

DECATUR GROWS GREENER

Trees + Water

Sustainability Report 2014



SUSTAINABILITY NOW

We aim to ensure a high quality of life for Decatur residents, businesses and visitors – not just for today, but in the future as well. A greener Decatur helps us achieve that goal.

Being a good steward of our resources – environmental, economic, organizations/institutional and community – goes a long way toward helping us reach our sustainability goals.

This special Decatur Grows Greener insert takes a close look at two valuable resources – water and trees – as well as the value and impact they have on our community and actions you can take to help protect and enhance them.

BEAUTIFUL UTILITIES

Trees have enormous visual appeal but they are valuable for many other reasons as well. Their benefits range from cooling our homes with their shade to reducing water pollution and topsoil erosion to cleaning the air we breathe. Trees are truly beautiful utilities.

What's a Tree Worth?

It is estimated that a single water oak tree with a trunk diameter of 30 inches growing on a single family residential lot provides environmental and economic services worth \$258 annually.

See some of the benefits to the owner:

WATER	ELECTRICITY	OIL + NATURAL GAS
Interception of 11,935 gallons of storm water.	Conservation of 270 Kilowatt/hours of electricity for cooling.	A decrease in consumption of eight therms of oil and natural gas.



OUR TREES ARE TOPS

Decatur's lush canopy and wooded landscape lend beauty, utility, shade, and increased air quality to our environment and our community.

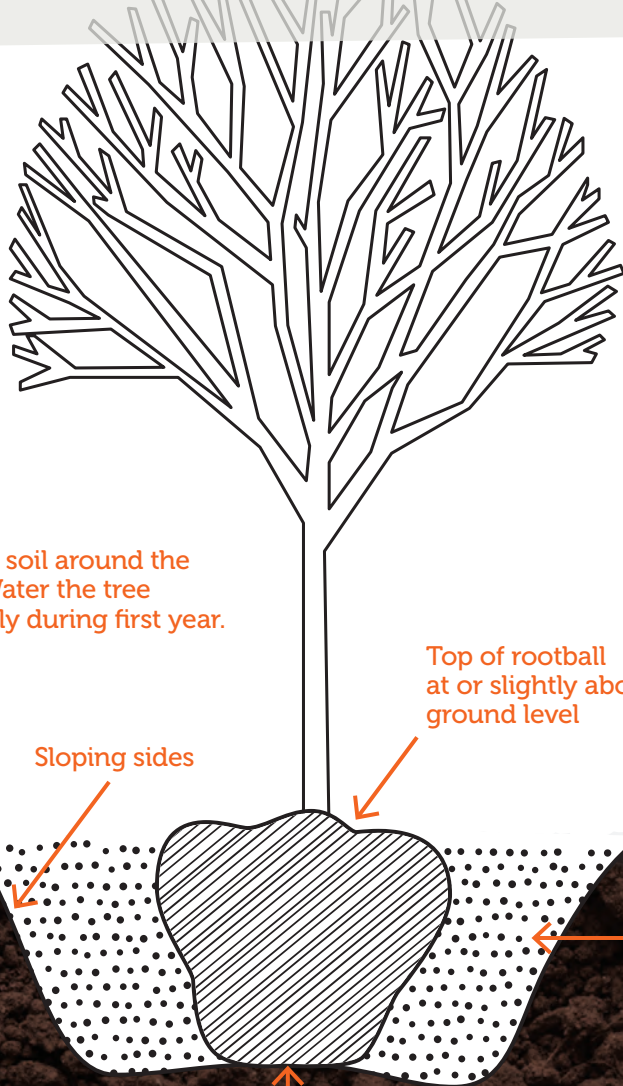
- Decatur has been designated a Tree City USA for four years.
- A tree canopy cover analysis, completed in 2010 using aerial photographs, demonstrated 45.1 percent coverage. The canopy will be measured every five years, starting this summer.
- Decatur has 5,922 trees growing along public streets that account for an estimated three percent of the city's tree canopy cover.
- The city is hiring an on-staff arborist to help keep our trees healthy.

PROPER PLANTING OF A TREE

How hard could it be, right? Dig a hole, drop it in. It isn't much more complicated than that, but proper planting techniques ensure a healthy, long-lived tree.

Simple Steps for a Happy Tree

The best time to plant a tree is when it's dormant, usually late fall to the end of winter. Putting a tree into a new location can be quite a shock to its system, so follow these few simple steps to give your tree the best chance to thrive:



Mound soil around the hole. Water the tree regularly during first year.

Top of rootball at or slightly above ground level

Sloping sides

Backfill with original soil and no other soil amendments

Firm soil on bottom

Width of hole is at least 1 foot wider than root ball (or as much as 3x to 5x as wide for best results)

1 Choose the right tree for this climate – preferably a native species – and be sure it will fit in the space when it's fully grown.

Use the list of tree species that thrive in Decatur on page 5 for a successful starting point.

2 Check for underground utilities before digging by calling 811.

3 Loosen the root ball gently before planting.

4 Dig a hole no less than one foot wider than the root ball or bare roots of the tree being planted. A planting hole up to three to five times the width of the root ball is even better!

5 Plant the tree no deeper or shallower than it was in its former location or container.

6 Rough up or “scarify” the dirt walls of the tree hole – this makes it easier for the roots to push out into the surrounding soil.

7 Adding soil amendments or fertilizer at the time of planting is not necessarily recommended. Just back fill the hole with the native soil.

8 Add mulch! Find mulching information on page 4.

9 Water the tree thoroughly and re-water regularly as needed. Be careful not to over water – the tree roots actually need air to survive!

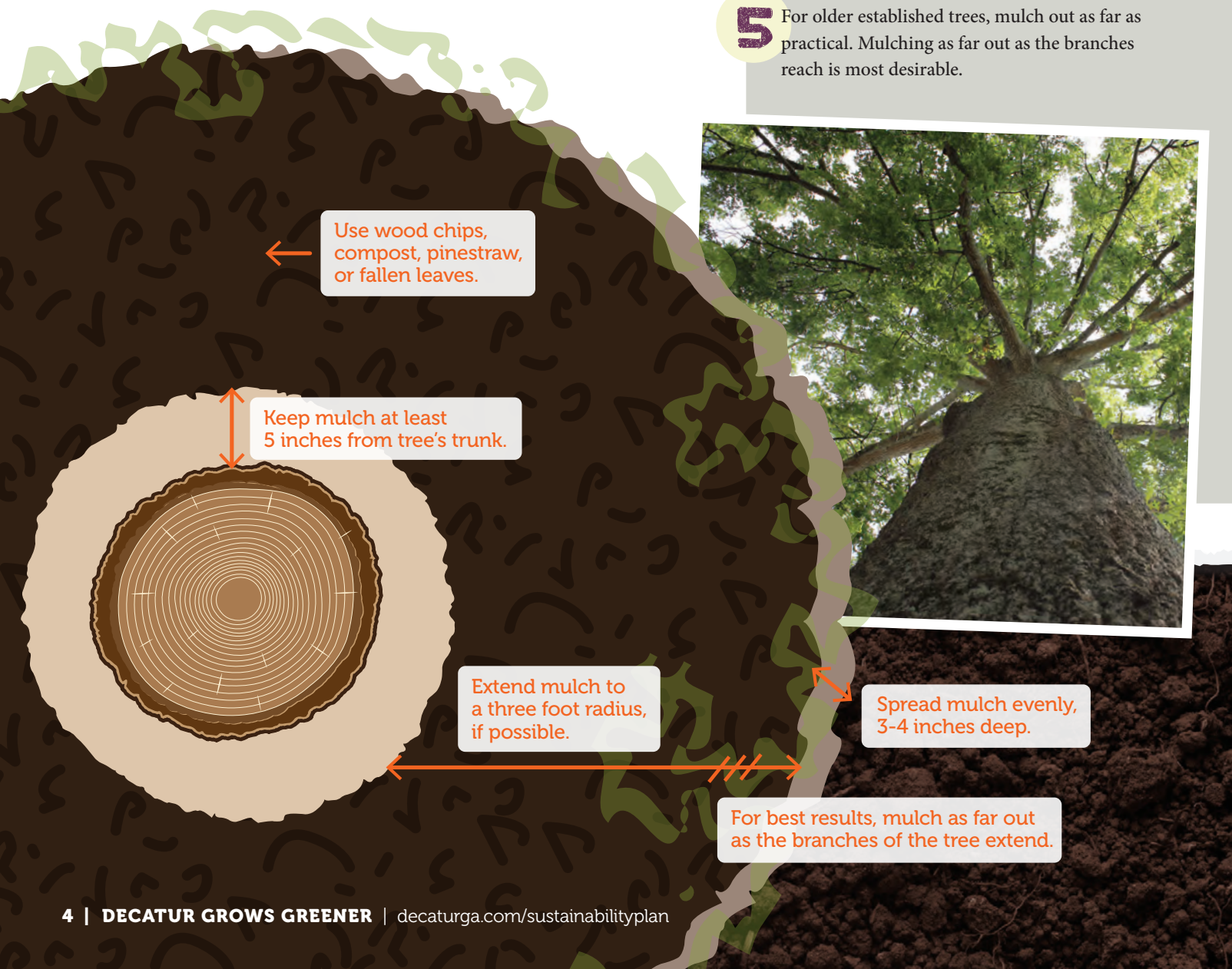
DON'T SKIP THE MULCH

Mulching is beneficial to trees because it helps retain soil moisture, moderates soil temperature, suppresses weed growth, reduces soil compaction, and reduces potential damage from mowers and string trimmers.

Mulching for Healthy Trees

Mulch trees when you plant them. And mulch established trees regularly to maintain coverage. To help your trees thrive, follow these five simple mulching steps.

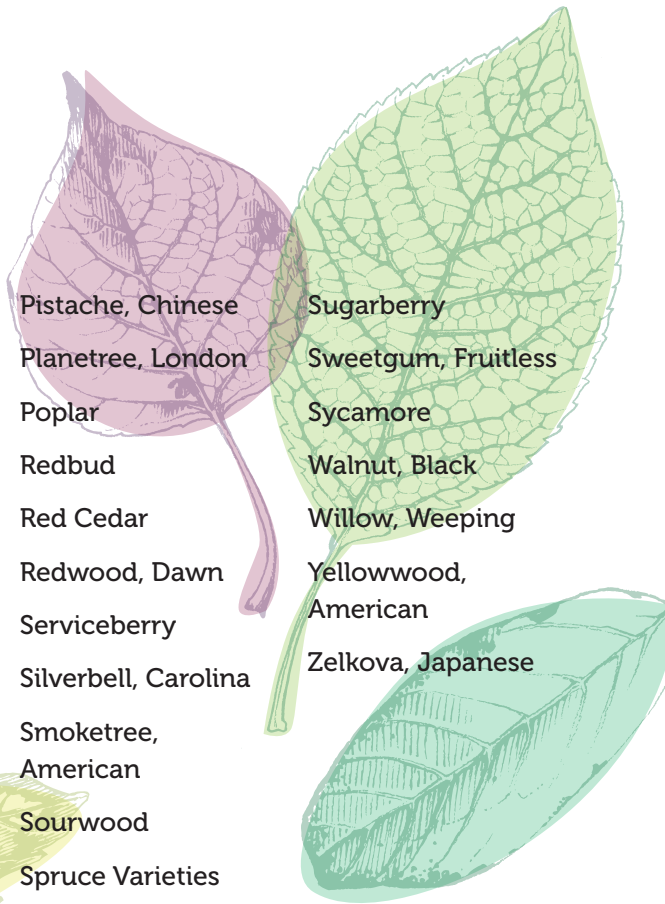
- 1 Use organic materials such as pine straw, leaves, aged wood chips and compost. Avoid grass clippings, plastic, and rocks.
- 2 Use the tree's own fallen leaves for mulch – no need to bag them when you rake!
- 3 Spread mulch in an even layer, 3-4 inches deep. Avoid mounding the mulch around the tree's trunk. Keep mulch at least 5 inches from the tree's trunk.
- 4 For newly established trees, mulch an area at least 6 feet in diameter, if possible.
- 5 For older established trees, mulch out as far as practical. Mulching as far out as the branches reach is most desirable.



TREES THAT THRIVE IN DECATUR

While many, many species of trees grow in Decatur, there are certainly some trees that will do better than others in this environment. Here are the best trees to plant in Decatur.

- | | | | | |
|-----------------------------|------------------|---------------------------------|----------------------|----------------------|
| Ash | Crepe Myrtle | Holly | Pistache, Chinese | Sugarberry |
| Bald Cypress | Cypress, Leyland | Honey Locust | Planetree, London | Sweetgum, Fruitless |
| Basswood, American (Linden) | Dogwood | Hophornbeam | Poplar | Sycamore |
| Beech, American | Elm | Hornbeam (Ironwood, Blue Beech) | Redbud | Walnut, Black |
| Birch, River | Fringe Tree | Locust, Black | Red Cedar | Willow, Weeping |
| Black Gum (Tupelo) | Ginkgo | Magnolia | Redwood, Dawn | Yellowwood, American |
| Buckeye, Red | Golden Raintree | Maple | Serviceberry | Zelkova, Japanese |
| Cedar | Hackberry | Oak | Silverbell, Carolina | |
| Chaste Tree (Vitex) | Hawthorn | Pecan | Smoketree, American | |
| Cherry | Hemlock, Eastern | Pine | Sourwood | |
| Chestnut | Hickory | | Spruce Varieties | |



WEED EATERS

Invasive species removal can be tasty! The City of Decatur employed a herd of sheep to help remove kudzu from the city's largest greenspace.

In Fall 2013, Trees Atlanta, in partnership with Ewe-niversally Green and about 75 of their sheep, helped cut back kudzu and other invasive plants in the Decatur Cemetery. "Sheep offer a low-impact solution for controlling invasive plants on site," said Trees Atlanta Forest Restoration Coordinator Brian Williams. The sheep, along with their

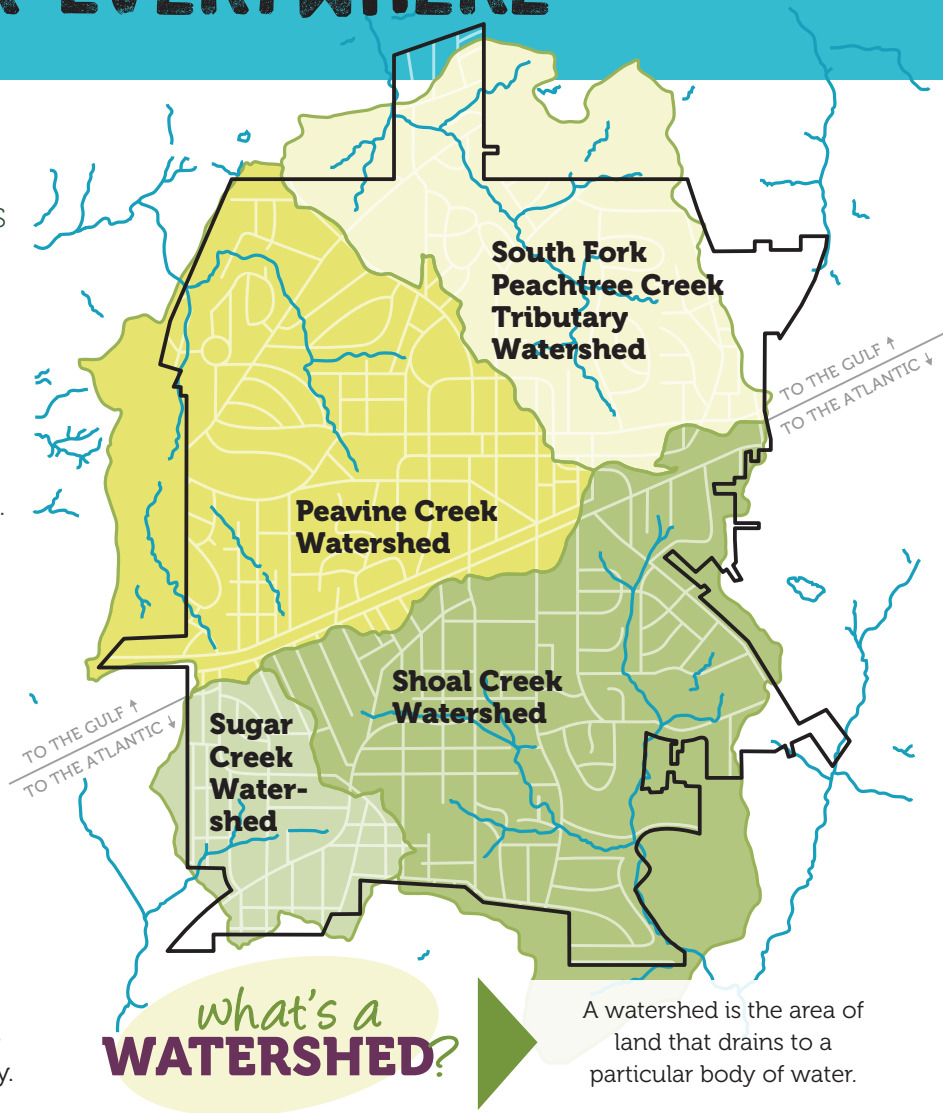
shepherd and guardian dogs, worked for about three weeks to clear land along the cemetery's stream corridor. Trees Atlanta is completing a 5-year woodland restoration effort in the cemetery. Trees Atlanta has used sheep to help eradicate invasive plants from many parks, nature preserves and green spaces in metro Atlanta, including Agnes Scott College's campus. Learn more about these helpful weed eaters at treesatlanta.org and eweniversallygreen.com.

WATER, WATER EVERYWHERE

Decatur's streams start right here in town, which makes us home to four major watersheds. Sugar Creek and Shoal Creek drain to the Atlantic Ocean. Peavine Creek and a tributary of South Fork Peachtree Creek drain to the Gulf of Mexico.

It's All Downstream From Here

It's our responsibility to protect our local waters and, in turn, the waters that flow through Georgia and the Southeast. Because these streams start here, water pollution starts here, too. Many people think of water pollution as large-scale oil spills or factory runoff, but the primary pollutants that affect our streams are tiny bacteria and sediment. Simple changes can ensure that water flowing downstream to our neighbors reflects Decatur's commitment to sustainability.



TAKING DECATUR'S STORMWATER DRAINAGE BY STORM

In 2013, the city began large-scale improvements to the downtown drainage system and flood control facility at the Beacon Municipal Center – reducing flood risk and improving water quality.

The downtown storm drainage system has been the main focus of stormwater construction efforts in 2013 and 2014. Downtown Decatur has the greatest amount of impervious surface in the city and the greatest impact on downstream properties. The area also houses some of the oldest and least adequate storm drainage facilities. Improvements on Maple and Church streets

will address many of the challenges in downtown, including significant flooding at the Beacon Municipal Center and surrounding areas. The new storm water management facility at Beacon will reduce downstream flooding that occurs on nearby residential properties.

Established in 1999, the city's stormwater utility is responsible for the maintenance and upgrades to the stormwater system. It has funded projects and staff to address flooding, erosion, and water quality in our community. Small repairs and upgrades are performed by city crews. Larger projects are contracted out to private construction companies.

PROTECT OUR WATERWAYS

Here are some small changes you can make to promote safe and healthy waterways in your community.

+ Keep hazardous chemicals out of drains – sinks, toilets, gutters, storm drains, and sewers. Paints, oil, cleaning solvents, and pool chemicals should be disposed of during specific hazardous waste recycling events. DeKalb County holds semi-annual hazardous waste disposal events. Check earth911.com/recycling for other options.

+ Never flush medications down the toilet. Bring your out-of-date medications to a “take-back” program that partners with a facility for proper drug disposal. The City of Decatur hosts drug take-backs annually with the DEA and local law enforcement.

+ Use nontoxic household products whenever possible. Make your own natural cleaning products or purchase green alternatives. Find them on the EPA’s Greener Products website: epa.gov/greenerproducts.



Have your car washed professionally. Professional car washes are required to drain their wastewater into sewer systems, where it is properly treated. This protects our local streams from oil and automotive fluids. Many car washes also recycle their wastewater, and use less than half the amount of water that a home car wash requires.



Don’t pour out waste motor oil into gutters, down storm drains or onto the ground. A single quart of motor oil that seeps into groundwater can pollute 250,000 gallons of drinking water. Find local disposal options at earth911.com/recycling. Check to see if your service station has a program to take back waste oil and dispose of it safely.

DOO YOUR PART

Even a little dog poop can be a big hazard to our waterways. The average dog poops 23 times a week, and just one ounce of dog waste contains 23 million microorganisms of bacteria.



Use these pet waste stations around town



Animal waste acts as a fertilizer on land and in the water. It can promote excessive aquatic plant growth, which chokes waterways, increases algae blooms and robs the water of vital oxygen. Dog waste also pollutes water with disease-causing bacteria and parasites, which can be passed to humans. Here’s what you should “do”:

Scoop it! Flushing pet waste (in biodegradable, flushable bags) down the toilet is best, because it will be treated at a sewage treatment plant, just like human waste. If flushing Fido’s waste is not an option, bag your pet’s poo and put it into a trash can (not your neighbor’s yard trimmings bag, please!).

Never put pet waste in a storm drain. Look for pet waste stations around town, or dispose of it properly at home. Encourage your family and your neighbors to do the same.

HELPING GREEN DECATUR



Left to right: Steve Provost, Tiffany Brott, Ben Jordan, Kristin Rowles, Greg Coleson, Sara Waterson, KC Boyce, Jill Jordan.
Not pictured: Gary Garrett

The Environmental Sustainability Board is an advocate for the environment and for the city.

The board, established in 2009, provides recommendations to the city commission regarding Decatur's environmental regulations, plans and initiatives. The board helps implement city projects that impact the natural environment to protect and improve the quality of life for the people of Decatur.

Contact Resource Conservation Coordinator Lena Stevens at lena.stevens@decaturga.com for updates and information.

Eco Excitement

Here are some of the city's recent sustainability accomplishments.

GET INVOLVED

Find out more about Decatur's Sustainability Plan online at decaturga.com/sustainabilityplan. Help sustain your community.

The Environmental Sustainability Board and the City of Decatur worked together to contribute to these initiatives and achieve these goals:

EDUCATION/OUTREACH

- Supported the Water Wise symposium for eighth and ninth grade students.
- Hosted Earth Day events along with the Wylde Center.
- Promoted community input sessions for the Unified Development Ordinance.

WASTE REDUCTION & RESOURCE CONSERVATION

- Continued Electronics Recycling Days twice a year, adding styrofoam recycling and paper shredding.
- Inventoried public trash and recycling receptacles downtown, with plans to expand options.
- Participated in the DEA's drug take-back initiative.

COMMUNITY

- Named a silver level walk-friendly and bike-friendly community.

BUILDINGS & ENERGY

- Earned Silver LEED Certification on a Decatur building, with one Platinum and two Silver certifications pending on others.
- Installed green roof at Fire Station No. 1, and cool roofs at Fire Station No. 2, Decatur Recreation Center, and Decatur Public Works.
- Presented research on high performance building regulations as part of Unified Development Ordinance community input process.
- Supported the Decatur Housing Authority's focus on building green and participation in the EarthCraft green building certification program for Oliver House.

FOOD & AGRICULTURE

- Continues to support the Decatur Farmer's Market, which now boasts the highest usage of the Wholesome Wave Georgia program in the area, doubling food assistance benefits.
- Raised \$10,000 for Decatur's Kitchen Garden.