an educational center focusing on green development, watershed management and the importance of wetlands. Water Works opened this fall and features an educational laboratory, a green roof, a solar-powered energy and hot water system, natural wetlands that treat water from Flint Creek, and constructed wetlands that helps treat sewage from the facility. Partners in the center, which opened in October, include AMRV-RC&D and the Tennessee Valley Clean Water Partnership. Learn more about AMRV-RC&D at <http://amrvrcd.com/>.

Parks, trails and greenways

Alabama Trails Commission – Alabama now has a state trails commission, which was unanimously approved this year by the Legislature and signed into law by Gov. Bob Riley. The commission will focus on developing and connecting land and water trails across the state.

Alabama Birding Trails – The Alabama Tourism Department and ADCNR have joined forces to develop the Alabama Birding Trails, which will ultimately tie eight regional trails into a single statewide network. Work is already under way, with completion is scheduled for fall 2011. Learn more at www.outdooralabama.com.

Alabama's new National Recreation Trails – Nine Alabama trails were officially designated this year as National Recreational Trails, joining more than 1,000 land and water trails that comprise the U.S. National Trail System. The Alabama additions are: 21.9 miles of the Elk River in Limestone County; Doc Hilt Trails near Lineville; The 36-mile Eastern Shore Trail in Baldwin County; The 25-mile Minooka Park trail system in Chilton County; the 10.2 mile Richard Martin Trail in Limestone County; Smith Lake Park trails in Cullman County; Sportsman Lake trails in downtown Cullman; Stony Lonesome OHV Park trail system in Cullman County; and Veterans Park trail in Hoover.

Railroad Park – Years in the making, Birmingham's 19-acre Railroad Park opened in September to wide acclaim. This new, central park of Birmingham on what had been four blocks of essentially empty lots features more than 600 trees, a lake, a bio-filtration wetlands area, playgrounds, a skate park and a natural amphitheater. Many of the walls and seating areas in the park are constructed from bricks and objects unearthed on the site. The park is expected to eventually be connected via greenways to nearby attractions, including Sloss Furnaces National Historic Landmark, the University of Alabama at Birmingham, and a proposed downtown baseball stadium for the minor league Birmingham Barons. Learn more at <http://www.railroadpark.org/>.

Harvest Square Preserve – This 70-acre tract in north Madison County was donated to the Land Trust of North Alabama by Aronov Realty Management and is expected to open in the spring of 2011. Thirty-three acres will be used for sustainable agriculture and the remaining 36 acres will be used as a community greenspace, with the first phase including a mile of trail with boardwalks for hiking, bicycling, and birding; interpretive signage and an information kiosk; two large stocked ponds; and an education/picnic pavilion. Learn more about the Land Trust of North Alabama at <http://landtrustna.org/>.

Our One Mile/Health Action Partnership – In Jefferson County, work is under way to create a greenway master plan that would specify routes for more than 100 miles of interconnected walking trails, bike paths, sidewalks and “blueways” linking parks, schools, homes and businesses. The “Our One Mile” campaign, coordinated by the nonprofit Freshwater Land Trust, is part of Jefferson County’s \$13.3 million Health Action Partnership, a broad, multi-partner initiative designed to help improve the health of people throughout the county through efforts to reduce obesity and smoking, expand healthy food options, implement “smart growth” design principles, and encourage physical activity such as walking and biking. For more information about Our One Mile, visit www.freshwaterlandtrust.org. To learn more about the Health Action Partnership, go to <http://www.jcdh.org/CommHealth/HealthAction.aspx>.

Coldwater Mountain bike trail – After 10 years of efforts, construction of the Coldwater Mountain mountain-bike trail began in November. A \$150,000 ADECA grant is helping fund the project on 4,000 acres of protected land in Calhoun County. The first trail/loop is expected to extend 6-10 miles. Plans are to eventually create up to 50 miles of trails. Learn more at <http://www.neabc.org/>.

Jacobs Mountain Preserve – The Southeastern Cave Conservancy has leased a significant site in Jackson County. The Jacobs Mountain Preserve features 65 known caves that have been closed for many years. Eighteen of the caves are considered significant. For more information about the conservancy and the preserve, visit <http://www.scci.org/index.html>.

El Paso Nature Preserve – A 51-acre site on the slopes of Shades Mountain in Homewood will be transformed into a preserve and outdoor classroom with a \$35,000 grant from El Paso Corp., parent company of Birmingham-based Southern Natural Gas. The preserve, which is owned by the Freshwater Land Trust, could eventually be linked to a planned extension of the Shades Creek Greenway.

Tuscaloosa Riverwalk expansion – The Tuscaloosa City Council in November approved construction of a third phase of the Riverwalk pedestrian and bicycle trail. The newest segment will connect the two existing sections, creating a nearly 2-mile, uninterrupted path along the Black Warrior River.



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