

# Planning Board Fall Forum Series Climate Protection October 22<sup>nd</sup>: Urban Forestry/Land (*First of Three Forums*)

## **Climate Protection Planning in Carrboro**

*Randy Dodd, Town of Carrboro Environmental Planner*

## **Urban Trees**

*David Jantzen, Town of Carrboro Landscaping/Grounds Supervisor,*

## **Naturalizing Landscapes for Healthier Soils and Plants and Happier People**

*Matthew Arnsberger, Landscape Designer/Contractor; Environmental Advisory Board Member*

## **Why Native Plants?**

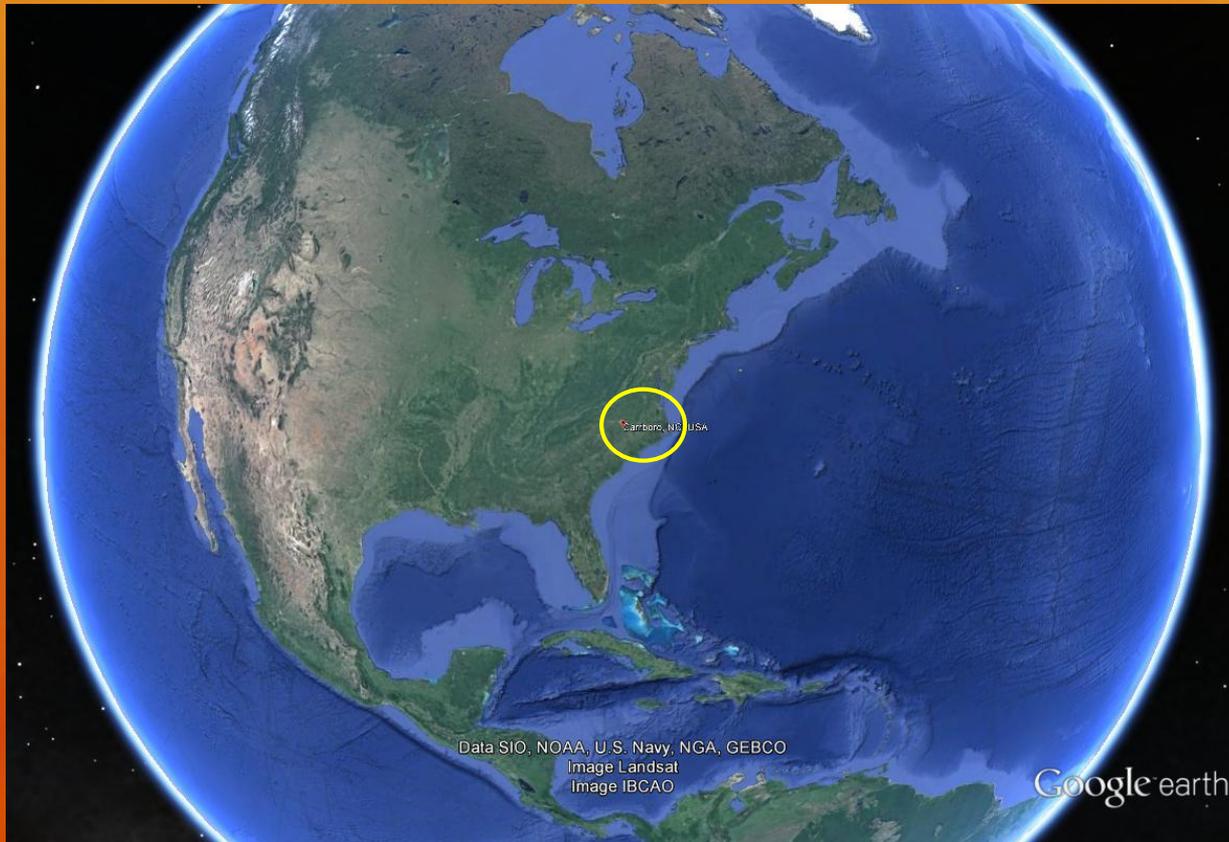
*Johnny Randall, Director of Conservation Programs, North Carolina Botanical Garden*

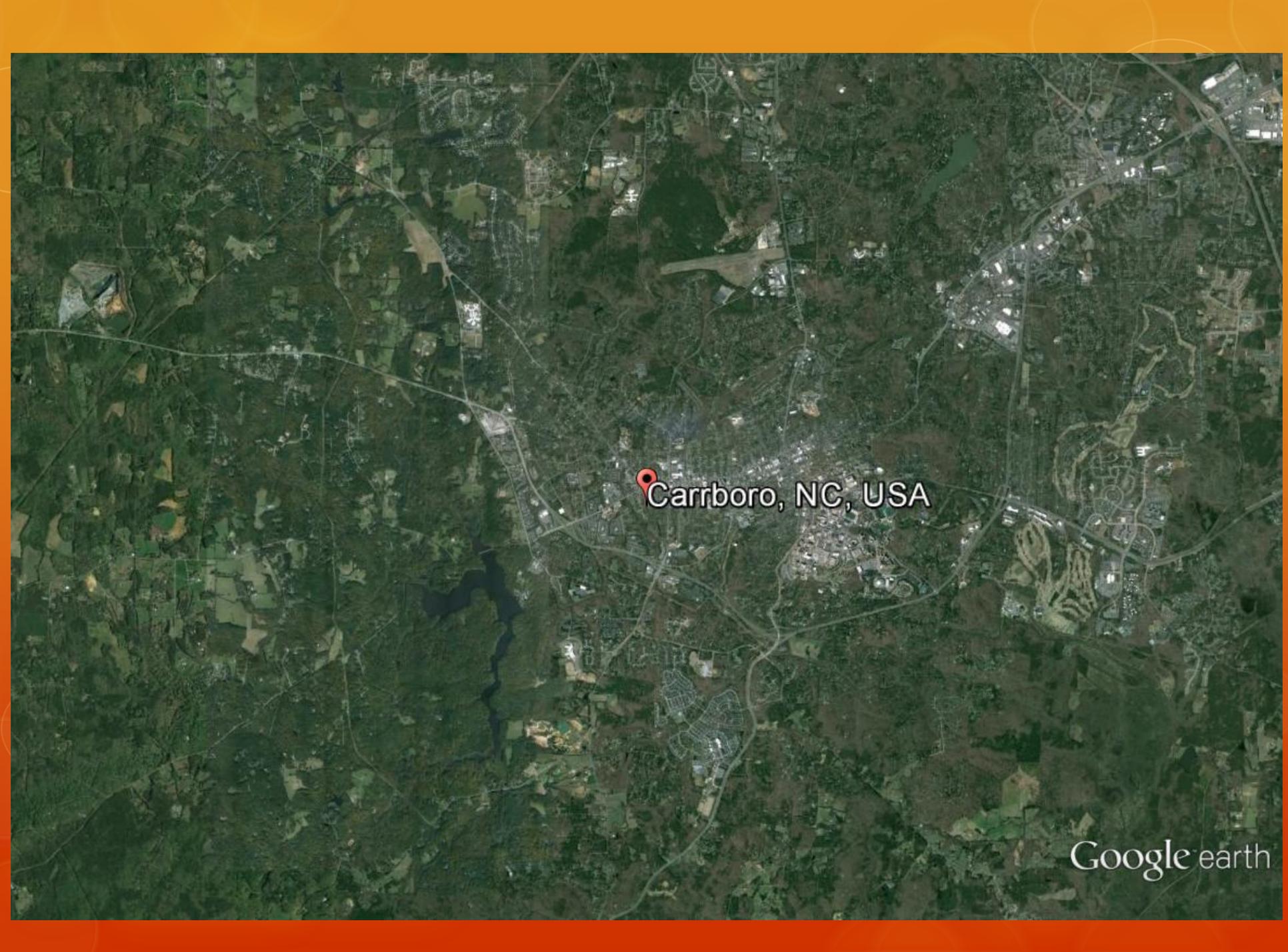
## **Rain Garden Uses, Benefits and Resources**

*Betsy Kempter, Watershed Educator*

## **Interactive Discussion**

# Climate Protection Planning In Carrboro



A satellite view of Carrboro, North Carolina, showing a mix of green fields, roads, and buildings. A red location pin is placed on the town, with the text 'Carrboro, NC, USA' overlaid in white with a black outline. The background is a solid orange color.

Carrboro, NC, USA

Google earth

# Themes for Climate Action Planning

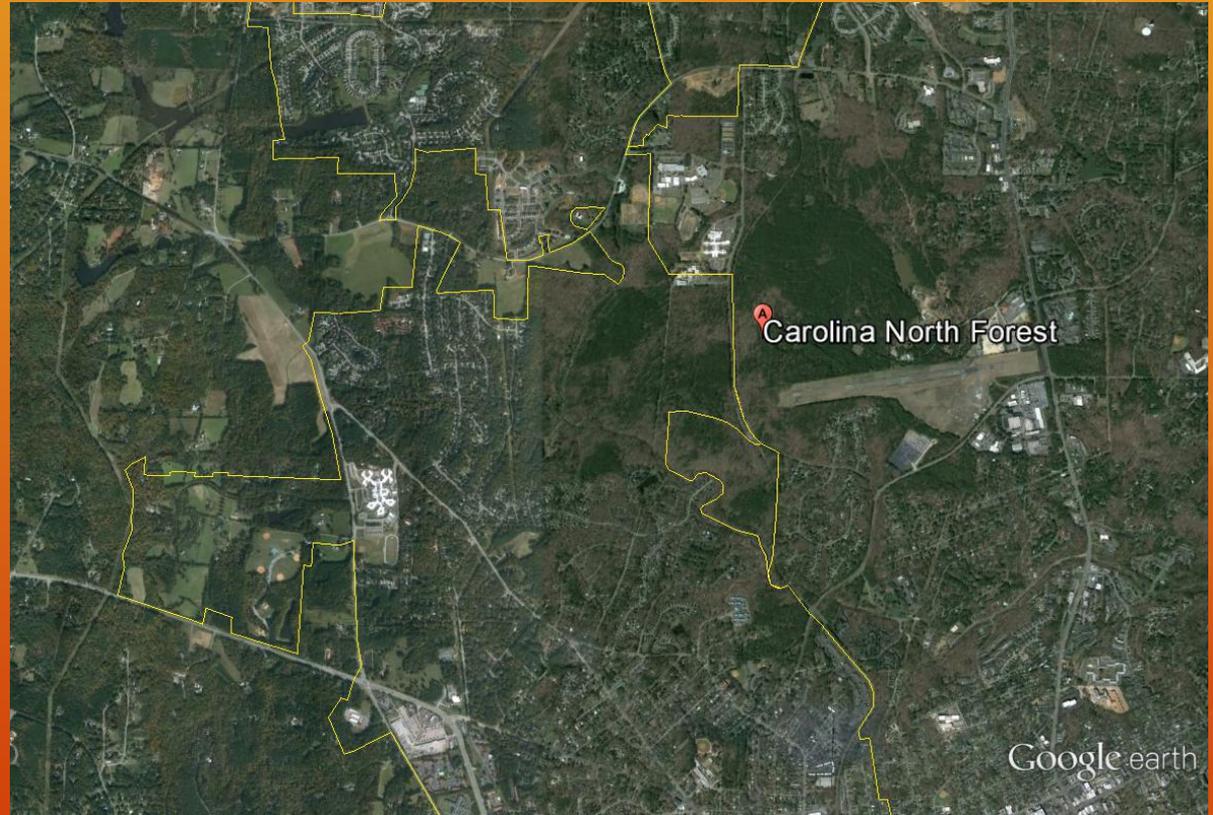
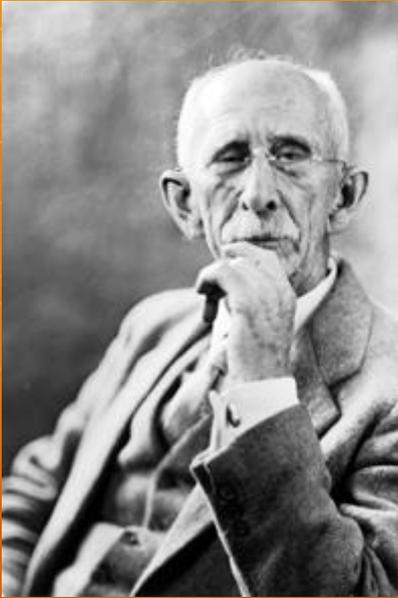
- Climate protection/mitigation
  - Greenhouse gas inventories as foundation; seek input on reduction goals and strategies
  - Energy use: buildings; transportation
  - Renewable energy generation
  - Carbon storage/sequestration in trees
- Climate resilience/adaptation/preparedness

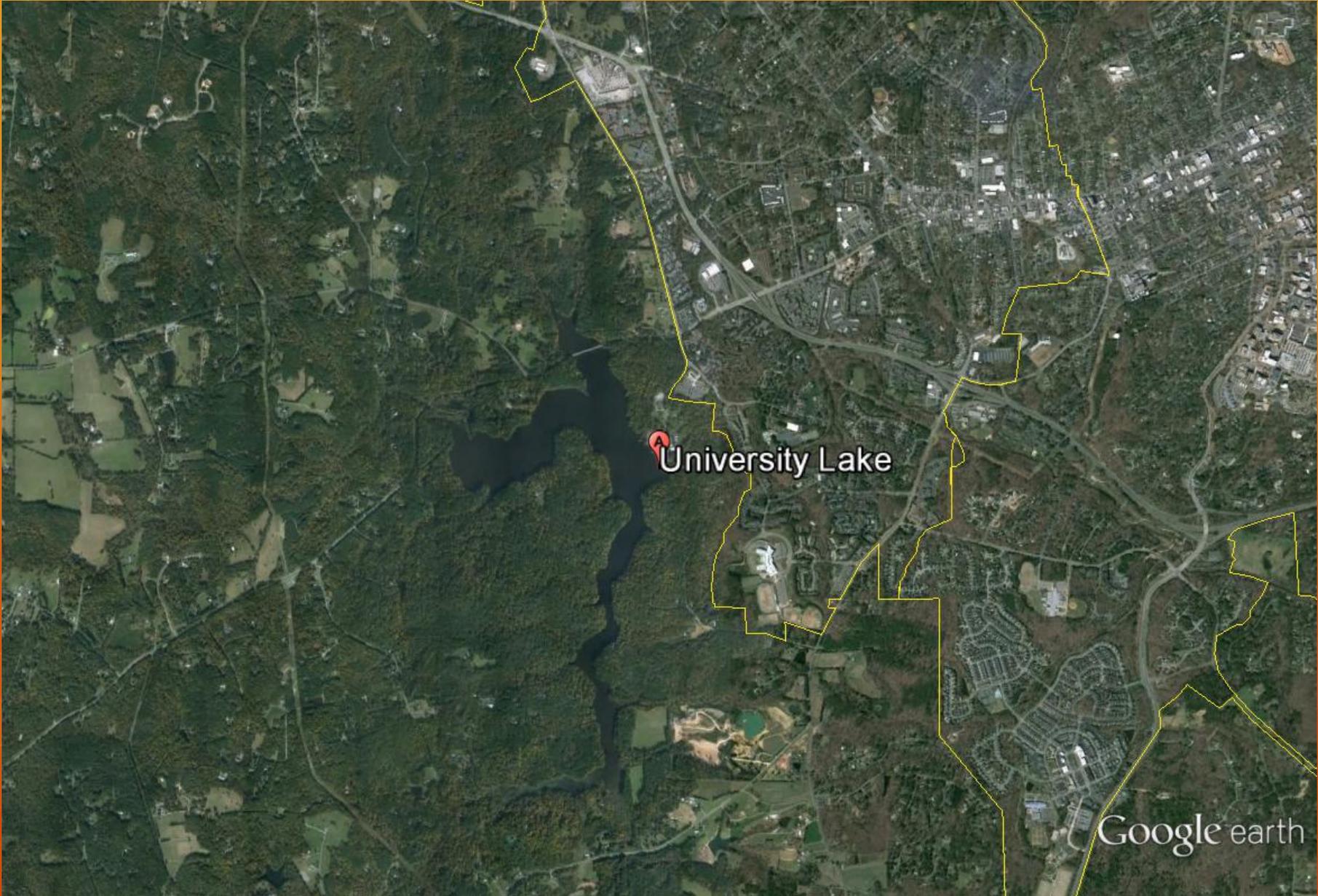
# What have we done/are we doing?

- Carrboro initiated climate protection planning in 2001
- Previous GHG Inventories:
  - 2009 – ICLEI report for Orange County (2005)
  - 2011 – UNC Capstone report for Carrboro (2009)
  - 2012-14 Municipal operations inventory

Milestone	Description
1	Conduct baseline inventory
2	Adopt emissions reduction target
3	Develop Local Action Plan
4	Implement policies and measures
5	Monitor and verify results

# What have we done/are we doing?





University Lake

Google earth

# Trees/Forests and Climate Mitigation

- Carbon storage/sequestration
- Relationship to buildings/properties
  - Summer shade
  - Solar access

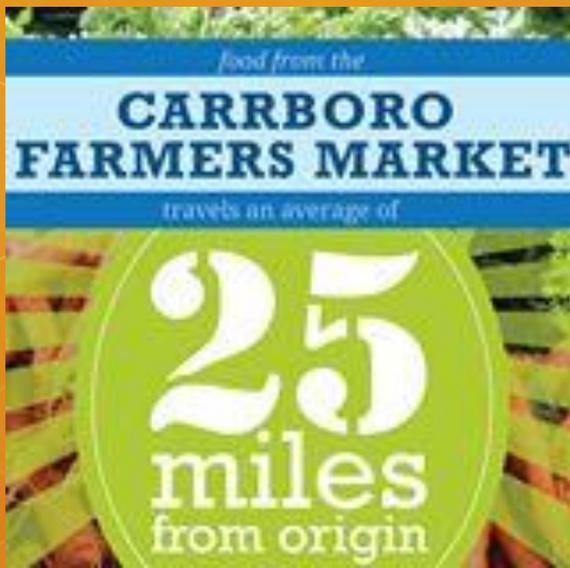


**TREE CITY USA®**



# Land Use Ordinance: Trees

- Section 15-198 Open Space
  - Preservation of open vistas, environmentally sensitive lands, wildlife habitat, historically or archaeologically significant areas, recreation.
- Section 15-319 Tree Canopy Coverage Standards
- Section 15-320 Protection of Trees During Construction
- Section 15-317 Retention and Protection of Specimen and Rare Trees
- Appendix E : Screening and Trees – Guide for Landscaping
  - E-1 Guide for Protecting Existing Trees
  - E-2 Standards for Street and Parking Lot Trees
  - E-3 Formula for Calculating Thirty-five Per Cent Shading of Paved Vehicle Accommodation Areas
  - E-5 Guide for Planting Trees; E-9 Guide for Planting Shrubs
  - E-10-16 Lists of Recommended Trees and Shrubs
  - E-17 List of Invasive Plant Species





# Draft Energy and Climate Protection Plan

- Incremental step
  - 1-2 year planning horizon
  - Municipal focus
- 5-10% municipal energy use/emissions reduction

**TOWN OF CARRBORO**  
NORTH CAROLINA

## **ENERGY AND CLIMATE PROTECTION PLAN**

**March 20, 2014**

**BOARD OF ALDERMEN**

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PATRICIA MCGUIRE, PLANNING  
TRAVIS CRABTREE, FIRE AND RESCUE  
WALTER HORTON, POLICE

# Draft Energy and Climate Protection Plan circle pieces for each forum

## Municipal

- Outdoor lights
- Assessments
- Facilities
- Fleet
- Measurement/  
reporting
- Urban forest

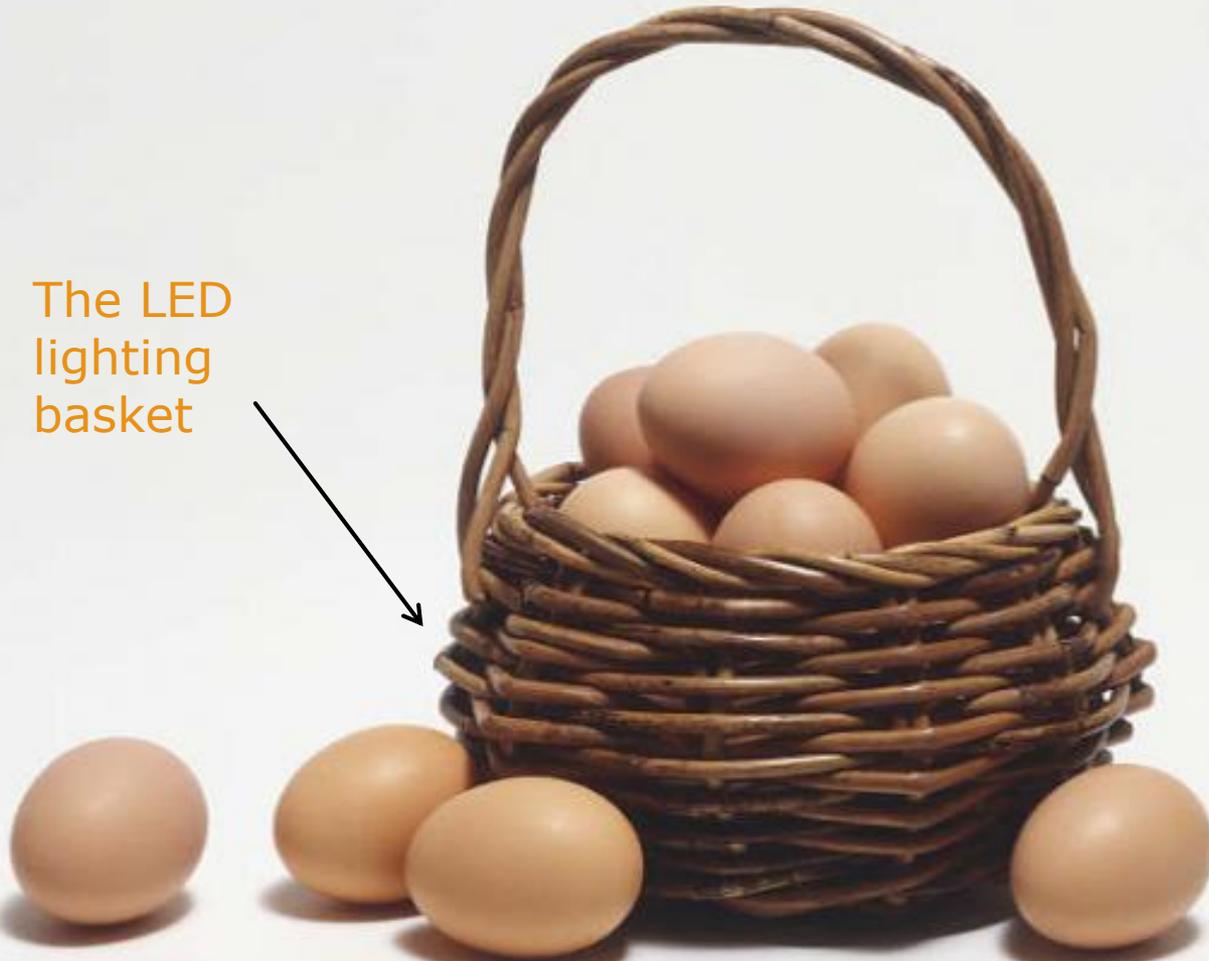
## Community

- Transportation
- Buildings
- Renewable  
energy
- Urban forest
- Vulnerability  
and adaptation

## Appendices

- Inventory
- Town building  
projects
- Urban forest
- Climate  
protection  
science
- Global  
planning

The LED  
lighting  
basket



**3400 K Color Temp Fixtures**

**Old High Pressure Sodium**

**New LED**



