



# **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  
March 31, 2015**

# CHUGS

- **Background**
- **Components**
  - Vision for urban greening
  - Urban Forest Master Plan
  - Water Efficient Landscape Ordinance
  - Zoning code update
  - Native/drought tolerant landscape guidelines and policies



# CHUGS

- **Overarching goals**

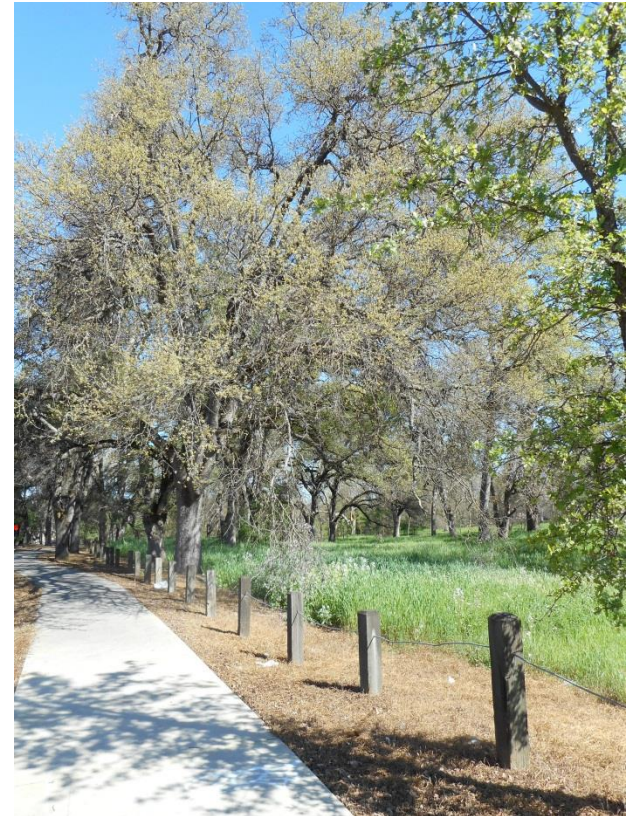
- incorporate urban greening principles into the City's regulations and daily activities
- develop a more sustainable urban forest by improving conditions for urban trees and optimizing the environmental, economical, and social benefits urban trees provide to the community





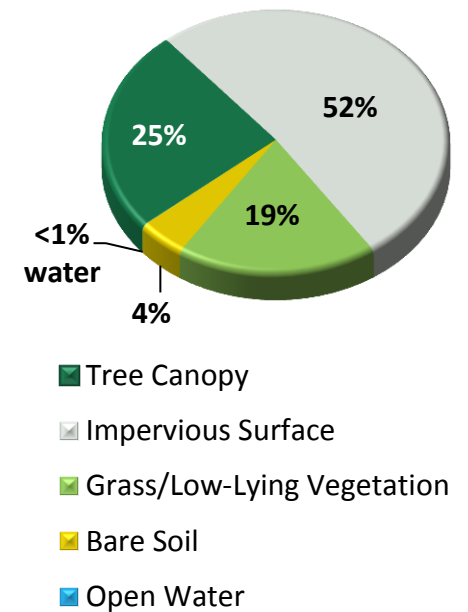
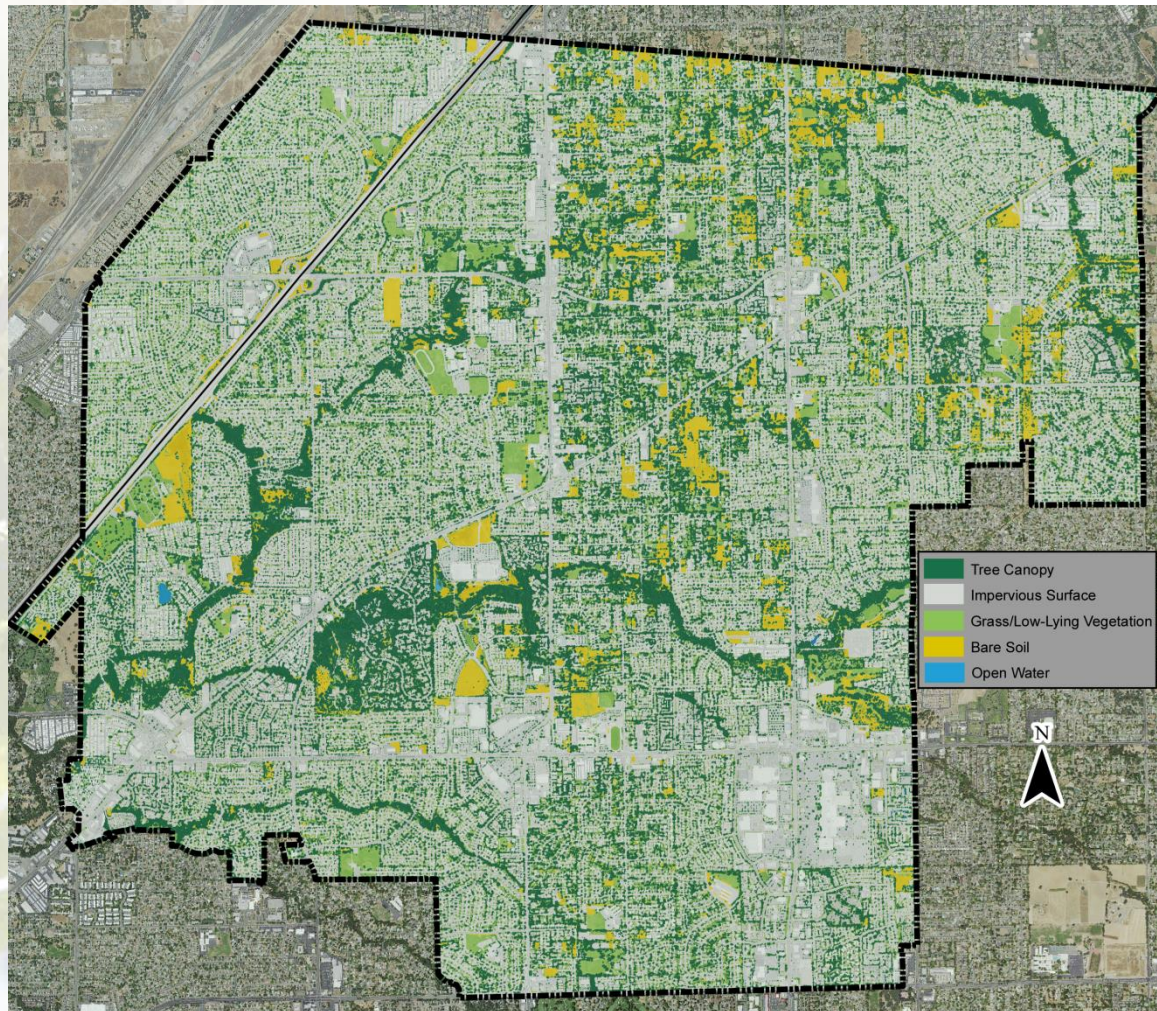
# The Urban Forest in Citrus Heights

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



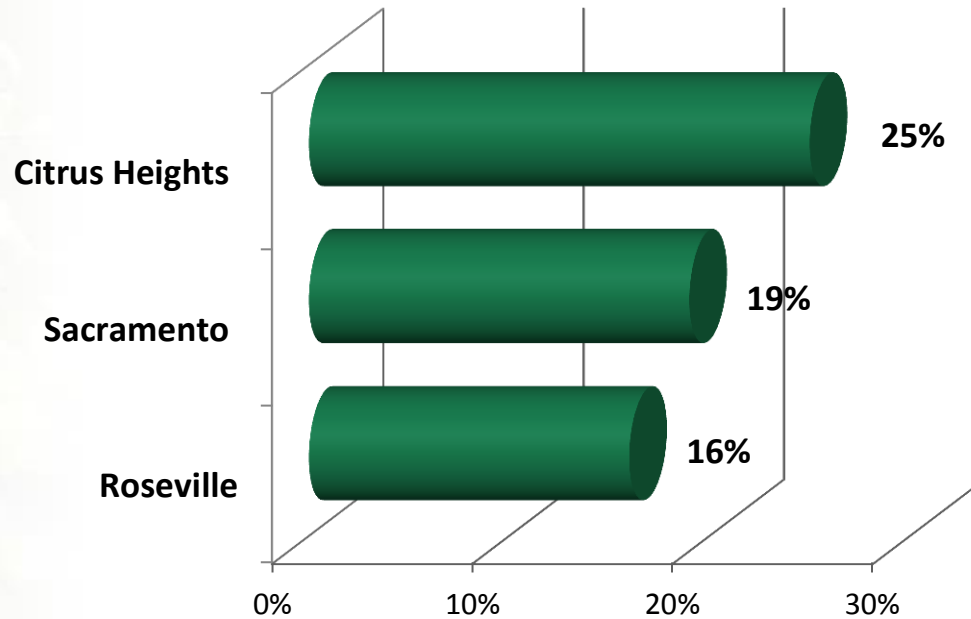


# Land Cover in Citrus Heights



# Citrus Heights Urban Tree Canopy

**In comparison**





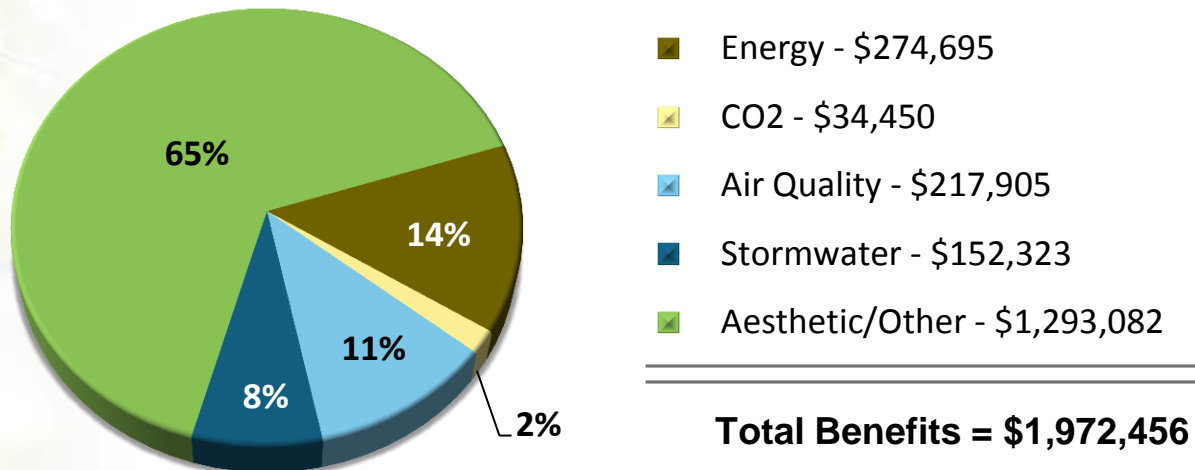
# Citrus Heights Urban Tree Canopy



# Citrus Heights' Community Urban Forest

## Value

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

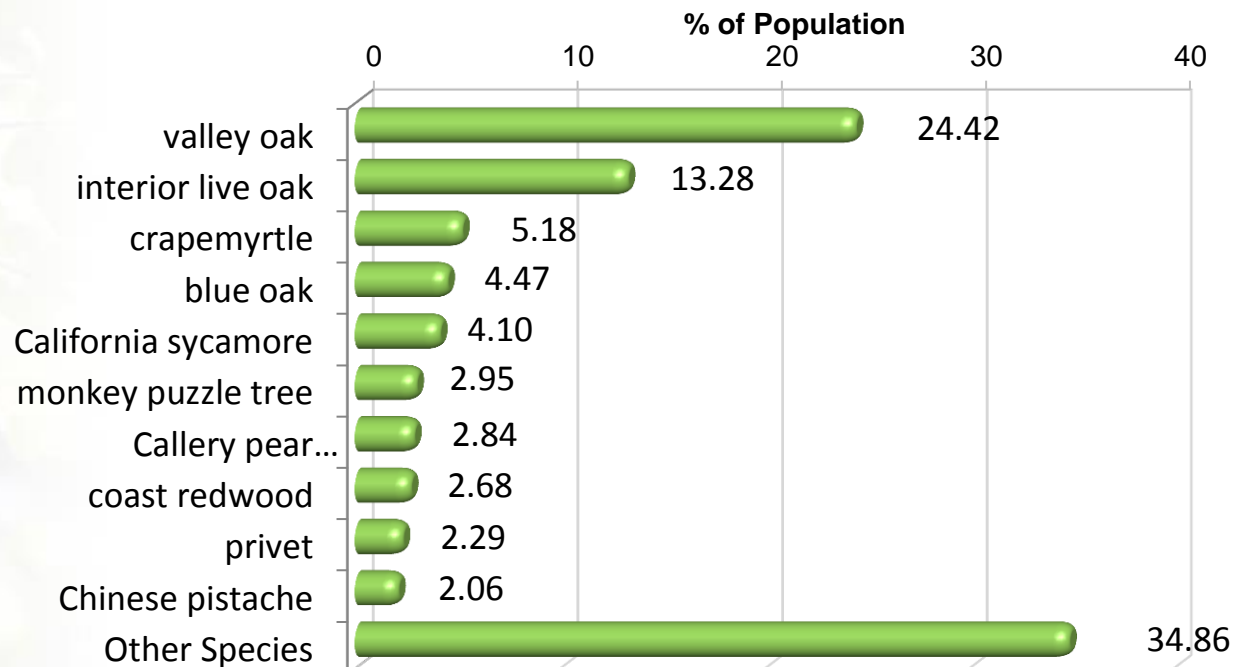




# Citrus Heights' Community Urban Forest

## Composition

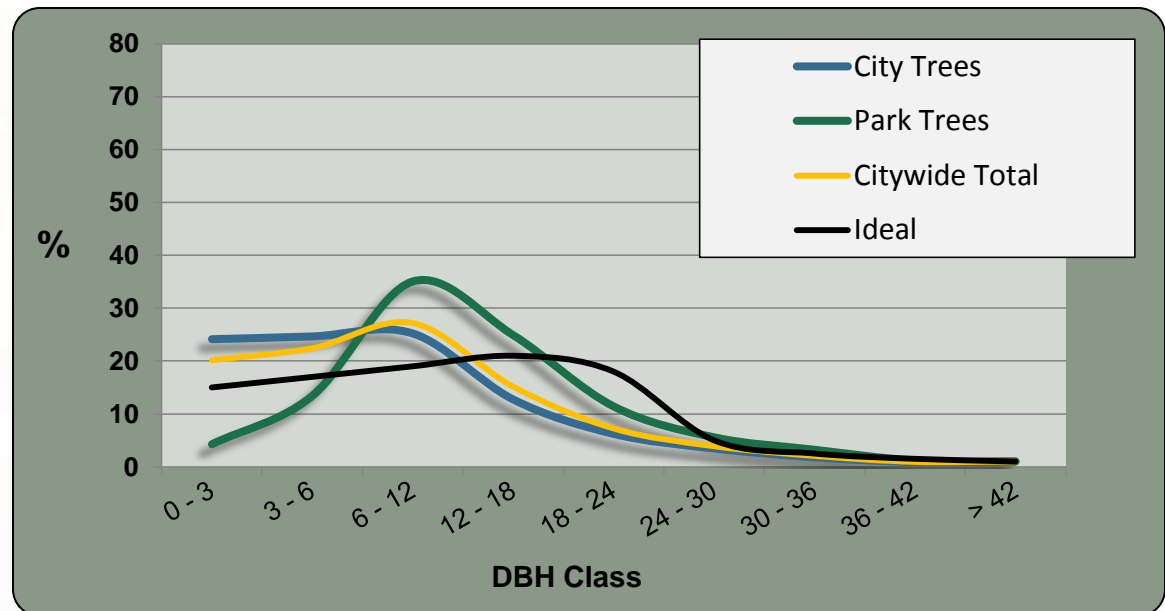
- Over 175 unique species



# Citrus Heights' Community Urban Forest

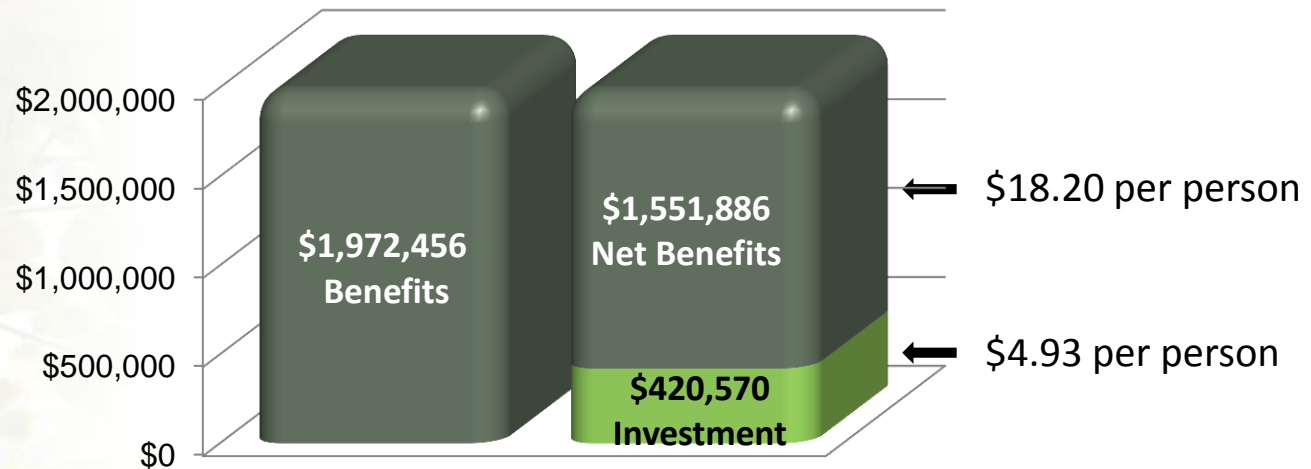
## Composition

- 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

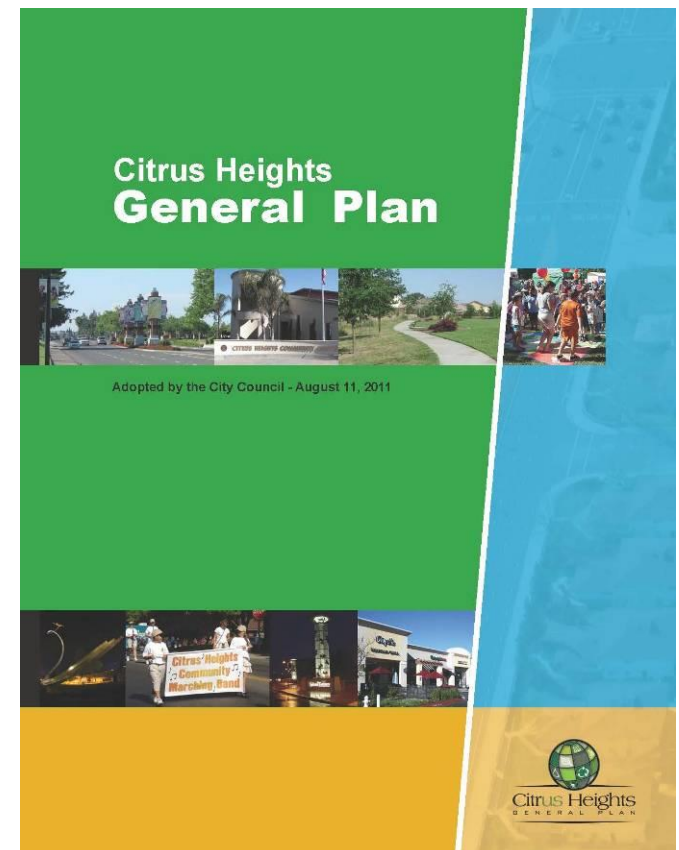
## City Forestry Operations

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

# Developing Landscape and Irrigation Guidelines

## General Plan

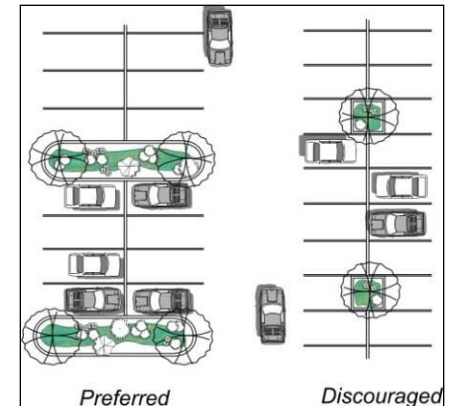
- Community Design Guidelines
- Street Tree Program
- Gateway Treatments
- Water Conserving Landscaping



# Developing Landscape and Irrigation Guidelines

## Zoning Code Section 3, Article 106, Chapter 34

- Apply to new Commercial and Multi-Family Development and certain other projects subject to Design Review
- Landscape Requirements
- Water Efficient Landscape Requirements
  - Do not apply to single-family homes
- Guidelines for landscaping around native oaks





# Developing Landscape and Irrigation Guidelines

## Design Review

- Plant List and Concept Plan

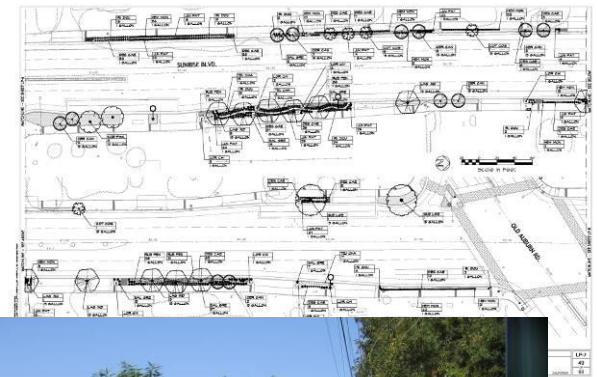
## Building Permits

- Landscape Plans
  - Plant Legend
- Irrigation Plans
  - Water Use Calculations

### WATER USE CALCULATIONS

WATER USE	TREES	SHRUBS	VINES	BROADLEAVES	SG. FEET	WATER USE FACTOR
LOW	CER OCC, LAS IND, QVE MIS	ARC RM, CAR GAL, CEA YP, CIB SUN, HES PAR, HET ARE, RHA IND, ROS GAL		ARC PAC, MYO PAR, ROS OFF	71,126	71,126 X 0.4 = 28,640
MEDIUM	CER CAN, KOE PAN, PLA BLO	FES GAL, GAU LIN, HEM HYB, MUH RIS, PHO MM, PHO SUN, ROS PIN, VIB TIN	PAR TRI	GOT MIC, SUO FOR	41,848	41,848 X 1.0 = 41,848

TOSSS IS LESS THAN 113624, TI REQUIREMENTS FOR THE PROPC



# Developing Landscape and Irrigation Guidelines

## The Urban Greening Project will:

- Propose changes to existing regulations to address water efficiency
- Develop Planting Guide and Recommended Plant List
- Develop User-friendly Irrigation Calculator

### Companion Plants

Genus Species	Common Name	CA Native	Evergreen	Deciduous	Height	Spread
<b>Shrubs</b>						
<i>Abelia grandiflora</i>	Glossy abelia		■		3-7'	5'
<i>Arbutus unedo</i>	Strawberry Tree		■		25'	8'
<i>Arctostaphylos densiflora</i>	Manzanita	■			3-5'	7'
<i>Berberis darwinii</i>	Darwin's barberry		■		5-10'	4-7'
<i>Buddleia davidii</i>	Butterfly bush			■	10-12'	10'
<i>Coronaria californica</i>	California bush anemone	■	■		4-6'	4-6'
<i>Ceanothus 'Caneby'</i>	Wild lilac		■		10-12'	4-6'
<i>Cercis occidentalis</i>	Western redbud	■		■	10-12'	4-6'
<i>Daphne odorata</i>	Fragrant daphne		■		10-12'	4-6'
<i>Diplazium hybrid</i>	Monkey flower	■	■		10-12'	4-6'
<i>Gutierrezia parviflora</i>	Island bush snapdragon	■	■		10-12'	4-6'
<i>Heteromeles arbutifolia</i>	Torrey	■	■		10-12'	4-6'
<i>Myrica asplenifolia</i>	Myrtle		■		10-12'	4-6'
<i>Philadelphus virginicus</i>	Mock orange			■	10-12'	4-6'
<i>Plumbago auriculata</i>	Cape plumbago		■		10-12'	4-6'
<i>Rhamnus californica</i>	Coffee berry	■	■		10-12'	4-6'
<i>Rhus integrifolia</i>	Lemonade berry		■		10-12'	4-6'
<i>Ribes sanguineum</i>	Flowering currant	■	■		10-12'	4-6'
<i>Rosa californica</i>	California wild rose	■	■		10-12'	4-6'
<i>Salvia greggii</i>	Autumn sage		■		10-12'	4-6'
<b>Groundcover</b>						
<i>Arctostaphylos hookeri</i>	Monterey manzanita	■	■		10-12'	4-6'
<i>Baccharis pilularis</i>	'Twain Peak' Coyote Bush	■	■		10-12'	4-6'
<i>Ceanothus 'gracilis horizontalis'</i>	Carmel creeper	■	■		10-12'	4-6'
<i>Cistus salicifolius</i>	Sageleaf rock rose	■	■		10-12'	4-6'
<i>Rosmarinus officinalis cultorum</i>	Rosemary		■		10-12'	4-6'
<b>Grasses</b>						
<i>Elymus glaucus</i>	Blue wild rye	■	■		10-12'	4-6'
<i>Festuca californica</i>	California fescue	■	■		10-12'	4-6'
<i>Muhlenbergia rigens</i>	Deergrass	■	■		10-12'	4-6'
<i>Pennisetum alopecuroides</i>	Fountain grass	■	■		10-12'	4-6'
<i>Stipa pulchra</i>	Purple needlegrass	■	■		10-12'	4-6'





# 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
- Maximize environmental benefits
- Develop a more sustainable, drought tolerant resource
- Identify sustainable resources/funding
- Increase public outreach and engagement

# Developing An Urban Forest Master Plan

## Goals & Objectives

Community urban forest benefits



# Developing An Urban Forest Master Plan

## Goals & Objectives

### Tree Maintenance





# Developing An Urban Forest Master Plan

## Goals & Objectives

Community outreach and engagement



# Developing An Urban Forest Master Plan

## Goals & Objectives

Tree planting and canopy expansion



# Developing An Urban Forest Master Plan

## Goals & Objectives

Existing issues and challenges





# CHUGS – What's next?

- Draft Urban Forest Master Plan
- Draft Water Efficient Landscape Ordinance
- Develop recommendations for native/drought tolerant landscape guidelines and policies
- Draft species palette
- Next community meeting
  - Review draft CHUGS





# **Questions and Discussion?**



# **Thank you for your time**

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