



Urban Forestry

Urban Forests are essential to a city's water quality

Did You Know? For a cost of \$250–\$600 a single tree returns over \$90,000 of direct benefits.

- Walkable Communities, Inc.

The Importance of Urban Forestry

An urban forest consists of all of the trees and vegetation found within a city's boundaries and when combined with parks, greenways and open space, make up what is known as a city's "green infrastructure."

Urban forests have historically been considered an amenity for its citizens, but more recent studies and findings have shown that the urban forest has tremendous environmental and economic value.

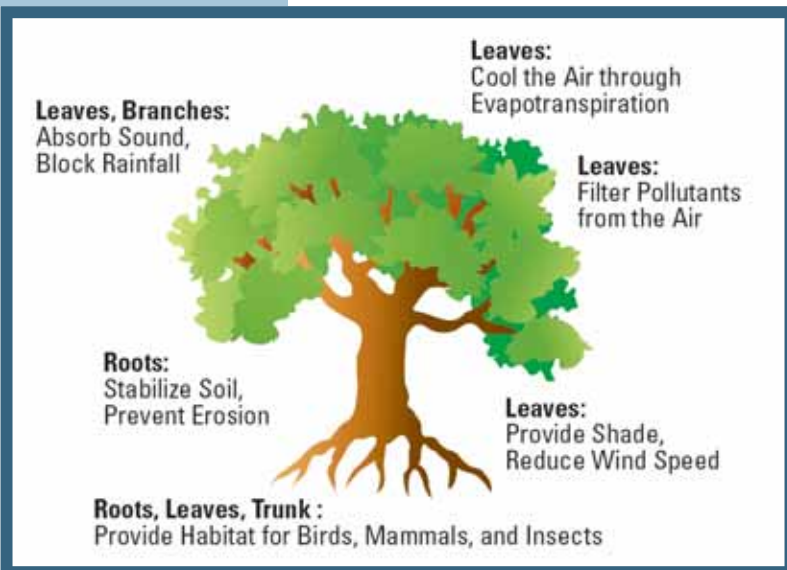
Specifically, urban forests are essential to a city's water quality. Trees and vegetation in an urban area are able to absorb stormwater, reduce flooding and erosion, filter pollutants, cool air and water temperatures and provide valuable habitat, providing an asset for a community's overall health.



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Urban Forests & Water Quality

During rain events, water runoff from impervious streets, parking lots and rooftops rushes into our rivers, lakes and streams, increasing erosion, the chances of flooding, and carries with it pollutants and sediment that endanger aquatic life. Urban forests are a natural and cost-effective way to intercept stormwater, allowing it to be naturally filtered back into the ground.



- A study by the Urban Forest Research Center showed that an average, medium-sized tree could absorb **as much as 2,380 gallons of rainwater** each year.
- The city of Atlanta found that even the current 7% canopy cover of downtown parking lots would result in **a savings of almost \$500,000 in stormwater management costs** over 30 years. (American Forests)
- **37,500 tons of sediment per square mile** per year comes off of developing and developed landscapes—trees could reduce this value by 95%. (Dr. Rim Coder, University of Georgia)

The multiple benefits of urban trees.
-EPA Heat Island Reduction Initiative

Resources & References

Georgia Urban
Forest Council
www.gufc.org

*Identified Benefits
of Community Trees
and Forests*
Dr. Rim D. Coder,
Univ. of Georgia 1996

Mississippi Urban and
Community Forestry
Management Manual
[www.mfc.state.ms.us/
publications.htm](http://www.mfc.state.ms.us/publications.htm)

National Tree Trust
www.nationaltreetrust.org

Southeast
Watershed Forum
The Value of
Community Forests
[www.southeastwaterform.
org/files/pdf/forestry.pdf](http://www.southeastwaterform.org/files/pdf/forestry.pdf)

Tree City USA
[www.arboday.org/
programs/treeCityUSA](http://www.arboday.org/programs/treeCityUSA)

Urban Forestry AL
www.aces.edu/ucf

Urban Forestry South
www.urbanforestrysouth.org

Urban Tree Conservation
Montgomery, AL
Tree Committee
www.montgomerytrees.org

USDA Forest Service,
Center for Urban
Forest Research
www.fs.fed.us

US EPA Heat Island
Reduction Initiative
www.epa.gov/hiri

Sample Tree Ordinances

Tree Canopy Cover

Athens-Clarke County, GA—Sec. 8-7-15.

It is the goal of Athens-Clarke County to achieve and maintain an actual tree canopy cover of at least 45 percent.

(c) Tree canopy cover required by zoning district: The amount of tree canopy cover required is measured in percent of total gross acreage of the site or lot and varies by zoning district... On new single-family residential subdivisions, tree canopy cover is required for the overall site as well as for each individual lot.

Landscape and Buffering Standards

City of Asheville, NC—Sec. 7-11-3.

(B) Applicability—7. Tree Save Areas

Residential projects shall preserve a portion of a site area dedicated to the preservation and/or establishment of natural woodland areas. b: Thirty percent of the total site area must be delineated on an approved site plan or an approved preliminary and final plat as tree save area. d: Tree save areas may be divided into more than one pocket provided no single area is less than 5,000 square feet.

Tree Preservation and Canopy Requirements

Chesapeake, VA—Sec. 19-602.

The landscape plan for every site shall contain the tree preservation and canopy requirements set out.

A. Tree preservation areas clearly delineated on the site.

B. Tree canopy requirement—non residential development—a minimum of 10% of the calculation area.

C. Tree canopy requirement—residential development—a minimum of 15% of the calculation area for residential zoned for multifamily or townhouse; a minimum of 20% for all other residential sites.

Model Ordinance Guides

Guidelines for Developing and Evaluating Tree Ordinances

California Dept. of Forestry and Fire Protection
www.isa-arbor.com/tree-ord/ordintro.htm

How to Write a Municipal Tree Ordinance

National Arbor Day Foundation
www.arboday.org/programs/treecitybulletinsbrowse.cfm

Landscape Ordinance Research Project

Louisiana State University
www.greenlaws.lsu.edu/sitemanager.htm

Status of Tree Ordinances in South Carolina

South Carolina Forestry Commission
www.strom.clemson.edu/primelands/trees

Tree Ordinance Development Guidebook

Georgia Forestry Commission
www.gfc.state.ga.us/CommunityForests/documents/2005TreeOrdinance-100.pdf

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