

## IMAGE SUMMARY

Project name & location: **Culver City Urban Forest Master Plan, Culver City, CA**

Category II: Planning and Analysis

ASLA, Southern California Chapter, 2016 Quality of Life Design Awards

Chapter 2 - INTRODUCTION

### what is the urban forest?



The urban forest is the ecosystem of plants and people in the city

The concept of the "urban forest" is relatively new, although what it describes—the ecosystem of plants and people in the city—is as old as cities themselves. The term is not always immediately understood, so it is useful to examine it more closely.

#### The Urban Forest Is An Ecosystem

The term "urban forest" puts emphasis on the ecosystem (the interconnected system of living and non-living elements), whereas the term "street trees" emphasizes trees as isolated objects. When we use the phrase "urban forest" we are talking about more than just street trees; we are also talking about the connections between people, plants, air, water, animals, and climate in the city. This allows for a larger scope of thinking, management, and planning; this approach relates urban plants to broader goals for resource management, conservation, and ecosystem health.

#### Urban Forestry Is A Multidisciplinary Field

The concept of the urban forest and the field of urban forestry emerged in the 1970s, reflecting the paradigm shift that accompanied the development of the concept of ecology. Ecology recognized the importance of studying the interconnections between organisms and communities. Just as the term "urban forest" describes an interconnected system, so too does the field of urban forestry create connections among diverse fields of knowledge and practice, including horticulture, arboriculture, urban design, landscape architecture, history, conservation, and government.

#### The Urban Forest is a Cultural Resource

In some places, the urban forest includes significant remnants of natural forests, however, in most places (including Culver City) the majority of plants in the city are planted and managed by people. People create the urban forest as a way to make the city more comfortable and more beautiful; planting an alley of trees along a street transforms this utilitarian public infrastructure into an amenity. There is a long history of plants being used in urban design to shape the form and function of the city.

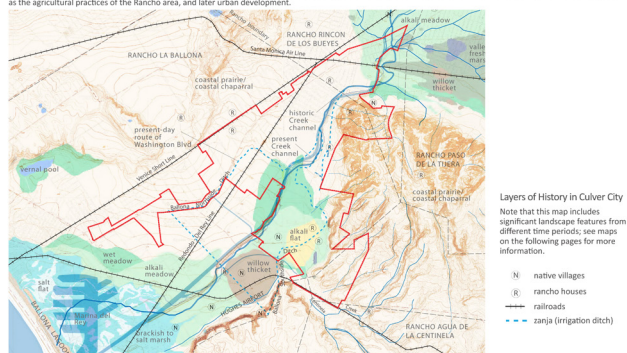
1. In an innovative approach, the The Culver City Urban Forest Master Plan considers the urban forest through the lens of landscape architecture, looking beyond "just" trees to view the urban forest as the ecosystem of plants and people in the city.

Chapter 3 - CULVER CITY'S URBAN FOREST

### Culver City's urban forest heritage: an evolving landscape | maps

As the urban forest can be defined as the ecosystem of plants and people in the city, the history of the urban forest traces changes over time in this ecosystem and human community. This history can reveal significant information about how the City developed its current form and how humans have shaped the land over time. The history of Culver City parallels that of the larger Los Angeles region, tracing a familiar historic arc from native landscape and settlements, to rancho farming, early development, rapid growth, and urban revitalization.

This diagram illustrates some of Culver City's most significant landscape features from various times in history. The City's current form was shaped by major landscape features such as the Baldwin Hills (forming the eastern boundary), Ballona Creek, and the irrigation ditch, or zanja. (Washington Blvd follows the route of the former zanja) and the Pacific Electric Lines (now Venice and Culver Blvds). The ecology of the area changed dramatically over time due to both natural causes and human actions, such as the agricultural practices of the Rancho area, and later urban development.

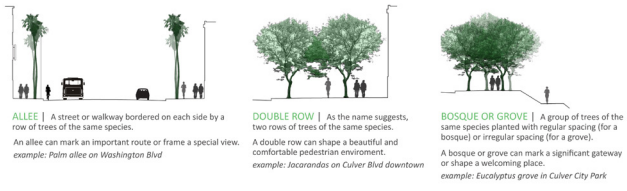


2. The Plan is based on a thorough analysis of the City's historical and existing urban forest. It includes a series of mappings, such as the one pictured here, that trace the evolution of the City's landscape over time. This analysis serves as a foundation for proposals and recommendations.

typologies in the urban forest: A Vocabulary for Planted Form and Composition

To discuss the urban forest, it is useful to have a shared vocabulary to describe characteristics of form as well as species and age composition. Some helpful terms are illustrated here.

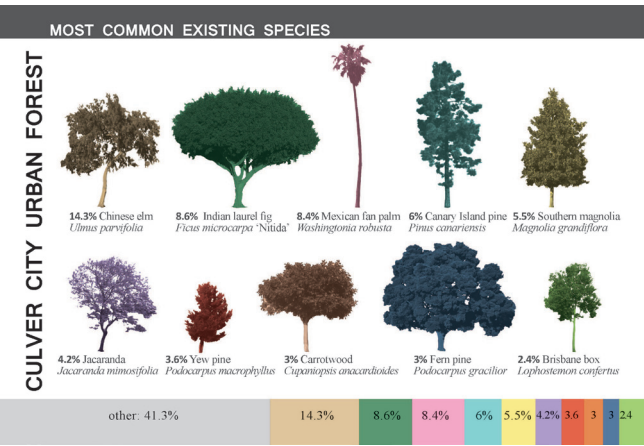
planted form | How trees shape spaces, create places, and provide wayfinding



composition | How species and age characteristics define different types within the urban forest

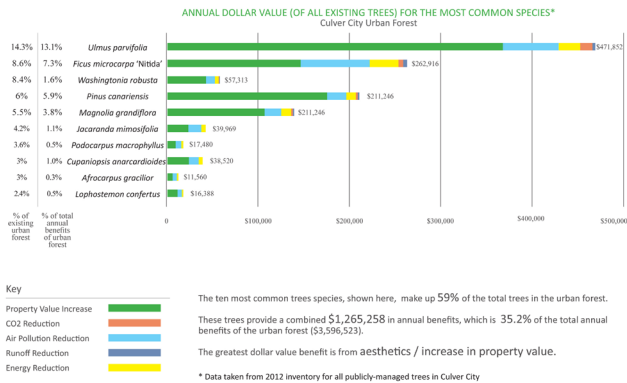


3. Designed to be useful for City residents as well as City staff, the Plan employs an elegant layout and compelling graphics to explain the foundational concepts of urban forestry. These diagrams illustrate useful urban forestry terms, such as grove and monoculture, in order to facilitate clear dialogue and planning.



4. The planning process included a strong community engagement component. This postcard was sent out to residents to invite them to the five community meetings. By presenting urban forest concepts in clear, accessible language with compelling graphics, the consultant team fostered a robust community dialogue.

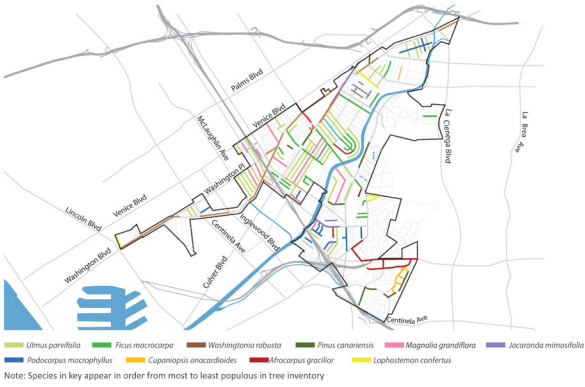
ecosystem services: Quantifying the Benefits of Culver City's Existing Urban Forest



5. The Plan includes extensive analysis of Culver City's existing urban forest, including the most common species and genera, age composition, and the size of existing trees. This diagram shows the benefits of the most common species in the existing urban forest; these ecosystem services were quantified using iTree software.

most common existing species in Culver City's urban forest

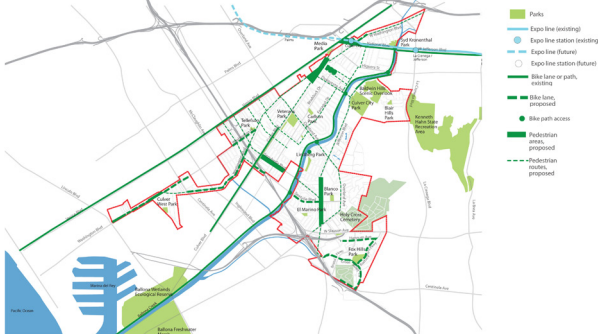
This map shows, at a glance, where there are monocultures of the ten most common species in Culver City. Because of the large area shown in this small size map, it is not possible to show each individual tree. Certain species, like *Washingtonia robusta* and *Afracarpus* (syn. *Podocarpus*) *gracilior*, are concentrated along certain streets, while others, like *Ulmus parvifolia* and *Magnolia grandiflora*, are dispersed throughout the City.



6. Maps and diagrams were designed to be compelling and accessible. This map shows the location of monocultures within the City, offering a quick look at large patterns of species composition and how they shape certain streetscapes and neighborhoods.

vision: green connections for Culver City

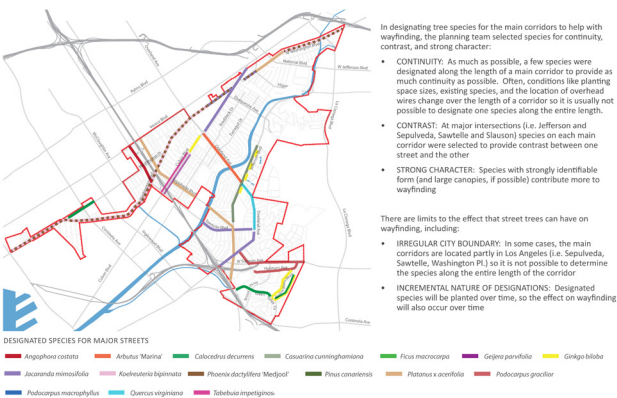
This chapter on recommendations for the urban forest begins with the large scale, a broad vision for the urban environment of the City. In this vision, planning for and investing in the urban forest will strengthen the important network of "green connections" throughout Culver City. More than just tree-lined streets, this vision describes a green infrastructure that includes the urban forest, park land, sustainable transportation networks, and pedestrian areas. This green infrastructure provides vital functions for the City including improving air and water quality, mitigating the urban heat island effect, reducing energy demand, and improving public health. A strong urban forest and sustainable transportation network work together to improve links among existing resources (including civic, retail, and business areas, as well as public space and recreation) to improve access and interconnections throughout the City. These green connections encourage recreation, walking, biking, and public transit use in the City, complementing goals from other City plans.



7. The Plan provides the City with comprehensive recommendations and tools for enhancing its urban forest. This diagram illustrates the overall vision for strengthening "green connections" in the City, a robust green infrastructure that includes the urban forest, park land and sustainable transportation networks.

wayfinding: proposal for Strengthening the Urban Forest as a Framework for Orientation and Navigation

The Tree Designations included in this plan were selected in part to strengthen wayfinding in the City. The key considerations are discussed below.



In designating tree species for the main corridors to help with wayfinding, the planning team selected species for continuity, contrast, and strong character:

- CONTINUITY:** As much as possible, a few species were designated along the length of a main corridor to provide as much continuity as possible. Often, conditions like planting space sizes, existing species, and the location of overhead wires change over the length of a corridor so it is usually not possible to designate one species along the entire length.
- CONTRAST:** At major intersections (i.e. Jefferson and Sepulveda, Sawtelle and Slauson) species on each main corridor were selected to provide contrast between one street and the other.
- STRONG CHARACTER:** Species with strongly identifiable form (and large canopies, if possible) contribute more to wayfinding.

There are limits to the effect that street trees can have on wayfinding, including:

- IRREGULAR CITY BOUNDARY:** In some cases, the main corridors are located partly in Los Angeles (i.e. Sepulveda, Sawtelle, Washington Pk) so it is not possible to determine the species along the entire length of the corridor.
- INCREMENTAL NATURE OF DESIGNATIONS:** Designated species will be planted over time, so the effect on wayfinding will also occur over time.

8. Applying a design perspective to the urban forest, the Plan addresses large, urban-scale issues such as wayfinding and placemaking as well as addressing small scale questions of species selection and maintenance. This map illustrates a proposal for enhancing wayfinding through species selection for major corridors.

**tree designations:** a framework for managing change over time

The Tree Designations list (Appendix G) indicates which species (selected from the Palette) will be planted on each block in the City when a tree is removed. The main goal of the designations process is to select the best species for each planting location in the City. The designations seek to reduce potential infrastructure conflicts, to establish stronger aesthetics for City streets and neighborhoods, to make maintenance more efficient, and to shape a more resilient urban forest overall. The Designations are based on knowledge gained from the existing urban forest, and from current scientific research. As with the Palette, the City may alter the Designations over time to reflect new information, knowledge, and experience.

It is important to emphasize that the Master Plan does not call for the removal or replacement of any particular tree or tree

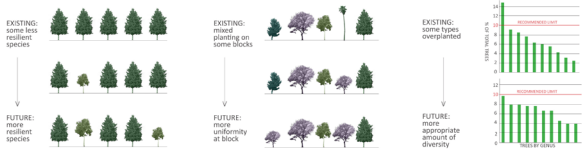
species. The designations list will be used only when a tree needs to be removed. In this way, the species on this list will not be planted all at once; rather, the designations list shapes a process of change over time.

In some cases, the existing tree was selected for continued planting in the future. In other cases, a different species was selected. In some situations, there was no predominant existing species, and the plan designates either one of the existing species or another species that was deemed more suitable.

To determine which species would be designated for each block, the Master Plan Team considered several questions (criteria), listed in the box to the right.

**TREE DESIGNATION PROCESS / CRITERIA**

1. What is the existing species, and is it OK for this site? Is this species "overplanted" in the City?
2. What species would work well with the existing species?
3. What is the parkway size? What is the largest possible tree for this location?
4. Are there overhead wires or other particular conditions?
5. What kind of street is it? What is the urban context?



**9. The Tree Designations list indicates the tree species to be planted on each block when an existing tree is removed. The text and diagrams here describe the criteria and thought process behind the designations and illustrate how they will create change in the urban forest over time.**

**places of priority:** Key Locations for Strengthening the Urban Forest

Community input as well as the consultant team's site observations revealed several areas of priority for expanding the urban forest. Identifying these places of priority allows the City to focus future efforts and resources where they are most needed. Some of the most visible and highly-trafficked parts of the City, these areas have the greatest need for more trees and larger canopies to reduce the visual impact of wide commercial streets and to increase walkability and shade. The areas are listed in order of priority, based on community input. Over time, other priorities may arise and the City can respond accordingly.

1. Sepulveda Blvd south of Ballona Creek  
This is a wide (6-lane) commercial street lined with storefronts and expansive parking lots, with little visual buffer. The existing tree wells are too small to support a large canopy tree; the resulting small canopies do not match the scale of the street and landscape.
2. Washington Blvd  
This is the longest continuous road in Culver City and the link between the City, the beach, and West Los Angeles. The existing Mexican Fan Palms shape a dramatic vertical alley and aid in wayfinding, but they do not offer shade for pedestrians or visual interest at the level of people, cars, and shops. The lack of shade discourages pedestrian activity and may also encourage higher vehicle speeds.
3. Jefferson Blvd north of Raintree  
This part of Jefferson Blvd has very few tree wells and lacks the extensive medians further south on Jefferson. This lack of street planting creates an imposing character on this section of the wide (5-lane) boulevard. In addition, the lack of trees discourages pedestrian activity along this route, which is a vital connector between the two largest parks in the City.

**10. The recommendations section indicates the places of highest priority for strengthening the urban forest. These recommendations, combined with comprehensive management guidelines and community resources, offer a powerful tool to assist the City and community in shaping a vibrant, healthy and sustainable urban environment.**