

GRCA
Green Progress Report
2011



2564 18th Street South, Homewood, AL 35209

December 27, 2011



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 2011:

Tornado Recovery and Rebuilding

On April 15th and April 27th, Alabama was hit by one of the most destructive natural disasters in our nation's history through a series of devastating tornadoes. The disaster destroyed people's lives, homes, businesses, and the environment. Tons upon tons of debris had to be safely removed. Whole forests were gone. According to the Alabama Forestry Commission an estimated 204,590 acres of forestland in 39 counties were impacted. Rivers, streams and lakes were choked off with sediment and debris. Alabama's landscape has been forever changed.

Under extraordinary circumstances, Alabama's environmental response, -during the recovery and rebuilding has been a success. And now that we are in the rebuilding phase, we are seeing creative green initiatives such as the Tuscaloosa Forward initiative.

<http://www.tuscaloosafoward.com>

Government initiatives

Anniston Chemical Weapons Destruction Complete - On September 22, the last of more than 660,000 nerve agent and mustard agent-filled munitions stored at the Anniston Army Depot were destroyed in the facility's specially constructed chemical weapons incinerator. It is the completion of a decade long effort to rid the base of the dangerous and toxic weapons.

Oil Spill Response - The Deepwater Horizon oil spill response continues, more than a year and a half following the April 2010 disaster. As of this month, volumes of tar recovered daily range from 200 pounds to one ton. Ongoing efforts include near shore tar mats, which are actively being located and removed when found; ongoing clean-up of the beaches; and ensuring the response is fully coordinated with local and state officials.

100-1000: Restore Coastal Alabama – In response to the spill, more than 25 agencies along coastal Alabama came together to build 100 miles of oyster reefs and restore 1,000 acres of marsh and sea grass. Led by the Alabama Coastal Foundation, Mobile Baykeeper,

the Ocean Foundation and the Nature Conservancy, the group began 2011 by bringing together over 400 volunteers to create a quarter mile of oyster reef in Helen Wood Park on Mobile Bay near the Dog River. <http://www.100-1000.org>

TVA Settlement – A settlement between the state and the Tennessee Valley Authority is expected to bring approximately \$11.2 million to Alabama to support projects to improve energy efficiency and reduce air pollution. The settlement, which includes a \$500,000 payment, is expected to lead to significant reductions in emissions from TVA's older coal-burning electrical facilities in North Alabama.

Attainment of air quality standards for Jefferson County area -For decades, metro Birmingham has suffered from poor air quality. But after a decade-long, community wide effort, the U.S. Environmental Protection Agency (EPA) this year certified that the area is meeting the current federal standards for air quality. The Alabama Department of Environmental Management (ADEM) and the Jefferson County Department of Public Health are among those who worked with industry, nonprofit organizations and others to reduce industrial and vehicle emissions while raising community awareness about the need to improve air quality.

Hunters Helping the Hungry - Alabama hunters have the opportunity to help others while they enjoy their outdoor pursuits. The Hunters Helping the Hungry program, sponsored by the Alabama Conservation and Natural Resources Foundation (ACNRF), provides a way for Alabama hunters to give ground venison to needy families and individuals in the state. Participating processors accept donated deer from hunters and are paid \$1 a pound by the ACNRF. Since the program's beginning in 1999, approximately 450,000 pounds of ground venison have been donated to Alabama food banks. Last year, 42,704 pounds of ground venison were provided by Alabama's hunters.

EPA's 2011 Greening America's Capitals Project - In 2011, the city of Montgomery was chosen as one of EPA's five Greening America's Capitals projects nationwide. For its part, the city is focusing on revitalizing and restoring a section of the historic Selma to Montgomery National Historic Trail that runs beneath the Interstate 65-85 interchange to reconnect the city's downtown with Montgomery's west side – specifically, the Renaissance Neighborhood, the first green redevelopment project in the city. A design team will explore how to increase shade, improve lighting and reduce freeway noise for trail users. The city has also asked for assistance to expand its climate change response planning. <http://www.epa.gov/smartgrowth/greencapitals.htm>

Alabama Forestry Commission/ Arbor Day Foundation Tornado Recovery - In the wake of the devastating tornadoes that battered Tuscaloosa and communities throughout north Alabama, the Arbor Day Foundation, in collaboration with the Alabama Forestry Commission, launched a new campaign to bring trees to families throughout the area. The campaign aims to speed recovery of the area's trees and forests.

<http://www.arborday.org>

Energy Efficiency Grants Saves Millions - Gov. Robert Bentley awarded almost \$1.4 million to help 11 cities and counties save energy and reduce utility bills by upgrading equipment and making improvements to their facilities. The grants are awarded as part of the federal Energy Efficiency and Conservation Block Grant Program. The program is administered locally by the Alabama Department of Economic and Community Affairs (ADECA). Receiving grants are:

Barbour County: to install energy-efficient windows in the Clayton Courthouse
Boaz: to convert street lighting along US 431 to solar-powered LED lights
Brundidge: to replace 91 streetlights with energy-efficient LED lighting
Enterprise: to install more efficient heating, air conditioning units in city hall
Eufaula: to replace heating and air conditioning units at city's community center
Headland: to make energy-efficient upgrades to city hall and library
Opp: to install energy-efficient windows in city hall and replace heat pumps
Phenix City: to replace 487 lighting fixtures in Central Activities Center
Vestavia Hills: to upgrade lighting system at the city municipal building
Warrior: to upgrade lighting system at the armory building
Washington County: to upgrade lighting and energy management systems at county courthouse.

TVA Power Plant Saves Energy – The Tennessee Valley Authority's Colbert Fossil Plant launched an energy conservation program at the plant saving enough electricity annually to power 125 homes. An example of the savings: replacing inefficient light bulbs. The plant has around 10,000 at the plant alone.

“Complete Street” Policies Adopted - Numerous municipalities in Alabama have joined the growing list of local and state governments that have officially endorsed the “complete streets” movement. The City of Mobile adopted a complete streets resolution along with a “3-foot rule” requiring motorists provide cyclists a minimum of three feet of space while passing on city streets. The City of Birmingham Planning Commission adopted a similar resolution in support of complete streets principles. Other communities including Midfield, Sylvan Spring Prattville, Chickasaw, Daphne, and Fairhope have also adopted resolutions.

“Complete streets” provide access and mobility for pedestrians, cyclists, transit riders, and motorists. Citizens of all ages and abilities can safely travel along and across complete streets most frequently found (and needed) cities, suburbs, towns and other population centers. Complete street networks support local economies, accommodate more travel choices, conserve energy, reduce emissions, and improve livability. The *2035 Regional Transportation Plan* developed by the Regional Planning Commission of Greater Birmingham (RPCGB) for Jefferson and Shelby counties includes a complete streets policy that applies to federal aid road projects in the region and provides a local policy framework. Members of the Jefferson County Health Action Partnership, including the United Way of Central Alabama, the Community Foundation of Greater Birmingham, the Freshwater Land Trust, Conservation Alabama, AARP Alabama and many other organizations have and plan to continue promoting complete streets and greenways.

Alabama National Guard Home to Largest Solar Project in Alabama - In December 2011, the Alabama National Guard opened its new Joint Forces Headquarters building in Montgomery. Among its many cost savings and energy-efficient features, the building is home to Alabama largest solar project, with solar panels that provide more than 340 kilowatts of power to the facility. The building has more than 208,330 square feet and will house the National Guard, along with several Army Reserve units.

Green Initiatives and Jobs

Honda Manufacturing Achieves Zero Waste - Honda Manufacturing of Alabama, in Lincoln, became the first zero-waste-to-landfill auto plant in North America at the outset of production in 2001, setting off an industry-leading trend within the company. Thanks to the Lincoln plant's trailblazing effort, waste sent to landfills has been dramatically reduced at Honda auto plants throughout North America – from 62.8 pounds per automobile in fiscal 2001, to an estimated 1.8 pounds per auto today. Honda now sends less than one-half of 1 percent of all operating waste from its 14 North American plants to landfills. Remaining waste is either recycled or used for energy recovery.

Green Jobs Training - As of December 2011, the Building Green Jobs for Alabama program has trained approximately 300 unemployed and underemployed individuals in green building and sustainability across the state. The five step program gives eligible individuals the opportunity to learn the fundamentals of sustainability and green building, train and test for one green building credential, and participate in small group mentoring with local green building professionals. <http://www.usqbcofal.org/greenworkforce/home.html>

Alabama Power Solar and Wind energy expansion - Alabama Power is expanding its solar power research in partnership with the Electric Power Research Institute (EPRI). The company is installing solar panels on a limited number of power poles across its service area. The company is also installing panels at select Alabama facilities, including The Water Course education center in Clanton.

The expanded research project will test the latest in solar energy technologies at locations around the state. The company also recently signed a contract that is expected to provide wind energy to its customers by the end of 2012. The wind energy will come from a wind farm now under construction in Oklahoma.

Working Cows Dairy Certified Organic - Geneva County's Working Cows Dairy, a certified organic dairy, was nominated by the Alabama Department of Agriculture and Industries for the 2011 International Dairy Foods Association's award program. A family farm, Working Cows Dairy has expanded its market to specialty food stores and markets in parts of Alabama, Florida and Georgia. <http://www.workingcowsdairy.com>

Land Conservation

Forever Wild - In 2011, the Alabama Legislature voted to put Forever Wild on the ballot in November 2012 so the public can decide whether it will be reauthorized. Since its inception in 1992 Forever Wild has preserved 88 tracts totaling 226,871 acres for public

recreation, hunting and wildlife protection.

<http://www.outdooralabama.com/public-lands/stateLands/foreverWild/>

Forever Wild Purchases in 2011:

- **The Freedom Hills WMA-McCullough Addition** in Colbert County is a mix of pine and hardwood forest habitats. This 160-acre acquisition provides for public land additions to the Freedom Hills Wildlife Management Area, which had been experiencing recent declines in acreage until Forever Wild's Southern Timber Venture purchase in 2001
- **The Little River Canyon-Hancock/TNC Addition** in Cherokee County is a mix of pine and hardwood forest habitats. This 1,506-acre acquisition serves as a public land addition to the Little River Canyon Wildlife Management Area, which is one of the largest and oldest state owned public hunting areas in Alabama.
- **The Barbour WMA-Dixon Tract Addition** in Barbour County is a mix of pine and hardwood forest habitats. This 2,564-acre acquisition serves as a public land addition to the Barbour Wildlife Management Area, which is one of the largest and oldest state owned public hunting areas in Alabama.

Little River Canyon National Preserve Expansion – In May, the Nature Conservancy of Alabama transferred 650 acres along Little River Canyon to the National Park Service for addition to the 14,000 acre Little River Canyon Preserve. The Conservancy initially purchased the property – along with an additional 1,536 acres in 2009. The remaining acreage is marked for transfer to the State of Alabama as part of the Little River Wildlife management Area.

Weeks Bay Foundation and the Dauphin Island Bird Sanctuary – After 40 years of cobbling together the small parcels of land that form the Dauphin Island Bird Sanctuary, the Sanctuary has entered into a partnership with the Weeks Bay Foundation to secure conservation easements on Dauphin Island. The latest easements comprise 28 lots totaling 9.45 acres. The barrier island is considered one of the most important “rest stops” in North America for migratory birds.

Partnership for Gulf Coast Land Conservation (PGLC) - This newly formed coalition of local, regional state and national land conservation organizations is devoted to advancing land and water conservation in the Gulf of Mexico region. It is organized under the auspices of the non-profit Land Trust Alliance and is patterned after other successful land trust coalitions across the country. To date the membership consists of 25 national, regional and local land trusts operating in the Gulf states.

Cypress Nature Park in Montgomery – In 2011, citizens in Montgomery formed the nonprofit, Montgomery Nature Conservancy to preserve and develop Cypress Nature Park, a 260 acre wetland just 1.25 miles from the State Capitol. The city-owned land has now been incorporated into the long-range plan for the downtown Riverwalk. More than 100 species of birds and 30 flowering plants have been documented at the site.

Harvest Square Recreation Preserve - The Land Trust of North Alabama opened the new Harvest Square Recreation Preserve on December 14 in Harvest. The preserve is part of the 69 acres donated to the Land Trust by Aronov Realty Management. A 33 acre portion of the preserve will continue to be used for farming.

Recycling & Cleanups

Recycling and the Alabama Environmental Council - Led by the Alabama Environmental Council (AEC), the Jefferson County Department of Health was awarded a 2011 Alabama Recycling Fund grant from the Alabama Department of Environmental Management. Building upon its 2010 grant, which launched the Recycle Alabama campaign, AEC is leading efforts to expand recycling in Jefferson County by:

- building a movable recycling trailer to help local festivals and activities recycle
- starting a glass and office paper pickup service for Downtown Birmingham
- expanding UAB's recycling program through the purchase of a recycling truck and additional recycle bins
- purchasing 20,000 curbside recycling bins for Birmingham residents
- purchasing four recycling hub trailers in addition to the six already in place for outlying Jefferson County communities
- building a new drop-off recycling center in south Jefferson County where 40 percent of residents do not have recycling opportunities

More information on the Recycle Alabama campaign, including a recycling search engine, can be found at www.RecycleAL.com.

Recycling Grants - ADEM continued its efforts to enhance recycling in Alabama by providing recycling grants to local municipalities. During the past year the department issued recycling grants totaling more than \$2 million that will be utilized to purchase recycling bins, recycling trailers, collection trucks, balers, and educational materials. To date, ADEM has provided almost \$5 million in recycling grants. These grant funds are made possible through the Solid Wastes & Recyclable Materials Management Act, which was passed by the Alabama Legislature in 2008. The legislation imposed a \$1 per ton fee on all solid wastes disposed of in Alabama landfills.

Renew Our Rivers Clean-up Programs - Twenty-nine volunteer cleanups were held across Alabama during this year's Renew Our Rivers campaign. More than 5,000 volunteers worked to remove over 165 tons of debris from state waterways on the Black Warrior, Cahaba, Chattahoochee, Coosa, Mobile and Tallapoosa rivers, and on Village Creek during 2011. Renew Our Rivers volunteers have collected more than 11.5 million pounds of trash and debris from Southeast rivers since the program's inception in 2000. <http://www.renewourrivers.com>

Robertsdale Scrap Tire Site - ADEM provided oversight for this year's removal of more than one million pounds of scrap tire materials, the equivalent of more than 68,000 passenger tires, from a site near Robertsdale. It marks the third completed cleanup of a large-scale unauthorized scrap tire dump with money from the Alabama Scrap Tire Fund. The cleanups are paid for through a \$1-per-tire fee collected on each replacement tire sold in Alabama.

Tornado Debris Recycling - Thanks to a partnership between Southeastern Renewables and the Alabama Environmental Council, the City of Birmingham sent all the debris from the April tornadoes through a recycling process instead of burying it in landfills or burning it, which adds to air pollution. Of the 165,000 cubic yards of debris collected, equal to 26,500 tons, more than 90 percent was recycled. The project not only saved expensive landfill space, it pumped \$2 million directly into the local economy, employed more than two dozen people, and provided a model for a more sustainable approach for storm debris disposal.

State Parks and ADEM Turn Scrap Tires into Playgrounds - Five Alabama State Parks have received playground and landscaping improvements with funding support from the Alabama Department of Environmental Management (ADEM). The ADEM funding was made possible through the Alabama Scrap Tire Fund and the ADEM Scrap Tire Marketing program, which develops and assists demonstration projects to highlight the use of recycled tire materials.

- The \$84,439 in funding was used to purchase recycled tire mulch and supplies for playground and landscaping improvements at Roland Cooper, Joe Wheeler, DeSoto, Lake Guntersville, and Buck's Pocket state parks.
<http://www.outdoorsalabama.com/news/release.cfm?ID=986>

Plastic Container Recycling Program - The Alabama Department of Agriculture's Full Circle Plastic Pesticide Container Recycling Program collected and granulated a total of 266,246 containers or approximately 268,642 total pounds of properly-rinsed plastic pesticide containers at recycling sites throughout the state this year. The program serves over 600 structural pest control operators, 800 certified nurseries, 2,000 lawn care companies, and 8,000 private applicators in Alabama. <http://www.acrecycle.org>

Habitat/species protection and restoration

Black Bears Increasing in Alabama - According to the Department of Conservation, Black bear sightings in Alabama outside of their primary range of Mobile and Washington counties have increased in 2011. During the spring and summer of 2011, bears were reported in several locations throughout Alabama. A male bear was tranquilized in Jefferson County and relocated to suitable bear habitat in another part of the state. Another bear was seen on multiple occasions as it traveled across north Alabama toward Mississippi. Several other bear sightings occurred in Macon and

Chambers counties. Recently an adult bear has been the subject in several game camera images taken in Barbour County. Two bear cubs have also been seen in Barbour County.

Preservation of Diamondback Terrapin Habitat - The Alabama Department of Conservation secured \$1 million grant to preserve some of the last known habitat of the diamondback terrapin turtle. The grant will allow the Department to buy a 595 acre wetland tract on Heron Bay and 520 acres on Pottersville Bay in south Mobile County. The tracts will be added to the Alabama Forever Wild Program.

Tulotoma snail removed from Endangered list – On July 19th, the Tulotoma snail was officially moved from the endangered species list to the threatened species list. The snail, which lives in the free flowing waters of the Alabama-Coosa river system is the first of 95 snails or mussels listed nationwide to be down listed from endangered to threatened. Scientists credit conservation efforts and better water quality for the Tulotoma snail's comeback.

Reintroduction of Alabama Lampmussels in Bear Creek - State and federal biologists are introducing a new population of the federally endangered Alabama Lampmussels (*Lampsilis virescens*) to Bear Creek in Colbert County. The Alabama Lampmussel is found in only two river systems in North America: the Paint Rock River in Jackson County and the Emory River in Morgan County, Tennessee. Historically, the species was restricted to the Tennessee River basin, upstream of what is now Pickwick Reservoir. Biologists plan to release over 1,000 cultured mussels into Bear Creek to help give the species a boost. The mussels were raised at the Alabama Aquatic Biodiversity Center outside Marion.

Orchid and Salamander Considered for Endangered Species List - The U.S. Fish and Wildlife Service is considering 244 species for inclusion on the nation's endangered species list, including a wild orchid and an aquatic salamander that can be found in northwest Alabama. The white fringeless orchid, which is found in Colbert, Franklin, Marion and Winston counties, and the Black Warrior waterdog, which lives in Lawrence, Marion and Winston counties, are among the candidates being considered for protection by the Endangered Species Act. The wild orchid, which is found in Texas to Virginia, blooms from July to early September with ghost-white flowers on long stems. It is typically found in partially shaded, flat, boggy areas, including at Cane Creek Canyon Nature Preserve south of Tusculumbia. The Black Warrior waterdog is a large salamander that lives in streams in north and central Alabama, including Sipsey River in Winston.

The Good Roots Tree Planting Grant Program - The Alabama Power Foundation has awarded more than \$21,000 in Good Roots grants to fund planting of trees across central and southern Alabama. Good Roots is coordinated with the Alabama Urban Forestry Association and awards grants for the purchase of trees for planting in cities, towns, communities and by non-profit organizations. Communities receiving grants include: Bear Creek, Centerville, Chickasaw, Clayton, Excel, Gilbertown, Gordon, Hayneville, Heflin, Jefferson County, Leeds, Livingston, Mobile, Monroeville,

Montgomery, Munford, Selma, Silas, Slocomb, Talladega, Thorsby, Loxey, Tuscaloosa, Vestavia Hills, Webb and Wilcox County.

Green buildings, green communities

State Parks Energy Efficiency - In an effort to promote environmental stewardship and continued operational efficiency, the Alabama Department of Conservation and Natural Resources (ADCNR) created a comprehensive energy efficiency program for Alabama State Parks. Johnson Controls has begun a series of energy and facility improvements at six parks throughout the state.

The comprehensive energy program will focus on building environmental improvements including insulation, lighting and water conservation measures, and is anticipated to save ADCNR more than \$9.1 million over 15 years.

Dothan to Renovate City Schools - In June, the Dothan City Schools approved a program to borrow \$3 million from Bank of America to help fund a \$5 million project that will make city schools facilities more efficient, and will eventually pay for itself in reduced energy costs. The city school system is partnering with Trane, a company that specializes in providing energy efficient renovation plans, to make renovations to city school buildings that will decrease their energy use. The company recently performed an energy audit of the city schools to determine what changes were needed. The school system expects to save nearly \$8 million over 15 years.

<http://www2.dothaneagle.com/news/2011/aug/19/dothan-city-schools-invest-green-renovation-ar-2297069/>

Birmingham Airport Renovations – The \$201 million terminal expansion and renovation project at the Birmingham-Shuttlesworth International Airport will include the following “green” initiatives: greater use of natural sunlight; energy-efficient LED lights and sensors; harvesting rainwater for use in toilets and urinals; solar water heating; recycling of construction materials; energy-efficient heating and air conditioning; use of native, drought-resistant plants in landscaping; and green housekeeping and maintenance practices. Designed by KPS Group, Inc. and constructed by Brasfield & Gorrie, LLC, the expansion and renovation will be completed in stages and when complete is expected to be awarded the Leadership in Energy and Environmental Design, or LEED, Silver certification by the U.S. Green Building Council.

Airport officials expect the green features will keep energy costs flat despite doubling the size of the terminal, while cutting water costs by 40 percent.

Huntsville Botanical Gardens and TVA Go Solar - This month the Huntsville City Council approved an agreement allowing TVA to activate a 120 foot long solar array that will produce electricity for TVA’s Green Switch program. According to the agreement, TVA will pay for the construction and will get free use of the land for 10 years.

Ruffner Mountain Earns LEED Gold - Ruffner Mountain Nature Preserve in Birmingham's two building complex Nature Center has achieved LEED Gold certification from the US Green Building Council under the LEED (Leadership in Energy and Environmental Design) in New Construction category. Designed by KPS Group and built by Stewart Perry, the two structures, named the Treehouse and the Back Porch were designed to minimize their impact on the existing ecology of the mountain. Carefully inserted into the mountainside, the structures resemble tree houses within the forest canopy. The Treehouse is 5,800 square feet and houses animal exhibits, a gift shop, meeting facilities, and the administrative offices. The Back Porch is a large open pavilion for school groups and events, and houses vending/picnic areas and restrooms. <http://www.ruffnermountain.org>

Alabama's First LEED Certified College Residence Halls - In fall 2011, Birmingham-Southern College opened the first LEED (Leadership in Energy and Environmental Design) certified residence halls in Alabama. The Lakeview North and South residence halls total 65,290 square feet and house 167 students. The buildings are oriented to reduce seasonal heating and air conditioning, and employed regional, recycled and low-toxic materials in construction. The building also uses a super-efficient HVAC system, energy-efficient windows and insulation to cut heating and cooling costs. The site also features a 15,000 gallon cistern that captures rainwater from the roof for landscape irrigation, saving 50,000 gallons of city water per year. Water and energy conservation measures include dual-flush toilets, low-flow faucets and showers, compact fluorescent lights, and occupancy sensors in public areas. <http://www.bsc.edu/communications/news/2011/20111101-leed.cfm>

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 2011:

- APCO Employee Credit Union in Birmingham
- Seafood By-Product Processing Facility in Bayou La Batre
- Habitat for Humanity of Alabama Homes in Athens
- University of South Alabama Dining Facility – Mobile
- Alabama Realtors Association – Montgomery
- River Region Health Center - Montgomery

USGBC-Alabama Chapter Award Winners – The U.S. Green Building Council of Alabama named their 2011 Clover Award winners at its inaugural G4 (Going, Going Green) Gala in August. The four award winners exemplified the qualities of sustainability, leadership, stewardship and advocacy. The 2011 winners are: Alagasco's Center for Energy

Technology for Sustainability, the Madison City Schools Superintendent Dr. Dee Fowler, Robbins and Morton and Dauphin Island Sea Lab. <http://www.usgbcofal.org/clover2011.php>

Water conservation and quality

Treasured Alabama Lake Designation - In 2011, ADEM in conjunction with the Governor's Office helped create a "Treasured Alabama Lake" designation for the state and identified Lake Martin as the first candidate. The new designation will be awarded to lakes that meet quality standards for cleanliness and nutrient enrichment.

ADEM Receives Conservation Award - In 2011, ADEM was recognized by the Cahaba River Society for its Little Shades Creek Restoration Project. The project restored approximately 2,000 feet of stream bank, reduced sediment that was being deposited in the watershed, improved aquatic habitat, reduced stream bank erosion, and reduced the loss of land along the stream bank.

Buxahatchee Creek Watershed Restoration - This just completed Shelby/Chilton County watershed restoration project reduced an estimated 80% of the phosphorus, nitrogen and sediment entering Buxahatchee Creek by the implementation of streamside, agricultural and stormwater Best Management Practices. The project was sponsored by Cawaco Resource Conservation and Development Council, ADEM, Soil Water Conservation Service, NRCS and EPA.

Portions of Choctawhatchee River Upgraded - In 2011, ADEM reclassified all of the East Fork of the Choctawhatchee River, all but about 1 mile of the West Fork of the Choctawhatchee River and all but an approximately 3 mile stretch of the Choctawhatchee to a more protective Swimming water quality standard. This upgrade will help protect the river and encourage recreational use.

Environmental Education

Rainwater Harvesting in Selma and Dallas County- Ala-Tom RC&D collaborated with school systems in Selma and Dallas County to conduct educational workshops and field days to demonstrate how natural water can be captured, stored and used to produce food organically. This process demonstrated alternative energy by using a solar pumping system to deliver natural spring water and by capturing rainwater from the hoop house. This project also exposed limited resource and socially disadvantaged families to ways and means by which they can use the natural environment to develop food security systems at the home and community level. The farm demonstrations were held at the Evelyn Fluker Cox farm in Dallas County. This farm is an Alabama Heritage farm and has been an active farm for over 100 years.

Environmental Stewardship In Wilcox County - Auburn University's Environmental Institute partnered with Ala-Tom RC&D for an outreach program in Wilcox County during the 2010-2011 school year. The Black Belt Environmental Science and Arts

program has worked with Wilcox County students for over ten years and focuses on promoting environmental awareness.

Center for Aquatic Resource Management - Auburn University this year opened its \$9 million-plus Center for Aquatic Resource Management. The center provides facilities for leading-edge aquatic research, education and community outreach.

Talladega Mountains Natural Resource Center - In June 2011, after a 15 year effort, Jacksonville State University "broke" ground on the construction of the Talladega Mountains Natural Resource Center. The 15,000 square foot center located outside Heflin will serve as both an environmental education facility and eco-tourism attraction for the region. Along with the JSU Talladega Mountains Field School, the center will also house the Cleburne County Operations Center for Emergency Management and 911 offices.

Gulf Coast Bay Buddy - The Alabama Coastal Foundation's Gulf Coast Bay Buddy program was updated in 2011 and reached over 2,200 students. This program teaches students in first through fourth grades about conservation and emphasizes that all human actions affect the earth. Additionally, the program was updated to align with Alabama grade-specific learning standards for environmental education and to include cartoon characters of species native to the Alabama Gulf Coast.

Flint River Association First "Wildlife Community"- As part of the "Top of the Watershed Project", the Flint River Conservation Association (FRCA) partnered with the National Wildlife Federation, the Monte Sano State Park, and the Monte Sano Civic Association to earn enough habitat points to make Monte Sano Mountain in Huntsville the first certified Wildlife Community in Alabama. To earn points, FRCA has put on several workshops for the Monte Sano denizens: A Rain barrel workshop, Invasive Species ID and Control, Alabama Water Watch Water Monitoring –where they trained 27 new monitors, and creating a backyard wildlife habitat.

WaterWorks Center for Environmental Education - The Alabama Mountains Rivers and Valleys-RC&D now owns the City of Hartselle's old water treatment plant on the banks of Flint Creek in Morgan County. Called the WaterWorks the treatment plant had discontinued operation due to the age of the facility and due to the poor water quality in Flint Creek. This innovative effort is the only water treatment facility in the country that now has been re-opened to treat water with natural wetland processes. WaterWorks also features an on-site sewage wetlands system, green roofs, vermi-composting, rain barrels, porous pavers, in place storm water basin under the pavers, 16.2 Kw solar power system, passive solar hot water heater and natural mosquito control using native species minnows. To maximize the impact on the maximum number of people the facility educates school children & adults on the value of natural and constructed wetlands as related to water quality, flood prevention, water storage in droughts, groundwater recharging, wildlife habitat, riparian zone protection and aesthetic values.

Watershed Education Center at Hays Nature Preserve - The City of Huntsville is finishing the Watershed and Wetland Education Center at the Hays Nature Preserve with many green features, to use in watershed education for the public. Features include –rain gardens to address both the quantity and quality of storm water runoff, as well as rain barrels that will be used to irrigate the native plants when needed. The use of indigenous plants will also be a teaching tool, and there is no irrigation system installed. The nature center will also sport pervious pavement in parking areas. A green roof and gardens will also mitigate the Heat Island Effect.

Environmental Literacy- At the request of the Alabama State Department of Education, the Environmental Education Association of Alabama is coordinating a task force to develop an environmental literacy plan for the state. The task force, which includes stakeholders from government agencies, schools, non-profits and businesses, has prepared an outline for the plan to be entitled "Best Practices in Environmental Education in Alabama." The completed plan will serve as a guide to schools, parks, and other organizations and direct efforts to ensure a better-educated citizenry.

GRCA Clover Crawl Event - On Saturday, March 31st, the Green Resource Center for Alabama hosted its Clover Crawl 2011, a FREE home and garden expo was held outside on the park grounds at Vulcan Park and Museum. This annual event is designed to educate the public on the latest trends in green products and services that can be used throughout the home, garden or office.

Auntie Litter's 20th Annual Parade and Tornado Relief - The 20th Annual Auntie Litter Parade in Birmingham (the state's oldest environmental parade) was cancelled in 2011 because of the tornadoes that struck the state on April 27th. In lieu of holding the parade, Auntie Litter, Inc. decided to forgo its annual event and \$2000 in Earth Day parade fees, while sponsors agreed to donate \$6000 worth of food products to American Red Cross volunteers. <http://www.auntielitter.org>

Toyota and Alabama A&M produce biodiesel – The Toyota engine plant in Huntsville has been collecting and delivering used cooking oil to a Alabama A&M University lab as part of a biodiesel donation program. The waste oil from the plant's cafeteria, along with oil from other sources will be converted into biodiesel to help run A&M's campus buses and agriculture equipment. The project is one of the plant's environmental sustainability efforts to find ways to save energy and water and cut back on waste. Last year, over \$190,000 in cost savings was found.

Parks, trails, greenways and recreation

The Piedmont Plateau Birding Trail & Alabama Birding Trails - The Piedmont Plateau Birding Trail held an official kick-off in November. The trail links 34 sites within East Alabama, providing opportunities to see everything from bald eagles to red-cockaded woodpeckers. The Piedmont Birding Trail is part of the Alabama Birding

Trails, a statewide system comprising eight geographic regions, including: [North Alabama](#), West Alabama, Appalachian Highlands, [Piedmont Plateau](#), [Black Belt Nature and Heritage](#), Pineywoods, Wiregrass, and [Alabama Coastal Birding Trails](#). The number of sites within each of these regions will vary based on local interest and site availability. Learn more at www.alabamabirdingtrails.com.

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>.

Alabama State University Chosen National Park Interpretive Center - Alabama State University was chosen as the site of the Montgomery Interpretive Center, the third center for the Selma to Montgomery National Historic Trail. The 54-mile Selma to Montgomery Trail begins in Selma, winds its way through Lowndes County and into the state’s capitol, reflecting the steps of the more than 25,000 foot soldiers who made the journey in 1965. The announcement was made January 2011, by National Parks Service.

Statewide Trail Proposal - In November 2011, the Alabama Hiking Trail Society proposed a 550 mile footpath that will start in Fort Morgan on the Gulf of Mexico and ends at the Walls of Jericho in Jackson County. The idea of a trail that would span the state has been in the minds of Alabama Hiking Trail Society members for a decade. Lack of land along the Gulf to build trails that could serve as the southern tip of the project has been cited as the primary obstacle to the project, but the Forever Wild conservation program’s recent acquisitions along the coast has made the trail possible.. <http://www.hikealabama.org/>

21 Alabama Trails receive National Recreation Designation - For the second year in a row, Alabama surpassed all other states in the number of hiking and other trails honored with a National Recreation Trail designation. In 2011, 21 of the 41 trails selected for this national designation came from Alabama. The trails receiving the designation include: Village Point Preserve Park in Daphne, Antique Rose Trail in Foley, Yoholo-Micco, The Creek Indian Trail in Eufaula, Chief Ladiga Trail in Jacksonville and Piedmont, Chattahoochee Valley Railroad Trail in Valley, Florida-Lake Jackson Scenic Trail, Desoto State Park near Fort Payne, The Larry and Rona Dykes Trail in Dothan, Chewacla State Park near Auburn, Swan Creek Greenway Trail in Athens, Sunset Drive trail in Guntersville, Guntersville State Park Trail System in Guntersville, Citronelle

Walking Trail in Citronelle, Montevallo Greenway Trail in Montevallo, Talladega Depot Annex in Talladega, Wind Creek State Park near Alexander City, Queen City Park Trail in Tuscaloosa, Lake Lurleen State Park near Coker, Tram at Tannehill Ironworks Historical Site near McCalla.

Railroad Park Named Best New US Park – Birmingham’s Railroad Park won the People’s Choice for best new park in the U.S. in an online poll conducted by the Daily Green, a national, environmentally-oriented website. Railroad Park, which has been called “Birmingham’s Living Room”, beat out entries from Los Angeles, New York City and Seattle to win the honor. <http://www.railroadpark.org/>

Appalachian Trail to Alabama – In 2011, with the acquisition of 762 acres along the Pinhoti Trail at Flagg Mountain in Coosa County, support for the terminus – starting point - of the Appalachian Trail in Alabama is gaining momentum. The world’s most famous walking trail, currently begins in Georgia, but with the purchase of the land at Flagg Mountain advocates in Alabama can now “make the case” that the Pinhoti Trail, a spur of the Appalachian Trail, is the appropriate place to begin a journey from Alabama to Maine. <http://www.facebook.com/AppalachianTrailtoAlabama?sk=wall>

New Land Trust of North Alabama Trails – The Land Trust of North Alabama created four (4) new trails for public use in 2011 – the Toyota Trail on Wade Mountain, the Stevenson Trail on Huntsville Mountain, the West Bluff and Lowery Trails on Green Mountain. Just at the end of the year, a 5th trail was started by Land Trust volunteers at Harvest Square.

Bike Share Programs – 2011 saw the establishment of “Bike Share” programs across Alabama. At the University of South Alabama more than 500 “Jag Bikes” have been made available on campus. The city of Montevallo and the university launched their own “Vallocycle” program (short for Montevallo) with over 70 bikes donated by local residents and businesses. Even Alabama Power has launched a bike share program with over 50 bikes, for its employees at their downtown corporate offices in Birmingham. The Power Company’s program encourages ridership and afternoon strolls to nearby restaurants and visits to parks such as Railroad Park. <http://vallocycle.com/>



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

Special thanks to:

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