

# Planner's Forest Toolkit: Codes, Ordinances, and Practices



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Green Infrastructure Center Inc. and SC Forestry Commission

[www.gicinc.org](http://www.gicinc.org)

October 14, 2021



# South Carolina Forestry Commission (SCFC)



## SCFC Urban and Community Forestry Program:

Our program's goal is to help foster, support and enhance long term, sustainable, urban and community forestry programs within communities. We provide technical, educational & financial assistance, primarily, to cities, towns, non-profit organizations, and state and county government.



South Carolina  
Forestry Commission  
**TREE CARE &  
COMMUNITY  
FORESTRY**



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<ul style="list-style-type: none"><li>Home</li><li>News and Events</li><li>Fire and Burning Information</li><li>People and Places</li><li>Landowner Services</li><li>Seedling Sales</li><li>Forest Management</li><li>Tree Care and Community Forestry</li><li>Forest Health</li><li>Economic Development</li><li>State Forest Recreation</li><li>Law Enforcement</li><li>Information Technology</li><li>Education Programs</li></ul>	<h3>URBAN AND COMMUNITY FORESTS</h3> <p>Trees growing in cities and towns, collectively, encompass "urban and community forests." Urban and community trees are essential components of community infrastructure that provide a multitude of benefits to improve the local environment, economy and human health and well-being.</p> <p>Management of healthy, sustainable, community forests involves careful planning, protection, selection, and proper planting and maintenance. Healthy urban forests maximize community benefits and improve quality of life in communities.</p> <p>Urban forest cover in the U.S. is consistently declining at devastating rate of about 175,000 acres per year (36 million trees), as impervious surfaces, such as buildings, roads, sidewalks, parking lots and driveways, dramatically increase with the progression of urbanization.</p> <p>To improve the health and sustainability of urban and community forests, communities must recognize the tremendous importance of urban trees and green infrastructure and improve the management of these assets through effective planning and more proactive approaches that focus on tree preservation during development, higher standards of care in maintenance and more aggressive canopy replacement planning to balance tree loss attributed to clearing for development, aging and insect and disease attack.</p>
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<https://www.state.sc.us/forest/urban.htm>

SCFC has funded the work to develop the planners forest toolkit with funds from USDA Forest Service.



The Green Infrastructure Center (GIC) is a nonprofit organization that helps communities evaluate green assets and manage them to maximize ecology, economy and culture.

We do this by:

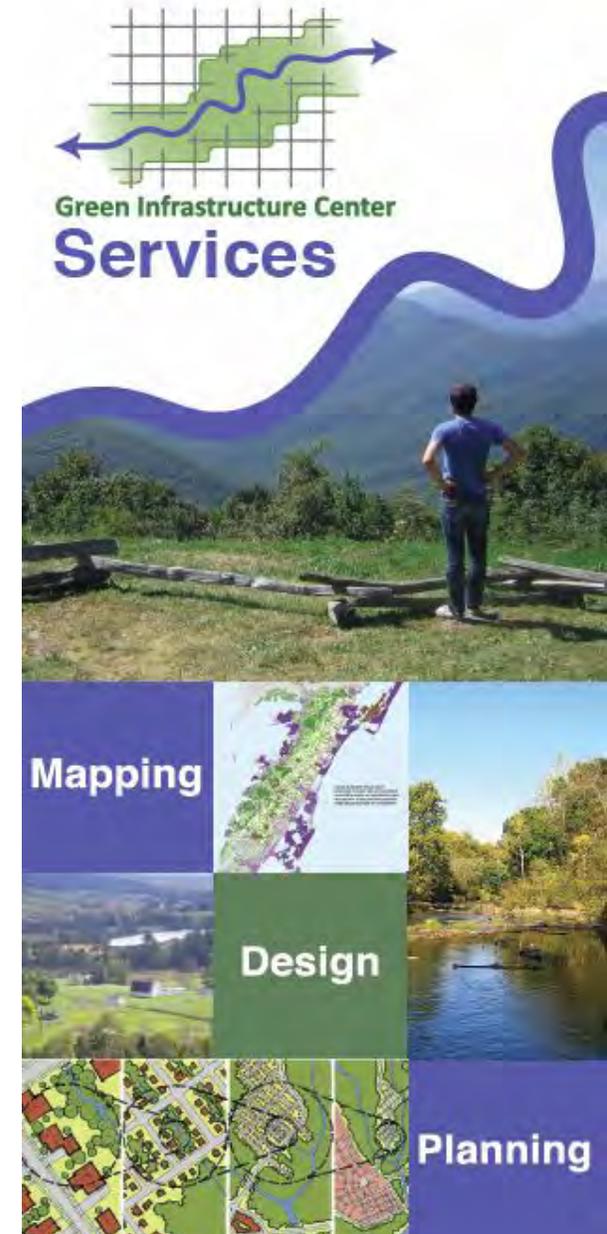
Mapping land cover and urban tree canopy

Modeling high value wildland habitats

Creating strategic green infrastructure plans

Writing, teaching and training

[www.gicinc.org](http://www.gicinc.org)



# Trees: the original – and best – green infrastructure!

Trees give us cleaner air, shade, beauty and stormwater benefits at a cost far cheaper than engineered systems!

*Estimates for the water a typical tree can intercept in its crown, range from 760 gallons to 4000 gallons per tree per year, depending on species.*



Tree in Charleston, SC

# PLANNER'S FOREST TOOLKIT

A Guide for South Carolina's Towns, Cities and Counties

A publication of  
the South Carolina  
Forestry Commission,  
Urban and Community  
Forestry Program



Written by the Green Infrastructure Center Inc.

GREEN INFRASTRUCTURE CENTER INC.

SCFC hired GIC to create a free workbook to describe all key tree codes and examples of them for South Carolina

<http://trees.sc.gov/pubs/urbanplannerstoolkit.pdf>

# Thanks to our funders!

This project to study South Carolina's tree codes was funded by the USDA Forest Service through a grant to the South Carolina Forestry Commission!



# We need to be concerned – America's trees are in trouble!

Recent national data show urban and suburban tree canopy cover is trending downwards at a rate of about **175,000 acres lost per year** – approximately 36 million trees annually. As these trees are lost, so are the benefits they provide – **an economic loss of \$96 million** per year (Nowak and Greenfield 2018).



# Codes for a Healthy Urban Forest



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# Good codes are essential!

Today we will cover the essential codes and policies to have in place for a healthy urban forest followed by discussion of your needs and solutions.

Why are codes so important?

- ✓ We often focus more on tree planting than on tree saving!
- ✓ We overlook the needs for long term care of trees.
- ✓ Why do million tree campaigns sometimes fail? They often replace trees in the same inadequate space they failed in the first time around!
- ✓ However, planting campaigns are still a great idea – when done right!

<https://www.tdworld.com/vegetation-management/article/21120273/arbor-day-foundation-announces-planting-locations-for-20-million-trees>



This tree is in too small a planting area and the sidewalk is starting to crack.

# Does your community have a robust tree ordinance?

## Ideal Tree Ordinances Include the Following:

### 1) A list of tree species

appropriate for:

- a. streets and rights of way
- b. parking lots
- c. parks and other public spaces
- d. yards and common lands within developments



### 2) Standards for tree planting area—

sizing for tree wells, spacing,

avoidance of utility conflicts, limits on tree damages and standards for

diagonal trenching or root protection during construction (of adjacent sidewalks, streets, utilities).

### 3) Bonding of trees required as part of site plans—

requiring full replacement for up to 2-3 years.

To find examples of these ordinances, see Section III and IV of this Toolkit.

# Overarching Tree Ordinance

Trees are often managed in a piecemeal fashion. There is a great deal of variability in where and how local governments enact tree policies and codes. Ordinances and policies affecting trees can be found in:

- ✓ The comprehensive plan
- ✓ Subdivision ordinances, cluster or conservation subdivisions (open spaces and common areas, yard trees and tree spacing and species)
- ✓ Parking lot standards (e.g. trees per number of spaces)
- ✓ Landscape buffers (vegetation between different uses such as residential and commercial or entry corridors)
- ✓ Street trees (types of, utility placement and conflicts, tree well design)
- ✓ Park and open space plans (land cover, playgrounds, natural areas versus manicured areas, greenways)
- ✓ Regulations governing tree protection during development (fencing to protect roots, placement of or access for utilities, erosion and sediment controls and more)
- ✓ Standards for tree canopy by zoning classes (e.g. residential and commercial)
- ✓ Regulations for local authority buildings – such as government centers and schools
- ✓ Entrance corridor regulations (tree placement)

# Trees and forests in policy

- The Comprehensive Plan (CP) sets the direction for the future growth and policies of a community. CP's updated ~ every 5 years.
- Zoning should be “in accordance with the comprehensive plan,” so it is important that the CP indicate support for forest values in order to justify new legal tools or to expend resources (time, personnel and equipment) on urban or rural forests.
- Are forests and trees mentioned in the comprehensive plan?
- Does the CP include goals for trees (canopy goals, protecting trees before, during and after development)...?
- Are there master plans for areas of your community in the CP – if so do they mention/show trees?

We created a tiered system for what each city or town should have in place.

## Essential Elements for Urban Tree Care Programs

Cities and towns vary according to which forest policy and practice elements are contained in their urban forestry programs – or they may not have a program at all. The following chart includes a list of key policies, programs and groups that should be in place for a successful urban tree care and management program. Many communities are aware of the Arbor Day Foundation's Tree City USA Program, which establishes a basic benchmark for urban forestry in cities and towns. However, some communities are not ready to meet that standard (e.g. they don't yet spend enough on urban forestry), while some have long ago achieved the status of "Tree City USA" and perhaps even won a "growth award" for program expansion...but even these cities can often do much more to ensure a well-funded and functioning program.



We have created the following four tiers: The "tree" being the most robust and desired outcome for a program. While, a small town may remain at the "roots" or "sapling" stage because of resource constraints, it could go all the way to the "tree" level by investing in its urban forest and establishing partnerships to make the canopy plan work. For examples of variations in programs, see the case studies in this chapter.

URBAN TREE CARE PROGRAM ELEMENTS & TIERS	Seeds	Roots*	Sapling	Tree
<b>DATA NEEDED TO TRACK AND MANAGE TREES</b>				
Map of public places where trees planted/managed				
City/town tree maintenance records/expense reports				
Tree Canopy (mapped for city/town)/ Tree Canopy estimated by i-Tree canopy)				
Spatially-based Tree Canopy Data and Map (includes both existing canopy and open space locations for planting)				
Tree Inventory (citywide, downtown, parks or other planning geography)				
<b>STAFFING - DESIGNATE CITY/TOWN DEPARTMENT OR CONSULTANT RESPONSIBLE FOR TREE WORK</b>				
Named staff member/contractor tree care				
Identify process/parties to remove hazard trees				
Staff landscape architect, horticulturalist, forester, arborist*				
City Arborist (certified by ISA)				
Continuing education credits/staff attending trainings				
Tree Risk Assessment Certified (TRAC) Staff				
<b>CODES GOVERNING TREE CARE, PLANTING OR REMOVAL</b>				
Code designates responsible party for tree care/planting				
Tree care ordinance (for removal or care of public trees)				
Protect trees during/after construction (fencing, signage, retention, after care for newly planted trees)				
Urban planting and landscaping standards				
Tree removal permit for private property				
Standards for street and RoW plantings, parking lots and plazas (including application of ANSI Standards for tree installation and maintenance)				
Incentives for structural support such as Silva Cells™				
Including trees as green infrastructure for stormwater, drinking water protection				

\*Meets TreeCityUSA requirement

URBAN TREE CARE PROGRAM ELEMENTS & TIERS	Seeds	Roots*	Sapling	Tree
<b>PLANS</b>				
Trees' importance mentioned in Comprehensive Plans				
Urban forest maintenance and planting plan				
Urban Forest Management Plan				
Emergency Management Plan				
Tree Recycling and Re-use Plan (Urban Wood Utilization Plan)				
<b>ENGAGEMENT</b>				
Information on city website or town newsletter about city tree benefits and city contacts regarding tree care/planting.				
Annual public education event for tree care/planting				
Website about city trees, who to contact, basic benefits				
Regular engagement events/education for new residents				
Arbor Day Celebration				
Advisory Group/Tree Board				
Community Tree Planting Program/Volunteers/Partnership				
Tree-focused Advocacy Group				
<b>FUNDING</b>				
Funded program for tree care and maintenance				
Spend at least \$2 per capital on urban forestry/landscaping				
Tree donation program				

\*Meets TreeCityUSA requirement

# Big Tree Saving Gone Wrong

Saving just big trees in filled wetlands....Only the large trees were required to be saved. This is from an ordinance that required saving trees with 20" DBH but did not prevent filling in the wetland... Now the tree is below grade. The intention is good, but not the result. The total development footprint increased.



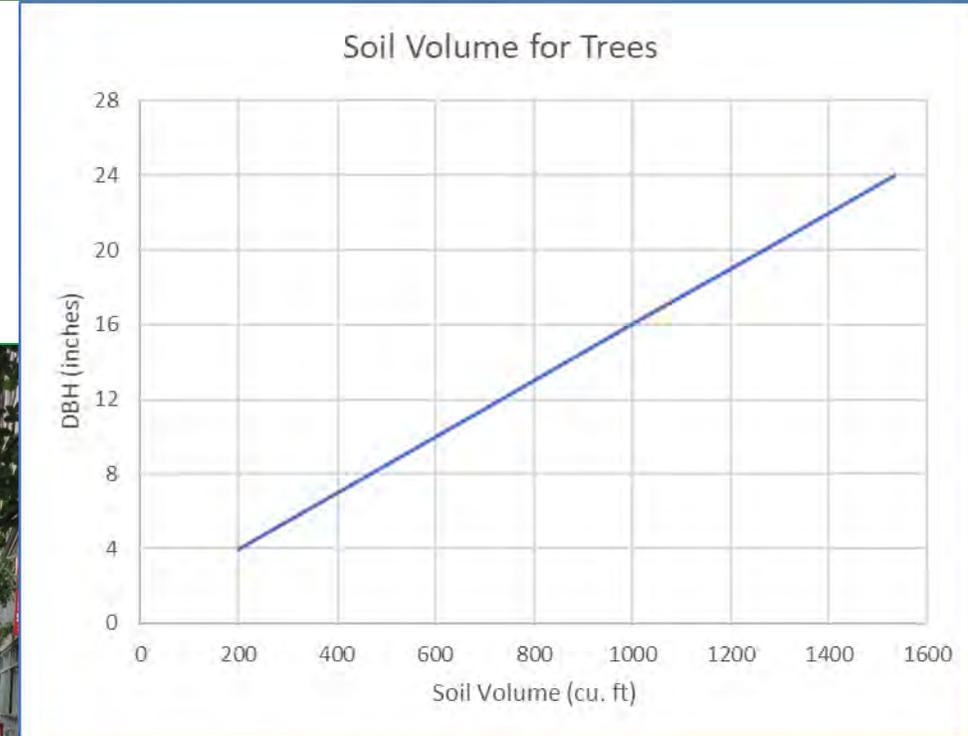
How long will this tree live? About 6-8 years tops!

# Consider Adaptive Systems to allow for trees to get big.

This small tree has permeable pavers for high traffic areas.

The pavers can be removed as the trunk grows, while air and water can still reach the roots.

A general rule: 1000 cubic feet soil vol. per tree for large trees.

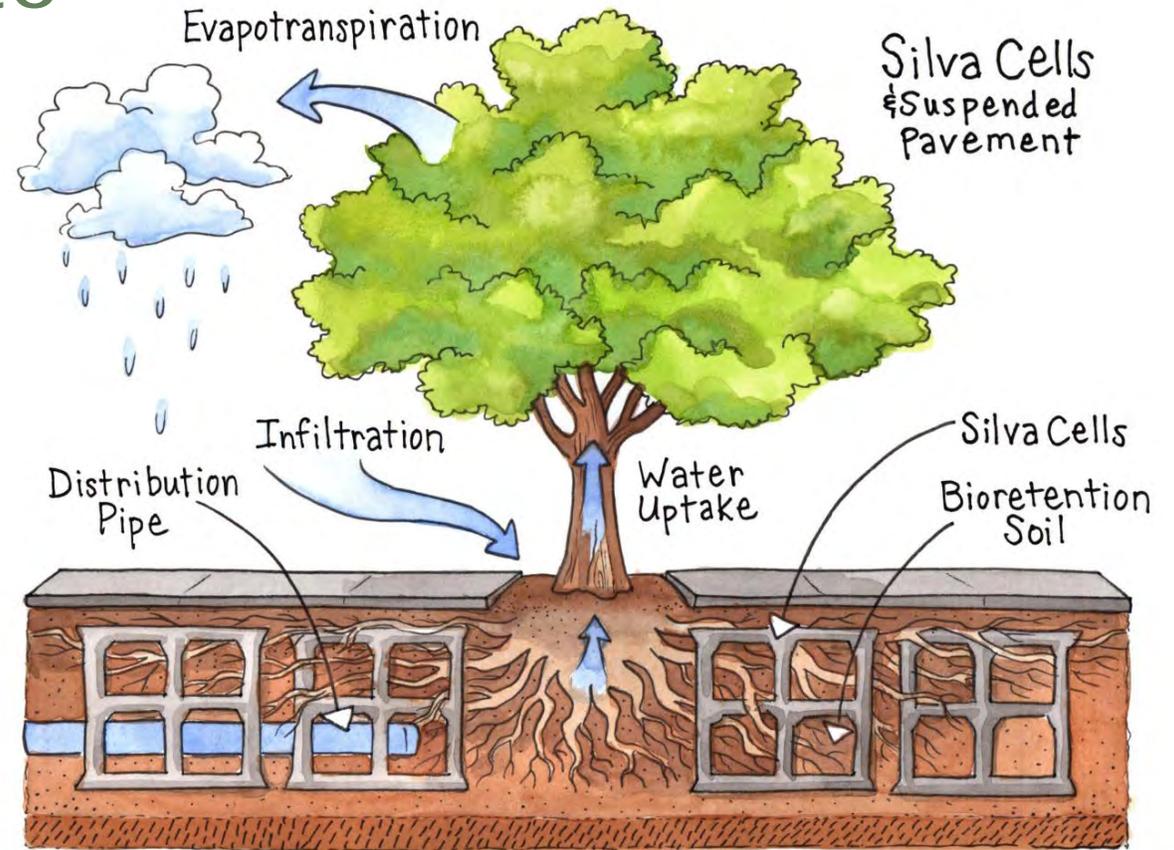


Tree Size	Planting Strip Width (minimum)	Open Soil Surface (minimum)	Total Soil Area based on 3' depth (minimum)
Small	4 ft.	16 ft. <sup>2</sup>	400 ft. <sup>3</sup>
Medium	6 ft.	25 ft. <sup>2</sup>	800 ft. <sup>3</sup>
Large	8 ft.	25 ft. <sup>2</sup>	1,000 ft. <sup>3</sup>

Use structural supports to extend tree roots under pavement and use permeable pavement above.



Permeable pavers allow water to reach tree roots. Tree at left is planted with sliva cell and above pavers that allow water through.





These trees were planted at the same time!

So what's the difference?

Well...

Trees at left have bigger openings but less underground soil volume and support.

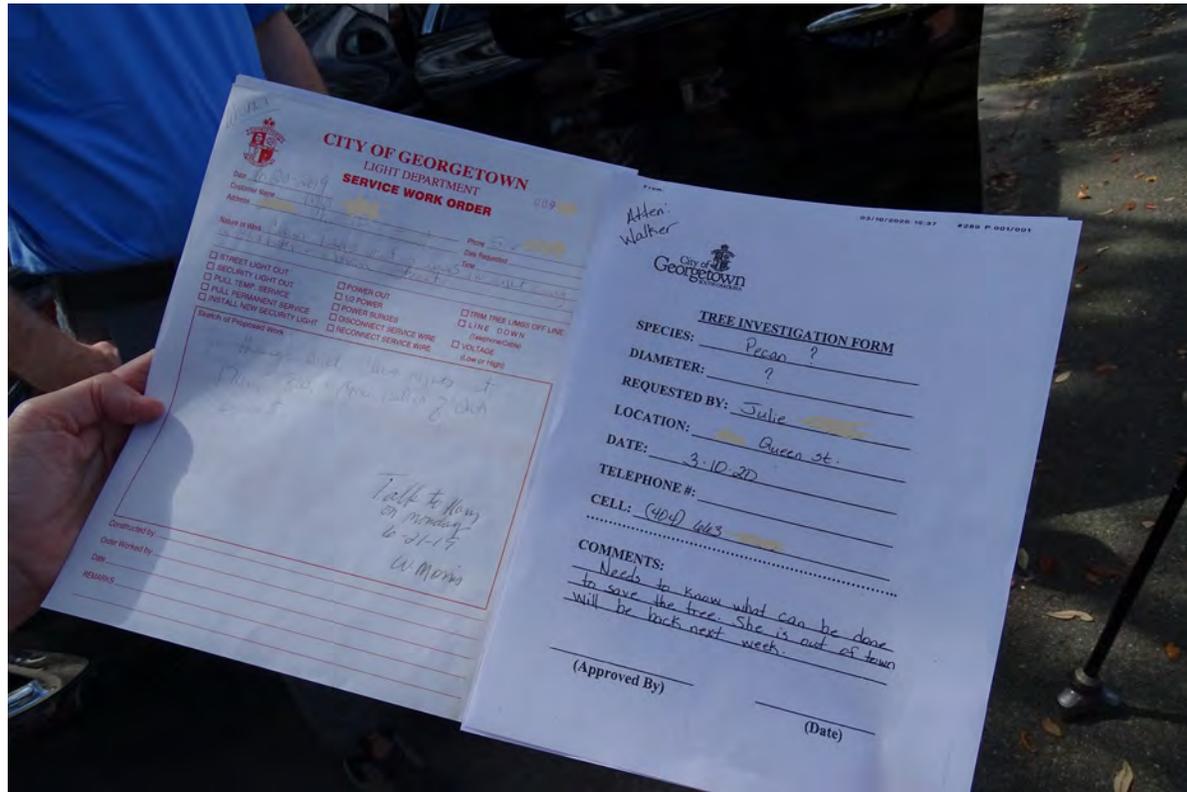


# Underground supports can enable large trees even in tight spaces

The structural supports direct roots to where they are desired. They also can include spaces for utilities and protect them from roots too!



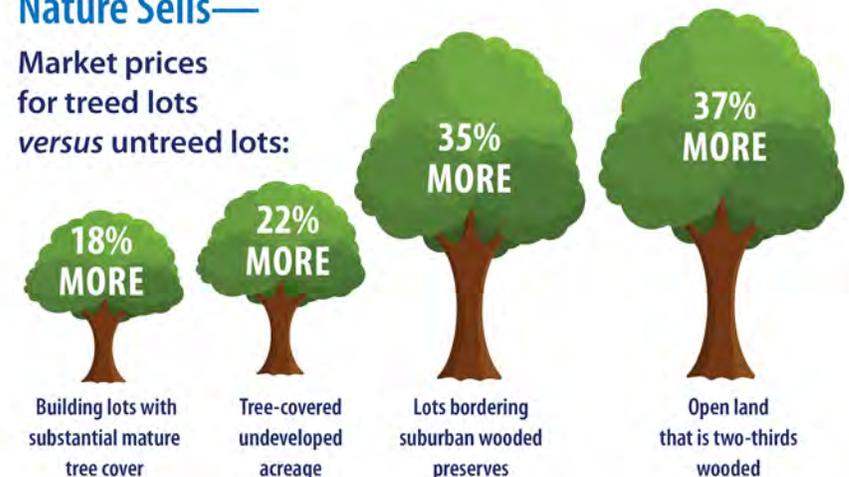
# Tree Removal Permits



- Require a permit to remove trees – yes even on private property.
- Require a certified arborist review the request.
- Provide homeowners with information on the value of their trees!

## Nature Sells—

Market prices for treed lots versus untreed lots:



Source: Kathleen Wolf, 2007, *City Trees and Property Values*.

## Example Ordinances: Tree removal on public and private property

- Walterboro, SC Sec. 11.6.2

*List of criteria for the acceptable removal of trees from public property without the consultation of the Tree Board. Example criteria include, tree(s) are dead, trees pose a safety hazard, tree(s) are located in a building footprint with no alternative site placement, etc.*

- Tega Cay, SC Sec. 22.91.

*Tree removal permit is required to cut down any tree or shrub greater than 4 inches in diameter measured one foot above the ground. (Private property)*

# Tree Removal Penalties need to be severe



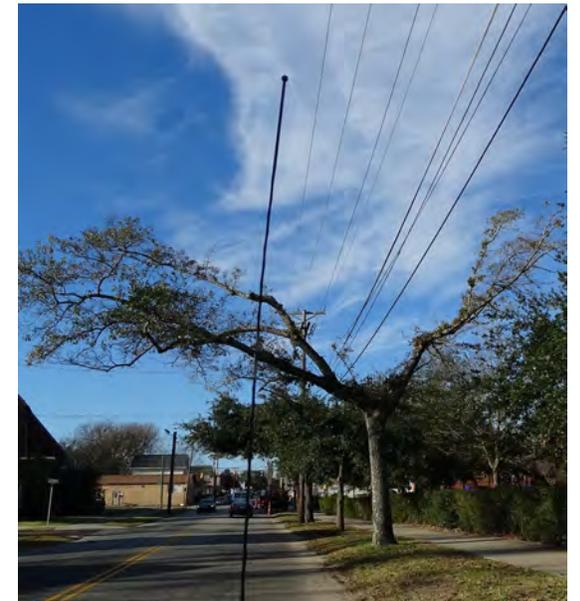
**Orangeburg County Code Example:** Where significant trees have been removed... in violation of this section:

Combined DBH of replacement trees is equal to or greater than three (3) times the DBH of the tree removed.

**City of Charleston Code Example:** For trees removed unlawfully from all other properties (not single-family), the Board is authorized to require up to ten (10) times the total D.B.H. of the tree(s) removed.



# Trees and Utilities



Let's avoid problem in above image by not allowing large trees to be planted under utilities!

# Example Ordinances: Trees & Utilities

- Rock Hill, SC Sec. 28-61

*It shall be the duty of any person planting or growing a public tree to: Place no tree so as to be, in the opinion of the forester, a traffic hazard or an interference with the overhead or underground public utilities. Prune trees so as not to cause a hazard and so that the minimum clearance of any overhanging portion is eight feet above any sidewalk and 14 feet above any street.*

*And the City maintains a list of pre-approved species to be planted under overhead powerlines and utilities.*

# Work with developers to shrink the footprint.

- Do not permit lot line to lot line clearing. Require retention of healthy clusters of trees.
- Look for opportunities to minimize impervious surfaces by meeting with developers BEFORE plans are finalized and INCLUDE the urban forester/arborist on staff.
- Some communities require their arborist to sit in on/review tree plans for large developments!



# Protecting Trees Before Development

Consider a waiting period between when land is cleared for forestry and when it is allowed to be developed.

If land is cleared before a conversation about tree saving, there is no option later.

Discuss site alterations – go taller not wider on buildings, consider shared parking, reduce parking requirements, etc.



## Development Plan Review Checklist for Conserving Trees on Sites Proposed for Development

- What is the site's current and potential future canopy (by percent, by location)?
- Are there incentives for retaining trees on site that could be realized (e.g. faster permit processes, conservation or cluster subdivisions to allow more creative arrangement of the built environment to save and connect treed landscapes)?
- Are existing clusters of trees and forests indicated on the site/ conceptual plan? What percent of tree cover currently exists and where are trees indicated for removal? If a percentage of tree cover is codified by zoning class, does the final plan's coverage meet minimum standards?
- If healthy, mature trees are recommended for removal, are there options to avoid their removal (e.g. can a driveway be shifted, could a proposed building be moved, could a one story building become two stories to reduce the development footprint, or could on-site parking be reduced)?
- Are the forests well connected on and across the site? Are forests 'trapped' as clusters in the middle or are they connected across and off of the site providing opportunities for pollinator and bird movement or future trails? Suggest opportunities or locations to better connect the landscape (see illustrations on page 85).
- Are buffers of trees required (at the edges or between land uses)? If so, are buffers of adequate width to withstand damages from wind (especially important for coastal or higher elevation sites)? If buffers are too thin and are created from remnant forests, trees may not be able to withstand wind damages and will be at risk of falling. Thinner buffers are also more susceptible to invasive species colonizing and taking over.
- Are street trees included in the site plan? If so, are planting standards indicated, e.g. where to plant, correct soil volume and planting standards (if a site plan, refer to notes details)?
- Are the names of trees (species/ cultivars) specified for any planted trees? Do they meet existing standards for diversity? Are the street tree species indicated appropriate for streets and native or adapted to the region?
- Where are utilities (above and below ground) to be located? Are there potential conflicts with tree canopy or roots and (if so) how are they dealt with?
- Although not part of site plan review, staff may ask about the maintenance plan or covenants governing community open space to ensure it remains intact and is well managed, as well as ensuring they are indicated for permanent protection. For example, are open space areas to be deeded as "permanent open space" or "parkland" not to be developed?

Example Ordinances: Improper use of forestry to clear land and tree survey of site.

- Lexington County, SC Sec. 3.1.7

*Development permits may be denied for a period of three years following a timber harvest if there was a willful intent... to circumvent any provision of the Landscape and Open Space Ordinance.*

- Beaufort County, SC Sec. 5.11.100.C

*Prior to any development approval, a tree survey of the areas in which building, clearing or construction activities are planned in accordance with:*

*The tree survey shall indicate species type and size (DBH), conducted by a certified professional and be less than 5 years old.*

# Canopy Cover Requirements

Have a minimum tree canopy coverage requirement by zoning class.

**Example:** Any development or other activity subject to this Section shall retain a percentage of existing tree canopy on the site in accordance with Table XX.

If the coverage cannot be met on site, include provisions for how to meet it offsite [and have sites already identified for where you would like to plant them]. Consider a tree fund to pay “in lieu of.” Provide for allowances to plant on private land too. Consider a tree mitigation bank.

Encourage saving large trees – give more credit for tree retention (one community only gave credit for new trees, so developers cut down trees and planted new ones to get the credit – a good intention gone wrong.)

Consider standards by basal area.

**Example:** All new development except for the construction of any public street, pathway, drainage project, single family subdivision, athletic field, airport runway, golf course or minor utility and the redevelopment or alteration of existing development... shall include at least 900 adjusted caliper inches (ACI) of trees per acre of pervious surface area.

## Example Ordinance: Minimum tree cover standards (by percent)

- Columbia, SC Sec. 17-5.4(d)(1)

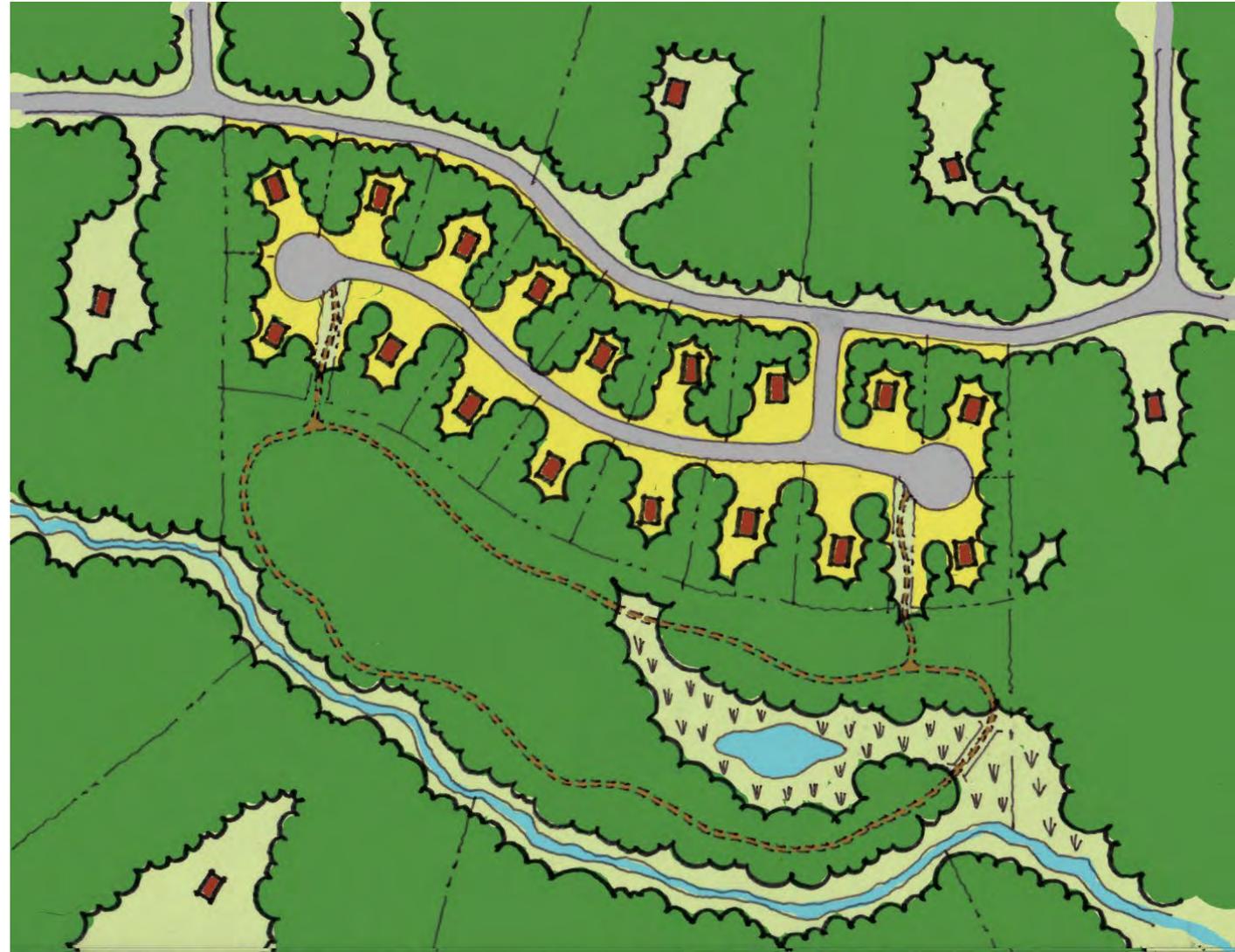
*Any development or other activity subject to this Section shall retain a percentage of existing tree canopy on the site in accordance with Table 17-5.4(d)(1).*

TABLE 17-5.4(D)(1): TREE CANOPY COVER RETENTION STANDARDS			
EXISTING TREE CANOPY COVER (AS A PERCENT OF THE SITE AREA) [1]	MINIMUM TREE CANOPY COVER RETENTION BY ZONING DISTRICT (AS A PERCENT OF EXISTING TREE CANOPY COVER) [1]		
	RESIDENTIAL DISTRICTS	ACTIVITY AND CORRIDOR DISTRICTS	INSTITUTIONAL AND CAMPUS DISTRICTS AND INDUSTRIAL DISTRICTS
80% to 100%	30%	15%	12%
60% to 79%	36%	18%	13%
40% to 59%	45%	22%	14%
20% to 39%	48%	24%	15%
19% or less	54%	26%	16%

NOTES:  
 [1] Tree canopy cover consists of the horizontal projection onto the ground of the crowns of all healthy self-supporting trees having a trunk diameter of at least eight inches, measured at four and one-half feet above the ground.

# Consider a cluster ordinance

Can consider a density bonus too!



## Example Ordinance: Cluster considerations

- Oconee County, SC Sec. 38-5.6

*A minimum of 50% of the gross area shall be preserved as green space.*

*An increase in green space by at least 15% shall permit the developer to decrease the minimum lot size by 20% (to 8,000 sq. feet).*

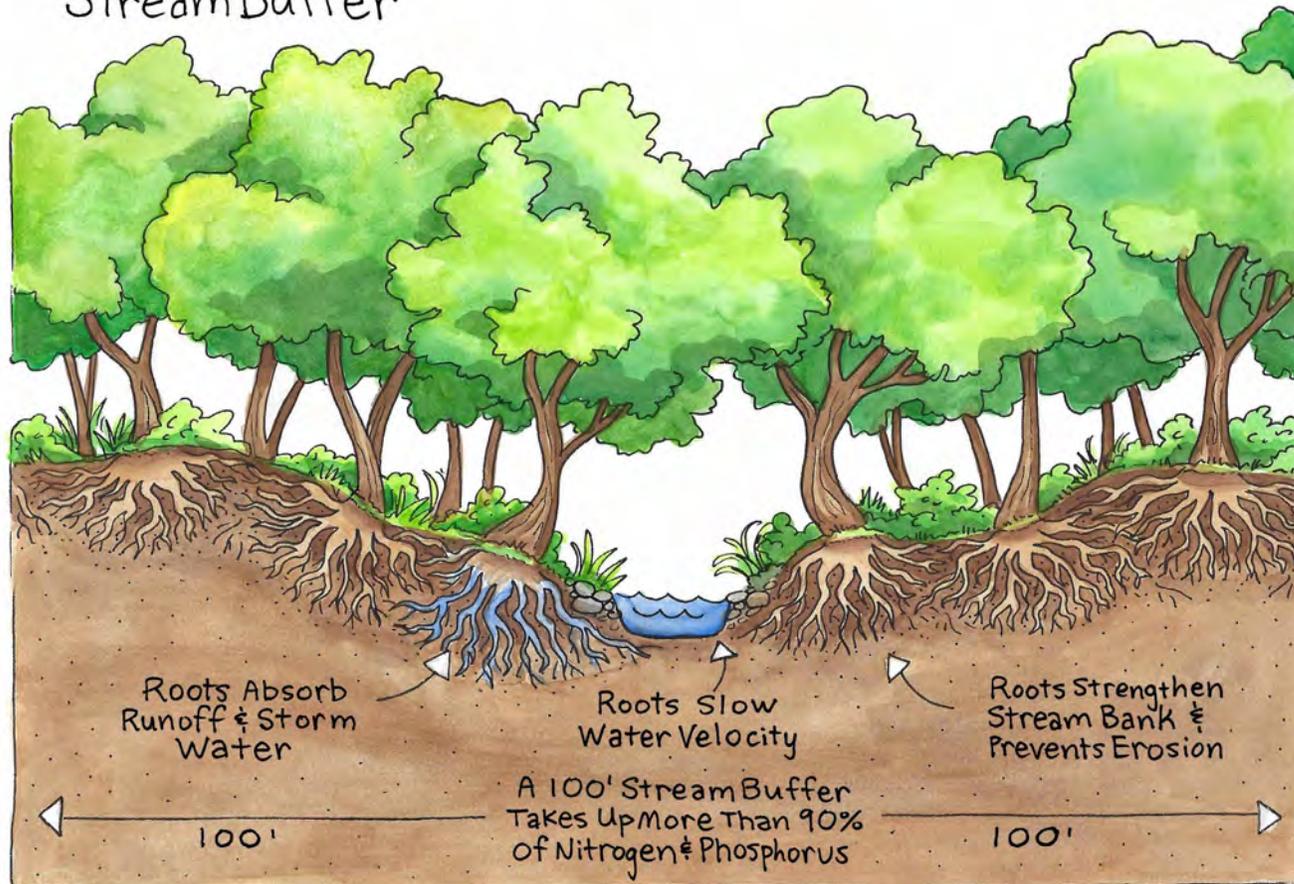
*All conservation lands shall be contiguous to provide for integrated open space throughout, excluding thoroughfares. Conservation land less than 150 feet in width shall be prohibited.*

- Greenville County, SC Sec. 8-9.3-5.6

*No more than 50% of designated open space may be wetlands and/or floodplain.*

# Consider a stream buffer ordinance

Stream Buffer



- Ag and forestry are usually exempted
- Can vary buffer widths – in rural areas use 100 ft. width, or in more urban areas with less room can have skinnier buffers.
- Removes the majority of Nitrogen, Phosphorus and Sediment from reaching the stream and holds banks in place.

# Reduce parking space requirements and increase parking lot perviousness and shade

- Some parking lots have excess spaces and therefore excess impervious surfaces and more stormwater runoff. Use **variable spaces** and **parking maximums**. Put a cap on how much parking per zone.
- Use Low Impact Development (LID) approaches to increase parking lot perviousness, trees to provide more shade and water capture and increase attractiveness.
- Require minimum trees per lot. **Example:** In lieu of landscape strips, landscape islands can be provided. No more than 6 consecutive parking stalls are permitted without a landscape island of at least 6 feet in width and extending the entire length of the parking stall. A minimum of one tree shall be planted in each landscape island.



**Versus**



## Example Ordinances: Parking lot trees

- Ridgeland, SC Sec. 5.11.2.B

*No more than 6 consecutive parking stalls are permitted without a landscape island of at least 6 feet in width and extending the entire length of the parking stall.*

- Walterboro, SC Sec. 8.3.G

*An increase of up to 10 percent in required parking lot trees may allow a development to reduce the number of required parking spaces by an equal percent.*

# Tree Species Lists

A big challenge for cities and towns – trees lists have problems:

- ❑ No list! (nothing in particular – dealers choice!)
- ❑ Improper species on the list (e.g. Red Maples as street trees or Bradford Pears, an invasive species!)
- ❑ An “okay” list but the top 3 trees keep being picked (try rotating them!)
- ❑ Consider a code that requires species diversity so that the same tree is not planted over and over. Require at least 4-5 species of trees and ensure that some are large canopy trees (not just dogwoods and crepe myrtles...)



We love our live oaks in the South...but don't just plant those, remember what has happened to our ash trees...

## Example Ordinances: Tree species lists & Biodiversity

- Horry County, SC

*The County developed a comprehensive landscape book that contains a list of approved vegetation species for any potential site development, giving developers and contractors clear guidance on appropriate plant materials.*

- Greenwood County, SC Sec.6-3-147.h.3 & Sec. 6-3-147.i.5

*Planting trees on a site:*

*1-5 trees = min. 1 species*

*6-10 trees = min. 2 species*

*11-20 trees = min. 3 species*

*21-50 trees = min. 4 species*

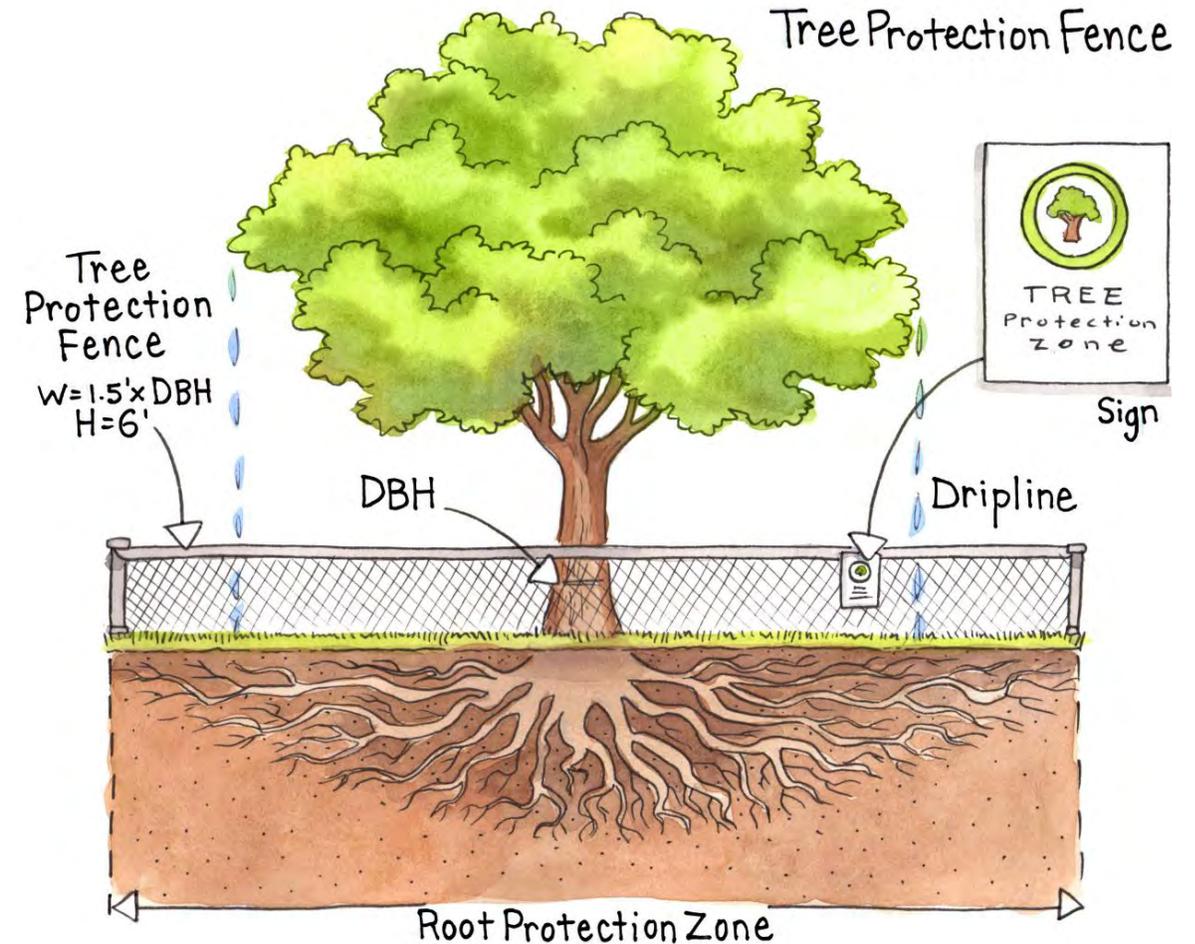
*51 or more = min. 5 species*

# Protecting Trees During Development



# Protect trees and the root zone

- Use steel tree protection fencing in place of orange mesh where tree damage during construction is likely.
- Protect as much of the root zone as possible.
- Provide matting or other structures to support roots and avoid conflicts.



## Example Ordinances: Tree protection during construction

- Town of Lexington, SC Sec. 156.07.02.A

*Maintain a physical barrier around a tree a minimum distance of 1.5 feet for every one-inch of diameter at breast height (measured at 4.5 feet above the ground) or the dripline, whichever is greater.*

- Hilton Head, SC Sec. 16-6-104.J.4.f

*Where compaction might occur due to construction traffic or materials delivery through a tree protection zone, the area must first be mulched with a minimum four-inch layer of wood chips.*

# Protect trees for several years after installation

Consider bonding of trees. It is common to bond stormwater BMPs, so why not trees too? Beaufort SC has a 2-3 year bond, which is not released unless all trees are healthy! If not, they must be replanted.

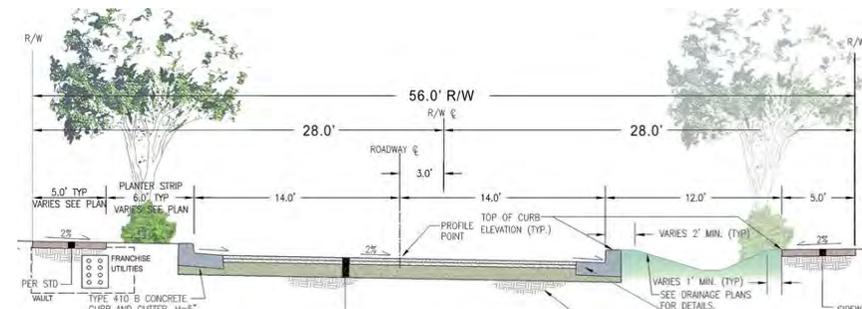
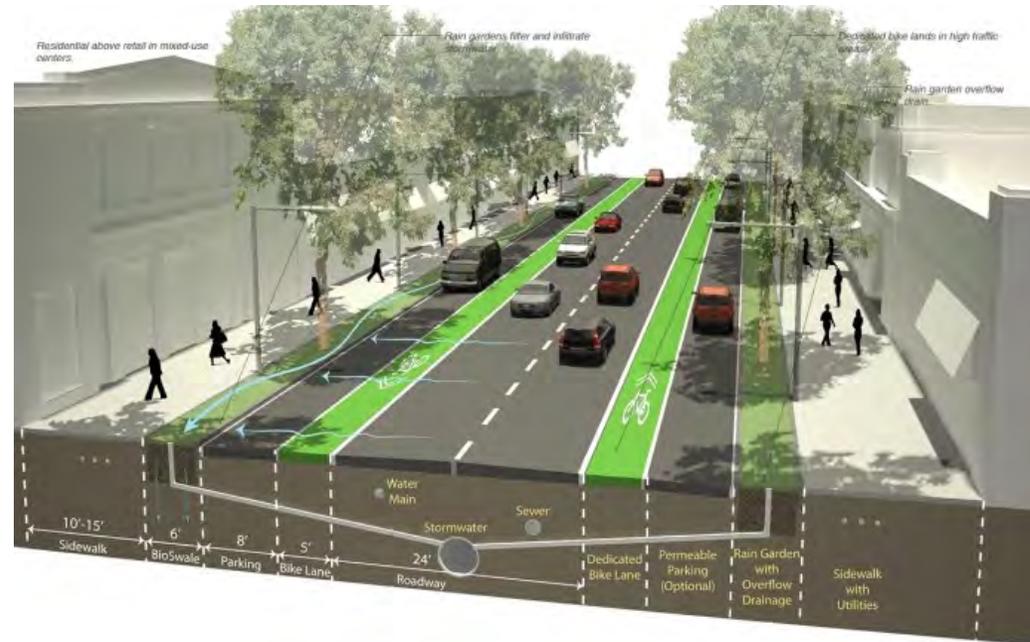


This tree in a new mall is dying. There were no standards for tree well sizing, care or survival!

# Redesign Streets as Complete 'Green' Streets

Complete green streets allow for

- ✓ Treatment of stormwater on site
- ✓ Reduction of urban heat island effect
- ✓ Beautification: increase in downtown foot traffic
- ✓ Habitat corridors



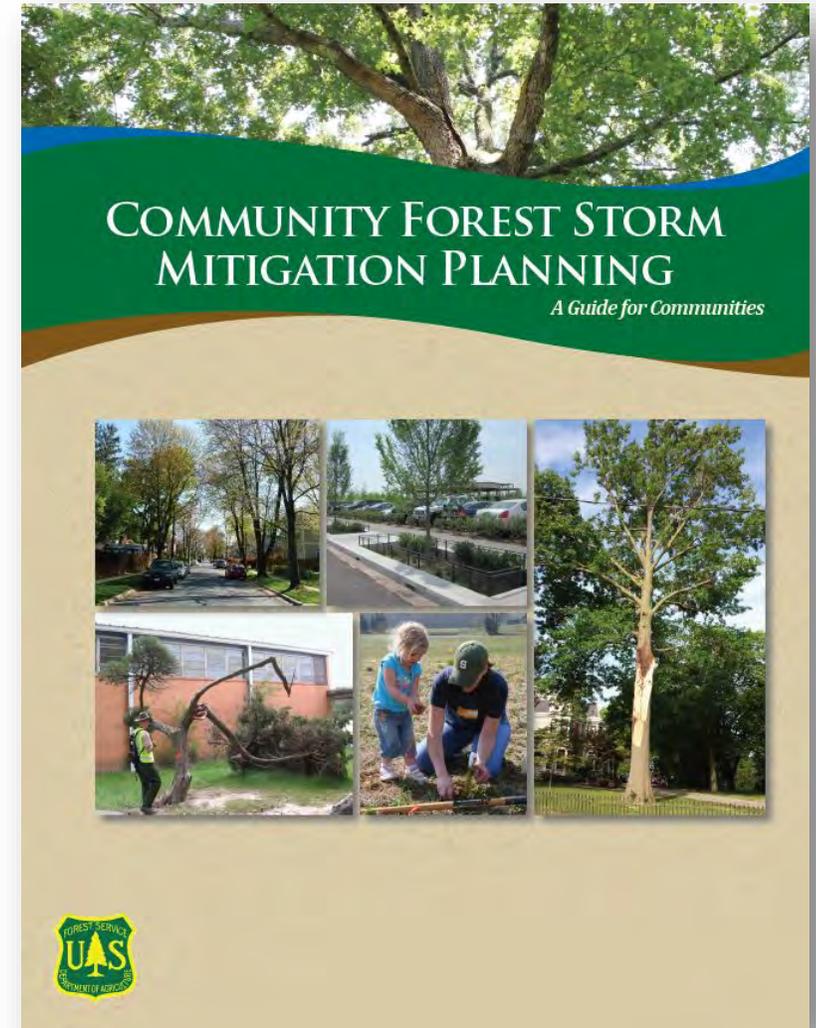
# Develop an Urban Forest Management Plan

- Set clear measurable goals with actionable steps for a municipality's urban forest.
- Link urban forestry goals to those of other departments (including Planning, Parks and Recreation, Public Works etc.)
- Specify needs and costs for tree care, planting and preparation for storms or other events. SCFC has grants available to support development of your plan!



# Develop a Forestry Emergency Response Plan

- Include sections and document protocol on tree risk assessment on city-owned property.
- Include sections on risk management and pre-disaster response.
- FEMA can reimburse for trees lost IF they were surveyed ahead of time and referred to as green infrastructure!
- GIC adapted GA and VA's guides for national use. It has resources for storm planning:  
<http://www.gicinc.org/PDFs/Comm%20Forest%20Storm%20Mitigation%20Workbook%20National%20Final.pdf>



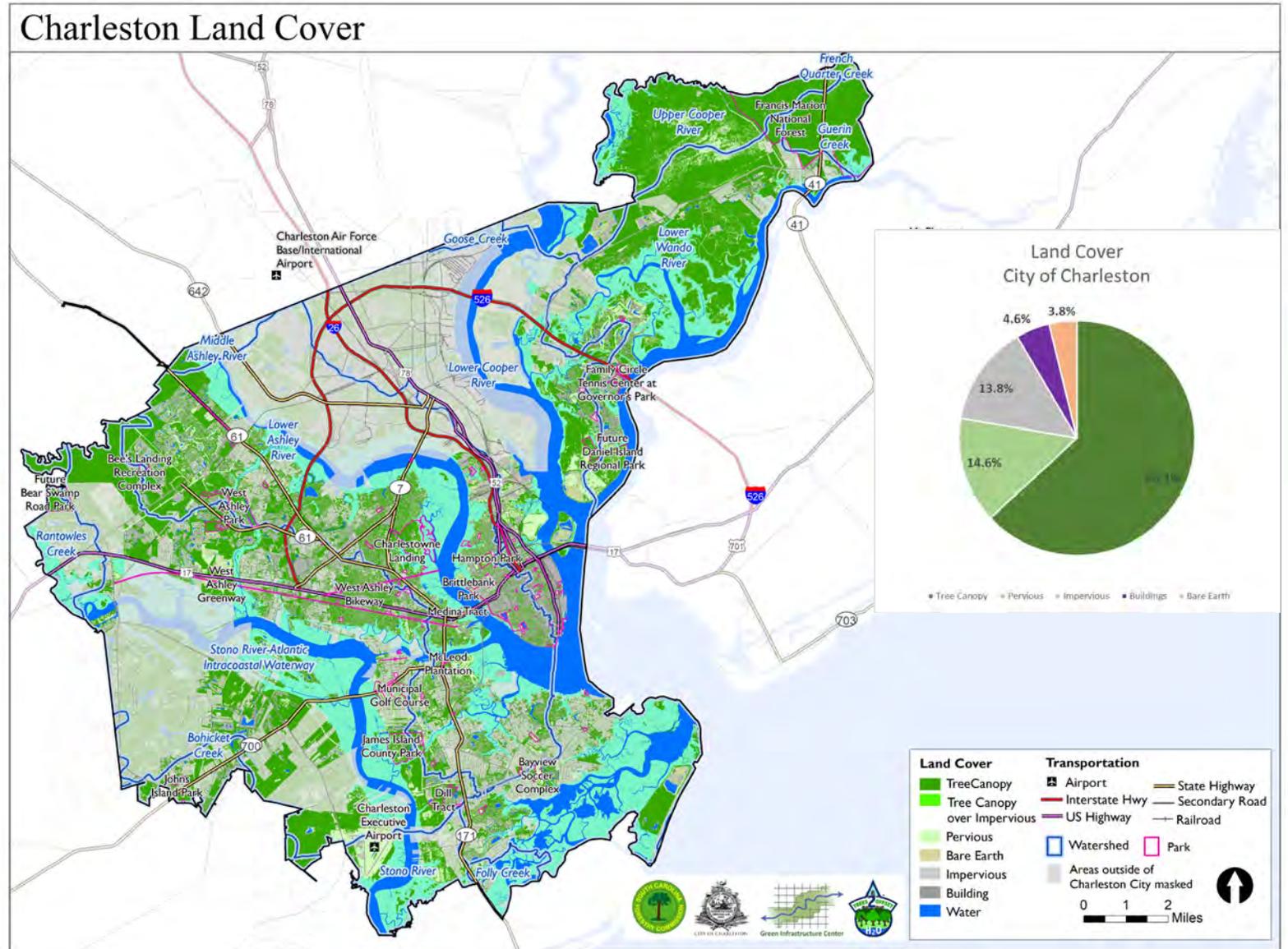
# Conduct a land cover assessment every 4 to 5 years.



Compare tree canopy levels over time. Conduct a tree cover mapping project and use as a baseline for the future!

Understand where tree loss is occurring and take mitigation steps. We developed a budgeting tool for cities to calculate the cost of tree planting to use with canopy data.

Mapping canopy citywide is key to knowing where trees are needed and whether your codes are effective – are you gaining or losing tree cover?.





# Possible Planting Area



Mapped open space shows where trees can be planted to soak up stormwater.



Possible Planting Area (PPA)

# Tree Stewards Groups and Tree Boards

Community members value their trees and should be engaged to plant – especially since 80% of land is in private ownership.

A Tree Board is usually not the same as the group that plants trees.

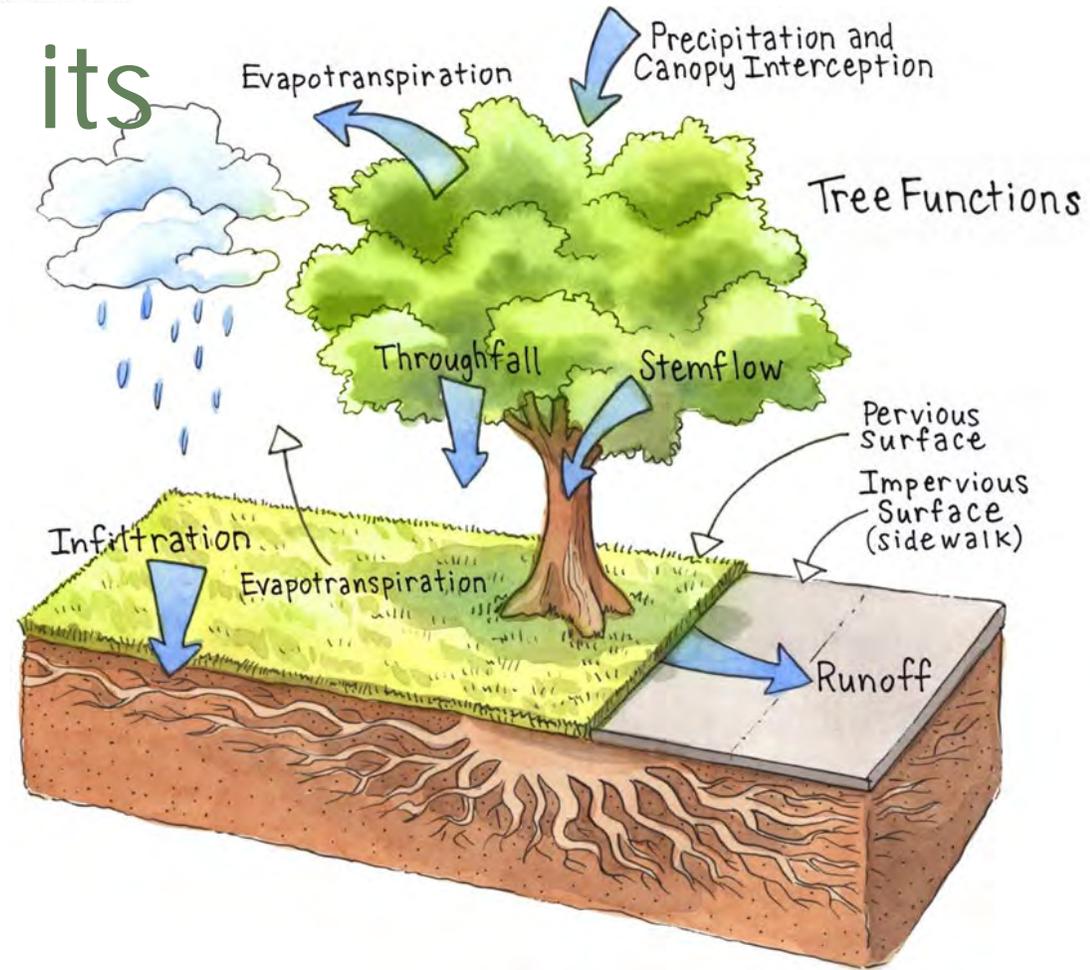
Both are needed!



Image credit: TreesUpstate

# Link a city's urban trees to its stormwater infrastructure.

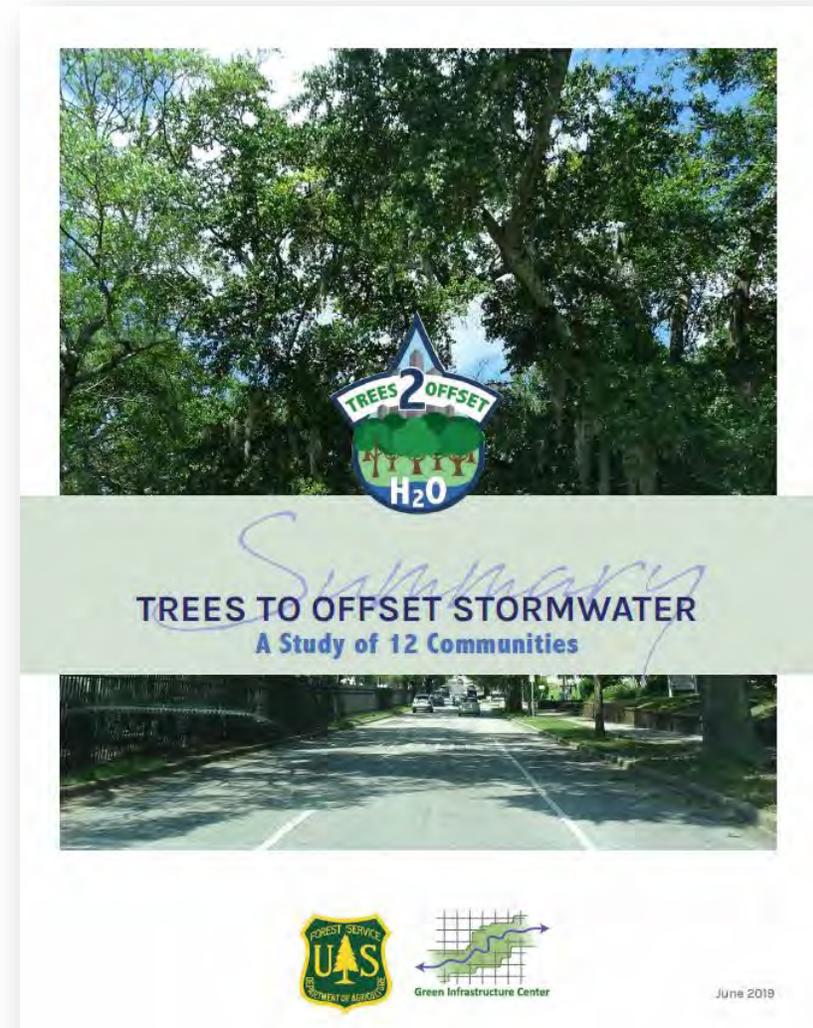
- 20% of annual rainfall or  $>$  retained in crown (Xiao et al., 2000)
- Establish city trees' role as infrastructure to receive federal aid for post-storm clean up efforts.
- Credit urban trees in a stormwater utility fee to promote more urban tree plantings.



# Products you can use (in addition to the Toolkit...)

- ✓ **Trees and Stormwater Codes Ordinances and Practices Audit Tool:** Anyone can fill it out and a city can self-score!
- ✓ **Trees and Stormwater Calculator Tool:** Requires tree canopy map and adding in other data are added such as roads, buildings etc. Then plantable area can be calculated and data can be added to the calculator spreadsheet. Technical instructions for GIS users too!
- ✓ The **12 case booklets** are all on line!
- ✓ A **final summary report** provides key findings!

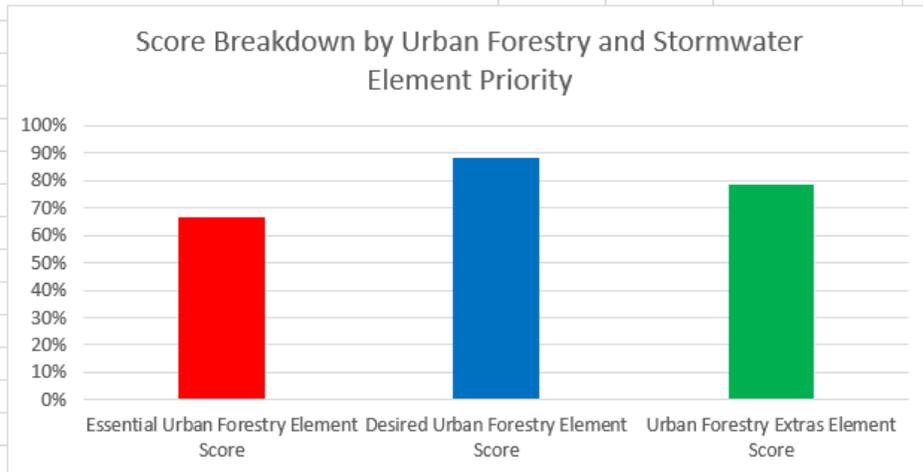
[http://www.gicinc.org/trees\\_stormwater.htm](http://www.gicinc.org/trees_stormwater.htm)



Try our score card – Score your municipality by how well your codes facilitate healthy trees or do you over-pave?

**Breakdown by Urban Forest Priority**

<b>Essential Urban Forestry Element Score</b>	<b>67%</b>
<b>Desired Urban Forestry Element Score</b>	<b>88%</b>
<b>Urban Forestry Extras Element Score</b>	<b>78%</b>



**Total Audit Breakdown**

Tree Care and Protection	Scored	Total Points	Percent	Percent
Essential Elements (3 pts)	6	21	29%	Percent
Desired Elements (2 pts)	10	14	71%	Percent
Extras (1 pt)	8	11	73%	Percent
<b>Total Score</b>	<b>24</b>	<b>46</b>	<b>52%</b>	<b>Percent</b>

**Plans and Goals**

Essential Elements (3 pts)	3	3	100%	Percent
Desired Elements (2 pts)	6	6	100%	Percent
Extras (1 pt)	2	5	40%	Percent
<b>Total Score</b>	<b>11</b>	<b>14</b>	<b>79%</b>	<b>Percent</b>

**Implementation Capacity**

Essential Elements (3 pts)	6	9	67%	Percent
Desired Elements (2 pts)	6	8	75%	Percent
Extras (1 pt)	7	8	88%	Percent
<b>Total Score</b>	<b>19</b>	<b>25</b>	<b>76%</b>	<b>Percent</b>

**Monitoring Progress**

Essential Elements (3 pts)	3	3	100%	Percent
Desired Elements (2 pts)	6	6	100%	Percent
Extras (1 pt)	1	1	100%	Percent
<b>Total Score</b>	<b>10</b>	<b>10</b>	<b>100%</b>	<b>Percent</b>

# PLANNER'S FOREST TOOLKIT

A Guide for South Carolina's Towns, Cities and Counties

A publication of  
the South Carolina  
Forestry Commission,  
Urban and Community  
Forestry Program

JUNE 2021



Written by the Green Infrastructure Center Inc.

Don't forget to get the toolkit too!

For a hard copy, contact SCFC or GIC and we will mail or deliver one.

Or, download ...

<http://trees.sc.gov/pubs/urbanplannerstoolkit.pdf>

Planners – learn how to get more trees planted! Join our Dec. 9 webinar on Tree Campaigns and get a CM credit! Find us on APA's website.

- Tree Campaigns: Make your town greener, cleaner and healthier!
- #9223785
- Thursday, December 9, 2021, 10 a.m. EST
- **CM | 1**



Interested in a grant to work on your own ordinance, map your canopy, create a forest management or emergency forest plan? Apply in fall 2021 for 2022 projects! Deadline November 19!

Contact [fwaite@scfc.gov](mailto:fwaite@scfc.gov) and find SCFC's new grant program at:  
<https://www.state.sc.us/forest/urbangr.htm>



Discussion,  
Questions?

## **GIC Inc.**

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