



Citrus Heights Urban Greening Strategy (CHUGS)

**Urban Forest Master Plan
Water Efficient Landscape Ordinance
& Guidelines and Policies for native/drought tolerant landscapes**

**Presented by
Davey Resource Group & Foothill Associates
June 23, 2015**



Presentation Overview

Overview of the Urban Forest

Summary of major recommended changes to:

- Zoning Code
- Landscape and Irrigation Guidelines

UFMP Goals and Objectives

Questions and discussion

CHUGS

Guiding Principles

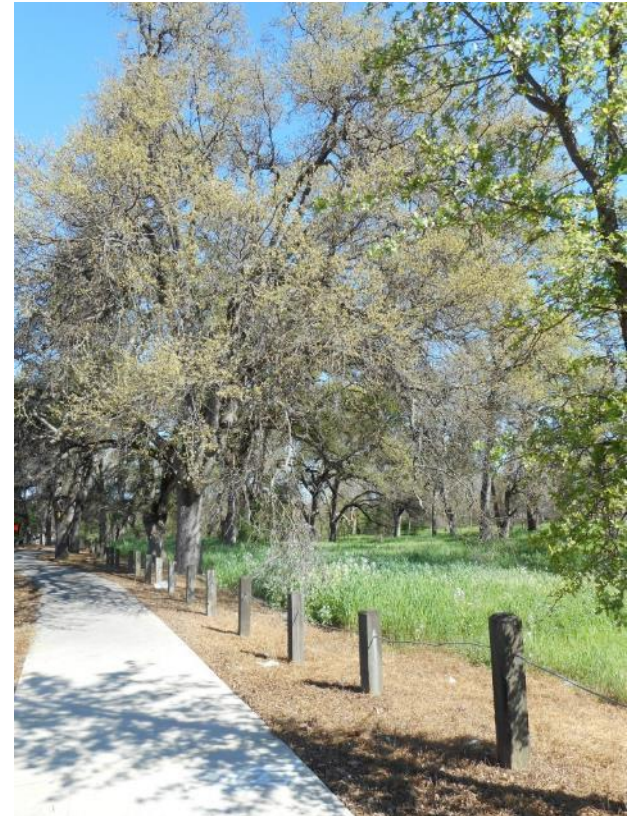
- Develop a more sustainable urban forest by improving conditions for urban trees and optimizing the environmental, economical, and social benefits trees provide to the community
- Incorporate urban greening principles into the City's regulations and daily activities
- Expand outreach, education, and engagement

CHUGS

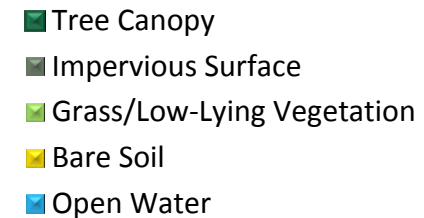
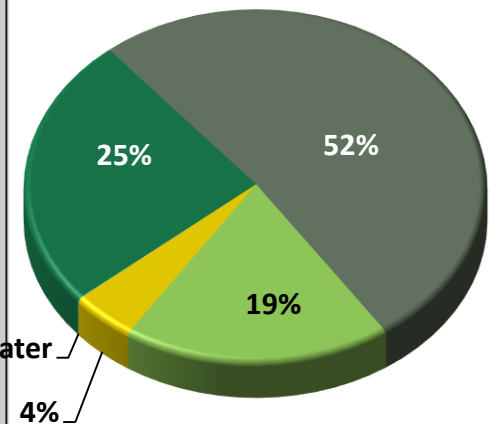
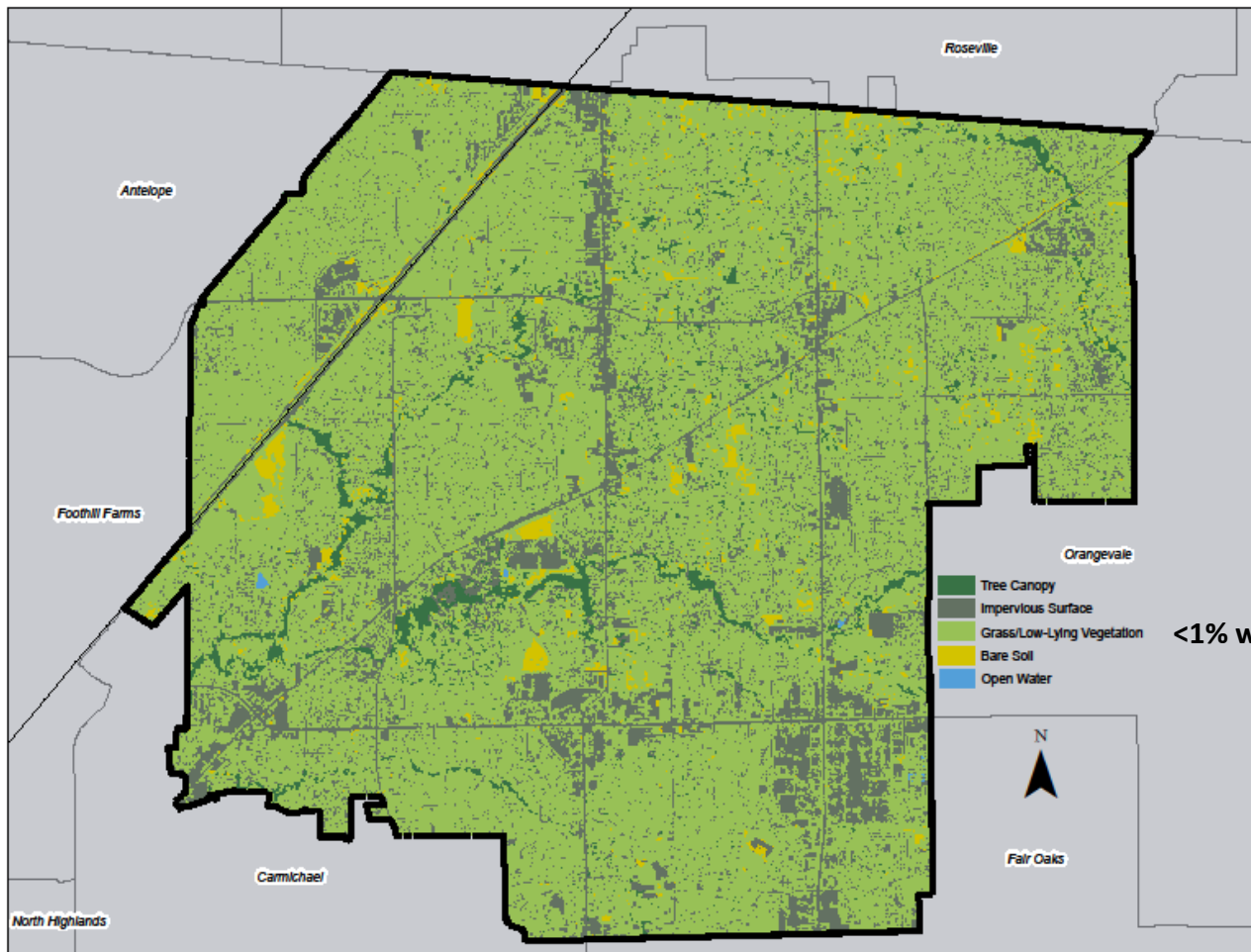
- Urban Forest Master Plan
- Water Efficient Landscape Ordinance
- Landscape Guidelines for selecting and using native and drought tolerant plants
- Species Palette

The Urban Forest in Citrus Heights

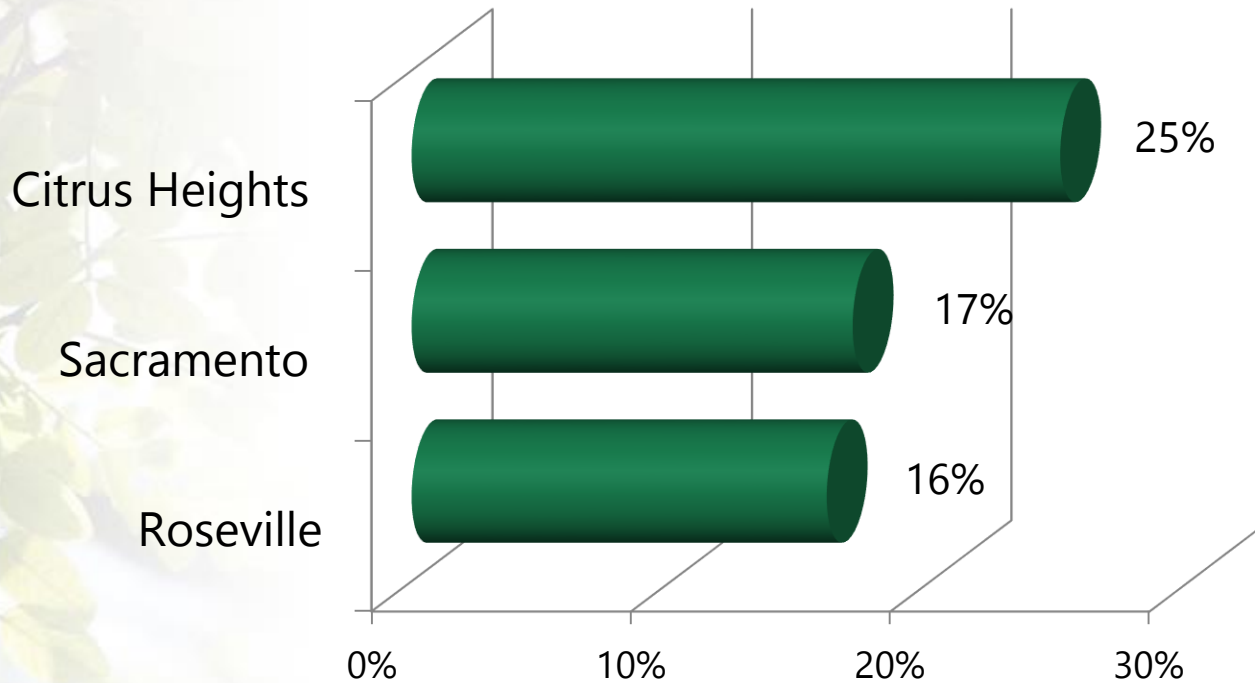
- Tree Canopy and Land Cover
- Community Urban Forest
 - Benefits
 - Composition
 - Investment versus benefits



Land Cover in Citrus Heights



Regional Urban Tree Canopy



Citrus Heights' Community Urban Forest

Value

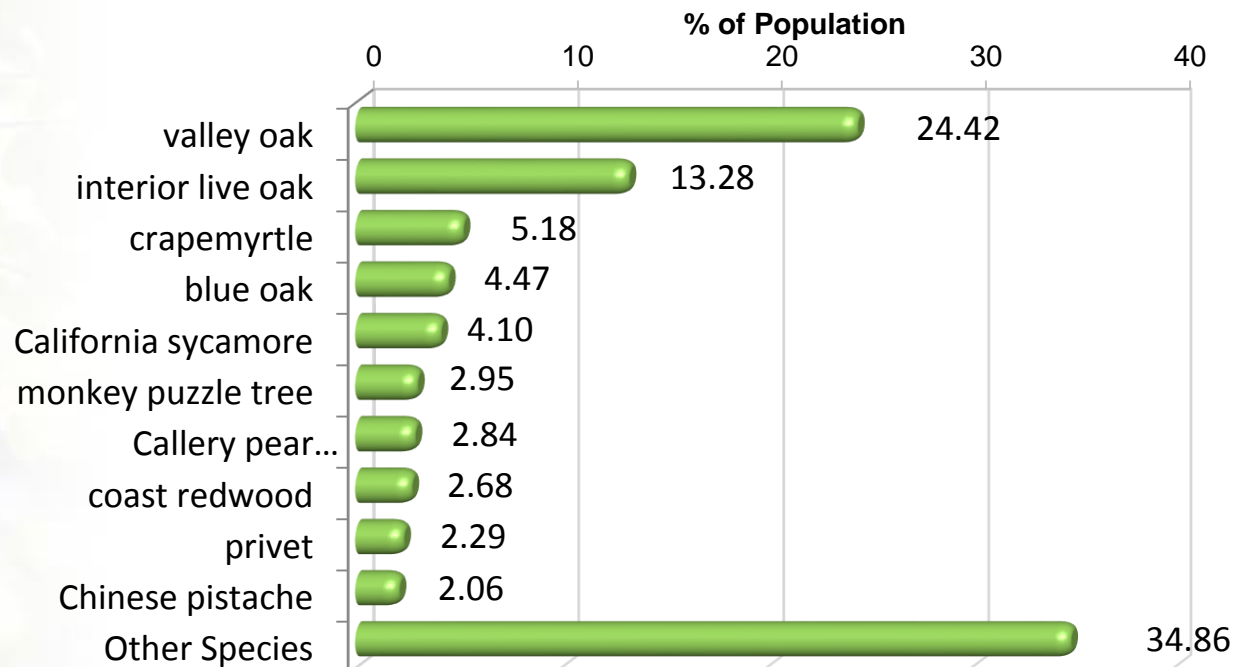
- 27,994 trees
- \$101 million to replace (\$3,603/tree)
- \$2 million in annual benefits



Citrus Heights' Community Urban Forest

Composition

- 177 unique species

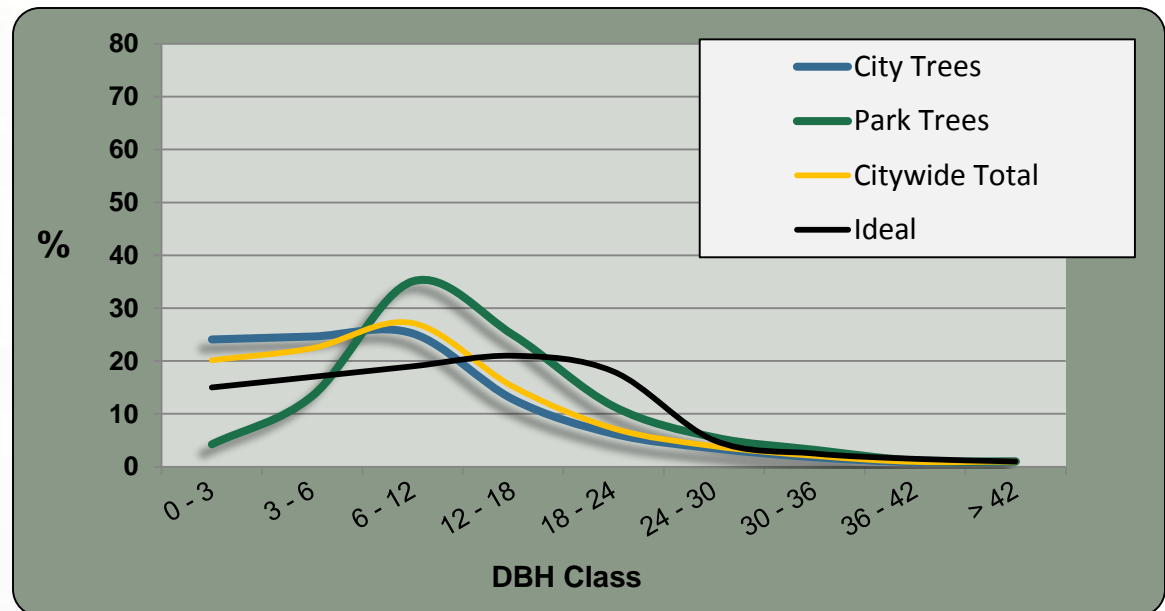




Citrus Heights' Community Urban Forest

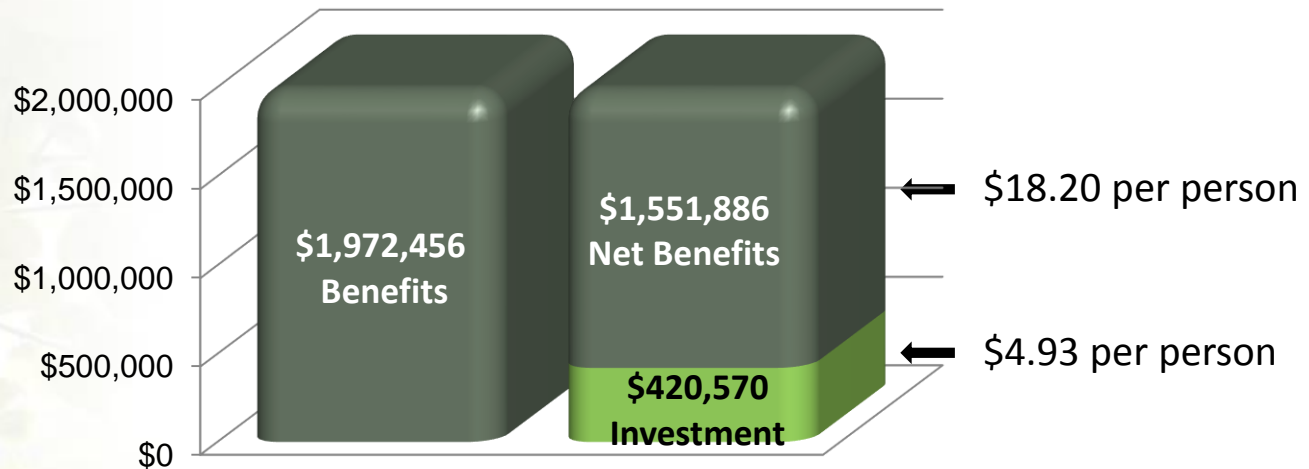
Composition

- Good condition
- Relatively young population



Citrus Heights' Community Urban Forest

Investment vs. Benefits



Annual Net Benefits from community trees = \$1.6 million

For EVERY \$1 Invested in community trees, Citrus Heights receives \$4.69 in Benefits



Citrus Heights' Community Urban Forest

City Forestry Operations

- Inspection of ROW trees
- Pruning
- Tree removal
- Service requests
- Emergency response
- Tree planting
- Maintain inventory data



Summary of Recommendations

Zoning Code

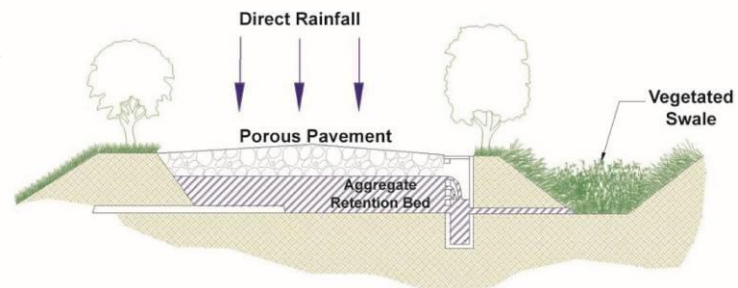
Landscape and Irrigation Guidelines

UFMP Goals

Summary of Proposed Zoning Code Changes

General Changes

- Requires the use of native species for temporary erosion control.
- Includes stormwater management/ groundwater recharge as a landscape design goal.
- Bans the use of turf in new parkways, planting strips, or medians.
- Sets requirements for soil volume and quality for planting areas.
- Requires trees to be irrigated separately from surrounding landscapes.
- Establishes approved plant list.



Summary of Proposed Zoning Code Changes

Water Efficient Landscape Requirements

- Apply to all new projects with more than 500 SF of landscape area and retrofit projects of more than 2,500 square feet – including residences.
- Require dedicated landscape water meters for projects over 1,000 square feet.
- Require irrigation systems to have a maximum precipitation rate of 1 inch per hour.
- Sets the total maximum landscape water use to 50% of evapotranspiration for residences and 40% for non-residential projects.
- Irrigation audits are required on all projects.



Landscape and Irrigation Guidelines

Gives a brief introduction of:

- Local Climate Zones
- Microclimates
- Soil Conditions
- Invasive Species
- Water Efficiency
- Riparian Areas
- Oak Trees






Landscape and Irrigation Guidelines




Includes Recommended Tree, Shrub, and Groundcover lists.

For each species, includes:

- Size and growth rate
- Flower color and season
- Sun/ Shade Requirements
- Water use
- Beneficial Uses
- Photographs

City of Citrus Heights

Common Name Scientific Name	Deciduous/ Evergreen	CA Native	Growth Rate	Lifespan	Height Width (feet)	Bloom Season and Color	Sun/ Shade	Water Use	Beneficial Uses	Special Maintenance	Photo
Coffee Berry <i>Rhamnus californica</i>	Evergreen	•	Fast		8' 8'	Spring White	Sun, Part Shade	Low	Birds/Hummingbirds Hedge/Screen With Oaks Riparian	Easy to prune	
GROUNDCOVERS											
Emerald Carpet <i>Arctostaphylos "Emerald Carpet"</i>	Evergreen	•	Fast	Mod.	< 1' 6'	Spring White	Sun, Part Shade	Low	Beneficial Insects Medians Ground Cover	Need rich, well-draining soil	
Beach Primrose <i>Camissonia cheiranthifolia</i>	Evergreen	•	Fast	Perenn.	0.5' 2'	Mar - Sept Yellow	Sun	Low	Beneficial Insects Medians Ground Cover		

Common Name Scientific Name	Deciduous/ Evergreen	CA Native	Growth Rate	Lifespan	Height Width (feet)	Bloom Season and Color	Sun/ Shade	Water Use	Beneficial Uses	Special Maintenance	Photo
Weeping Bottle-brush <i>Callistemon viminalis</i>	Evergreen		Fast	40 - 150	25' 15'	Apr - Aug Red	Sun, Part Shade	Low	Fall Color, Berries, or Seed Pods		
Desert Museum Palo Verde <i>Cercidium x "Desert Museum"</i>	Deciduous		Fast	50 - 150	25' 25'	Mar - May Yellow	Sun	Low			
Western Redbud <i>Cercis occidentalis</i>	Deciduous	•	Mod.	50 - 75	20' 15'	Feb - Apr Magenta	Sun	Low	Beneficial Insects Birds/Hummingbirds Fall Color, Berries, or Seed Pods Riparian	Tolerates clay soils and wide range of soil pH	
Desert Willow <i>Chilopsis linearis</i>	Deciduous		Mod.	40 - 150	25' 20'	Apr - Jul Various	Sun, Part Shade	Low	Birds/Hummingbirds		

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Developing An Urban Forest Master Plan

Why is a master plan important?

- Illustrates the value and benefit of community trees
- Communicates the challenges and opportunities
- Promotes shared vision
- Ensures resources are in place to support community goals



Developing An Urban Forest Master Plan

Opportunities and Challenges

- **Preserve and enhance existing trees and canopy**
- **Increase environmental benefits**
- **Identify sustainable resources/funding**
- **Increase public outreach and engagement**

UFMP Goals

- A sustainable, healthy, and safe community tree resource
- Preserve and expand tree canopy on public and private property
- Comprehensive, user-friendly regulations and policies
- Optimize community planning to consider trees as an integral component
- Optimize funding and identify new opportunities
- Expand outreach, education, and engagement



A sustainable, healthy, and safe community tree resource

- Adhere to industry standards and BMPs and wildlife protection requirements
- Prune city trees on a regular cycle
- Tree planting and replacement plan increase diversity
- Develop policies: tree inspection, risk management, inventory data management

Preserve and expand tree canopy on public and private property

- Canopy goals
- Develop guidelines to preserve significant trees
- Optimize stocking level
- Identify strategies to increase tree planting on private property
- Collaborate with nonprofits to facilitate neighborhood tree planting
- Conduct a canopy assessment every 10 years

Comprehensive user-friendly regulations and policies

- **Optimize city staffing to manage trees**
- **Revise Municipal Codes:**
 - **106.31 Site Design**
 - **106.34 Landscaping Standards**
 - **106.39 Tree Preservation and Protection**
- **Water Efficient Landscape Ordinance**

Optimize funding and identify new opportunities

- Identify and apply for grants
- Increase partnerships
- Optimize support from existing sources
- Tree Mitigation Fund
- Explore Landscape Assessment Districts



Optimize community planning to consider trees as an integral component

- **Incorporate trees into new projects**
- **Ensure planting sites will support trees**
- **Participate in regional urban forest planning**
- **Apply for Tree City USA status**

Expand outreach, education, and engagement

- Website, electronic and downloadable materials
- Recommended Tree List for homeowners
- Workshops and Seminars
- State of the Urban Forest Report

Questions and Discussion?





Thank you for your time

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