



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

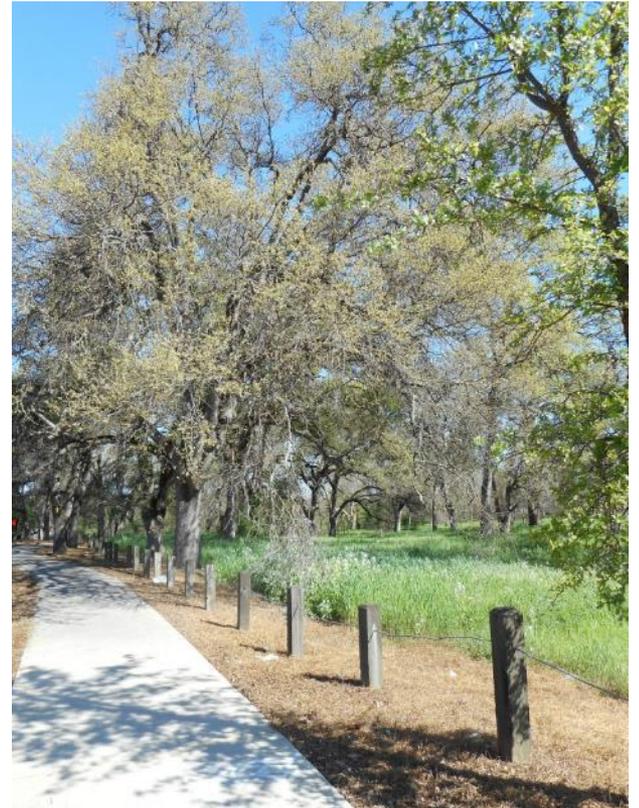
- **Develop a more sustainable urban forest by improving conditions for urban trees and optimizing the environmental, economical, and social benefits trees provide to the community**
- **Incorporate urban greening principles into the City's regulations and daily activities**
- **Expand outreach, education,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

CHUGS

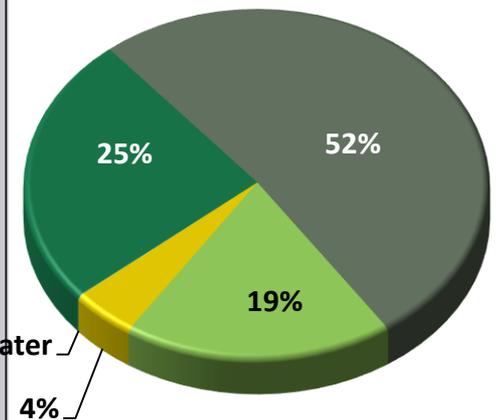
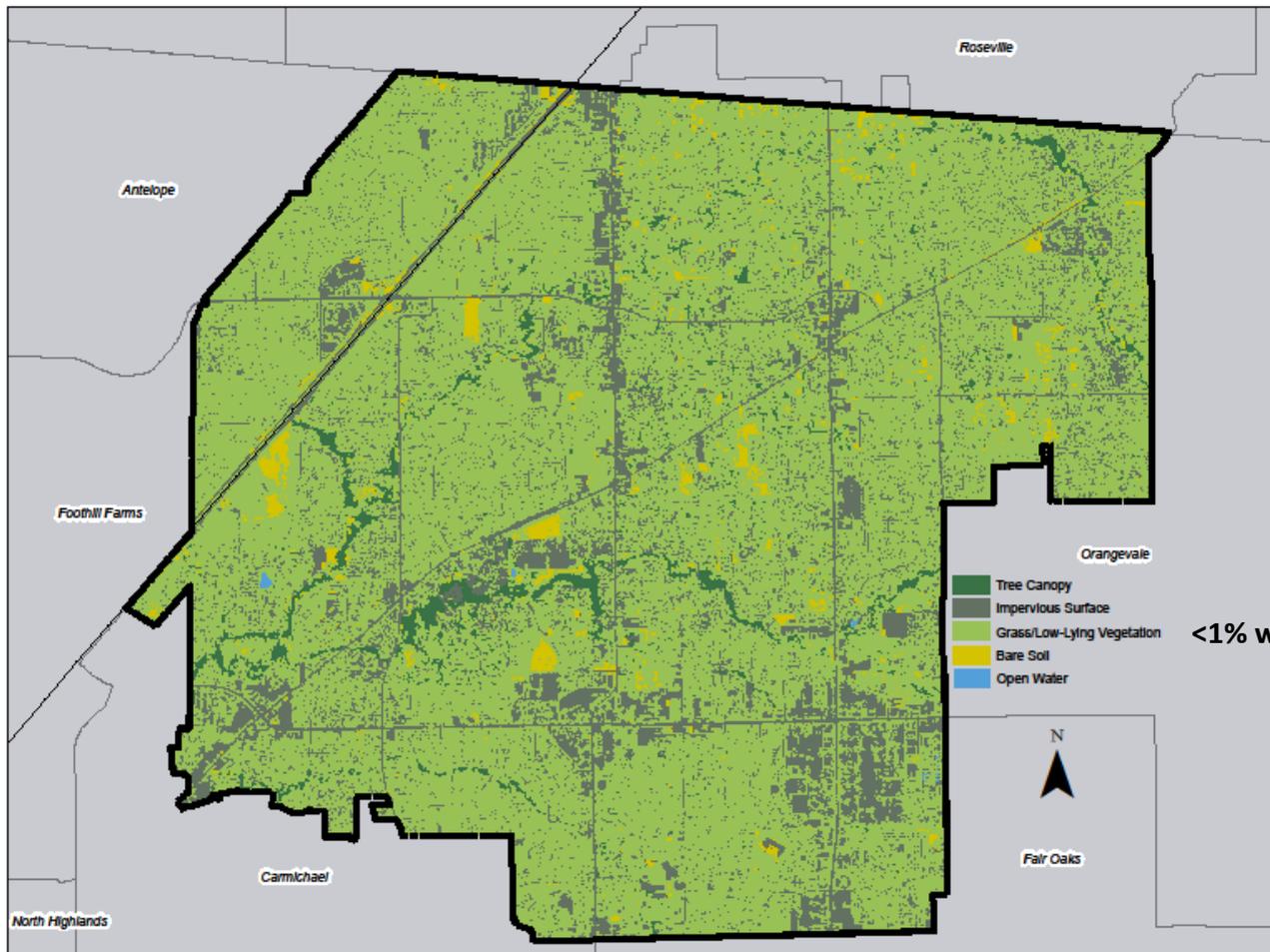
- **Urban Forest Master Plan**
- **Water Efficient Landscape Ordinance**
- **Landscape Guidelines for selecting and using native and drought tolerant plants**
- **Species Palette**

The Urban Forest in Citrus Heights

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

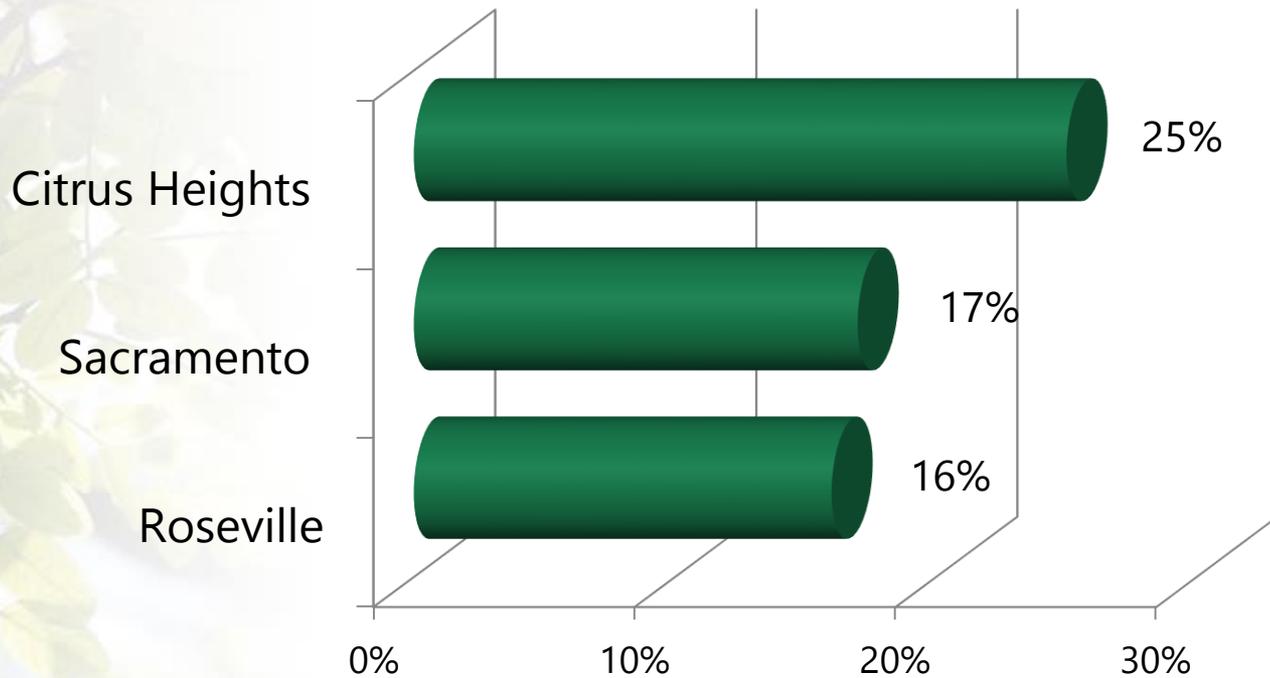


Land Cover in Citrus Heights



- Tree Canopy
- Impervious Surface
- Grass/Low-Lying Vegetation
- Bare Soil
- Open Water

Regional Urban Tree Canopy



Citrus Heights' Community Urban Forest

Value

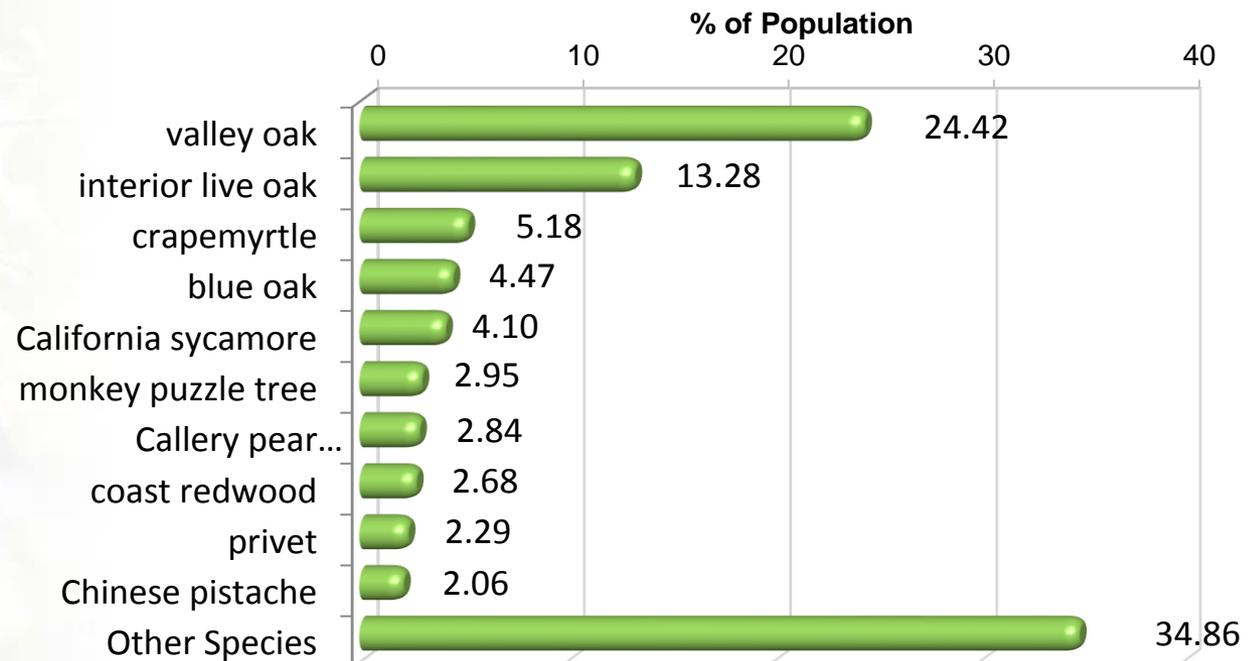
- 27,994 trees
- \$101 million to replace (\$3,603/tree)
- \$2 million in annual benefits



Citrus Heights' Community Urban Forest

Composition

- 177 unique species

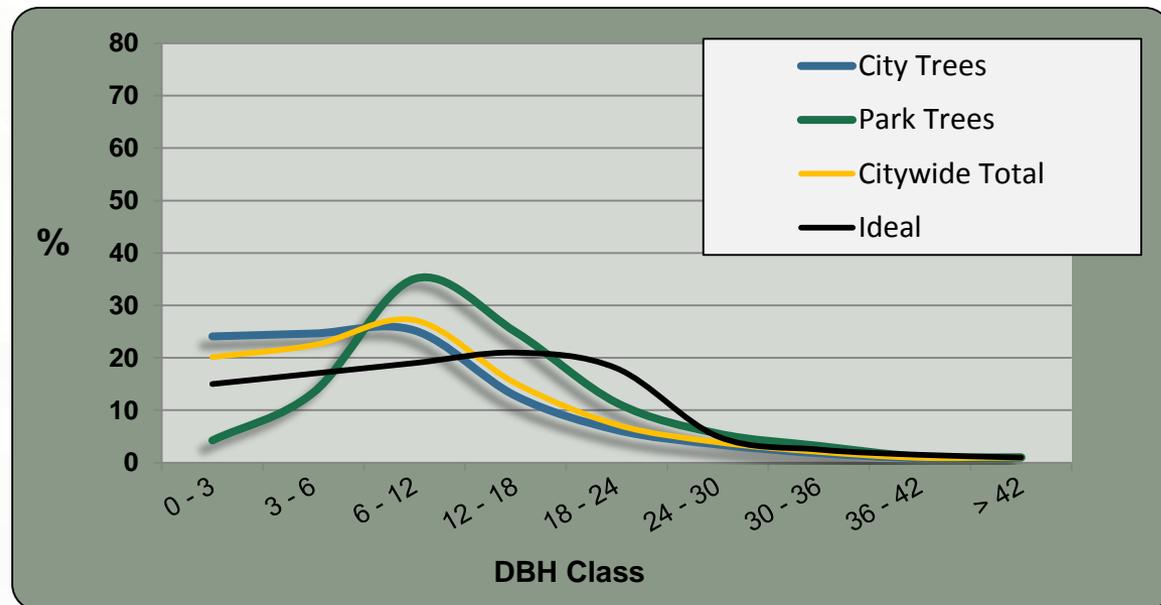




Citrus Heights' Community Urban Forest

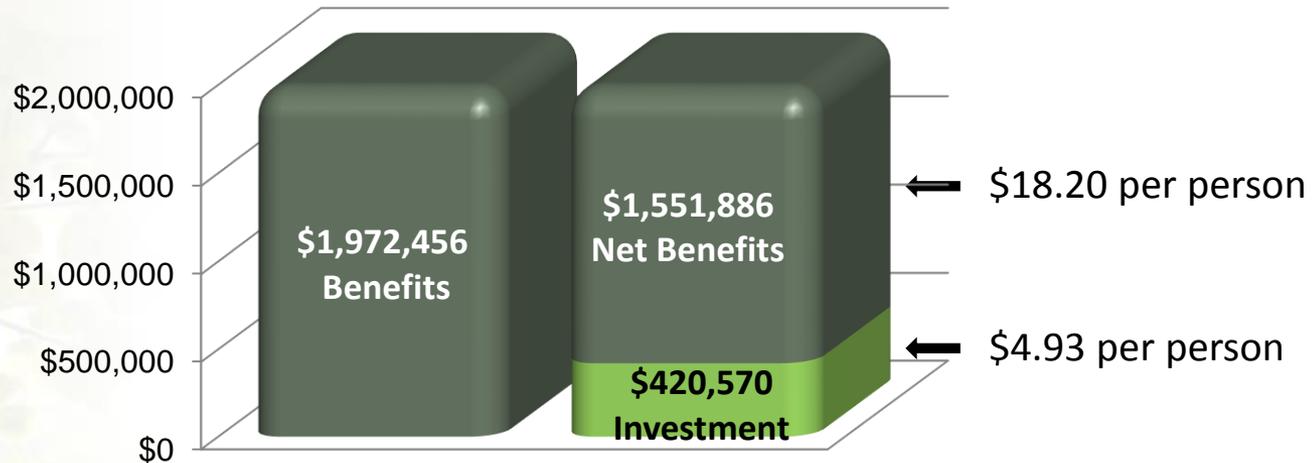
Composition

- 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

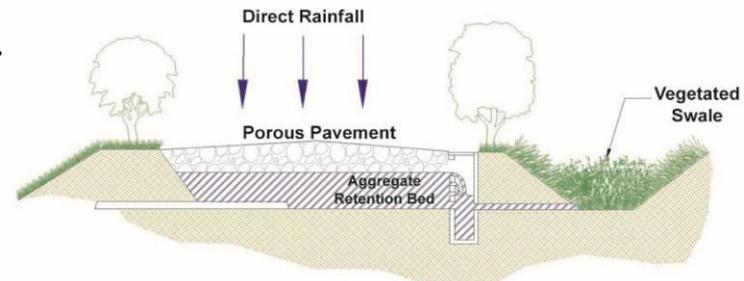
Landscape and Irrigation Guidelines

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

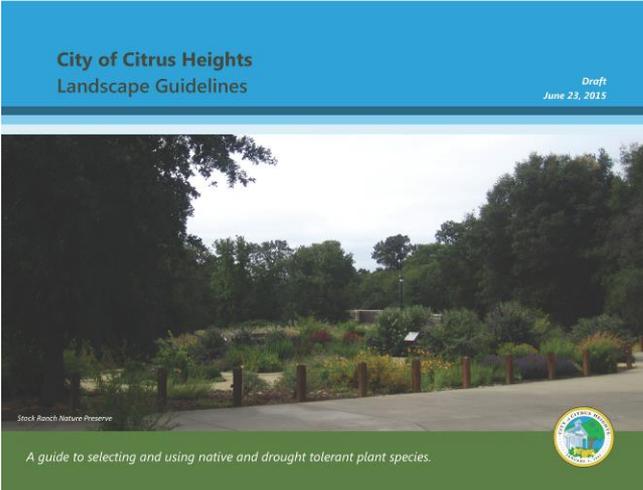
- Apply to all new projects with more than 500 SF of landscape area and retrofit projects of more than 2,500 square feet – including residences.
- Require dedicated landscape water meters for projects over 1,000 square feet.
- Require irrigation systems to have a maximum precipitation rate of 1 inch 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



City of Citrus Heights
Landscape Guidelines
Draft
June 23, 2015

Stock Ranch Nature Preserve

A guide to selecting and using native and drought tolerant plant species.

City of Citrus Heights

hit tolerant, low maintenance plants provide an attractive alternative. Once these low growing covers become established, they help keep out weeds and provide a variety of textures and colors to complement the landscape.

zone use much less water than those that spray water over a large area because there is less water lost to evaporation or blown away by the wind.

Options for drip irrigation include emitters placed at the base of the plant, soaker hoses that wind through the planting area, and bubblers with root watering systems. Each of these is suited to different planting needs. For example, soaker hoses are good for planting beds while root watering systems are usually better for large shrubs and trees. The drip irrigation method needs to be matched to the intended landscape area and plants.

Water Efficiency
Water is becoming an increasingly precious resource for Californians. There are several important strategies for reducing water use in private and public landscapes.

The most important strategy is to select plants that are tolerant of relatively dry conditions. Luckily, there are many attractive and hardy plant species that are well-adapted to the California climate and, once established, require little water beyond natural rainfall to survive. Many of these plants are native to California or to regions with similar climate conditions.

Lawns are one of the biggest water users in the ornamental landscape and a relatively high-maintenance groundcover that require regular mowing, and frequent applications of supplemental fertilizers and herbicides to stay healthy. Consider eliminating areas of lawn that are not regularly used as play or exercise areas for people or pets. There are many

Native species can be excellent ornamental plants providing a variety of flower color, leaf texture, and structure in the landscape.

Proper application of irrigation water when needed will also help conserve water. Drip irrigation methods that apply water directly to the plants and the root

Drip irrigation systems can be designed to meet watering needs for many types of applications from trees to groundcovers.

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

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>Comissonia cheiranthifolia</i>	Evergreen	•	Fast	Perem.	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 Bottlebrush <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 s "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		



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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