



Los Angeles
Center for Urban Natural
Resources Sustainability
Rooted in Research



Los Angeles Tree Summit
Miranda Hutten, U.S. Forest Service
May 22, 2020

TODAY'S PRESENTATION



Los Angeles

Center for Urban Natural
Resources Sustainability

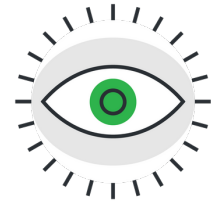
Rooted in Research

- Our unique model
- Research programs
- Tools and resources available to you
- How to engage with us

WHO WE ARE



Need



Vision



Mission



CONVENING

- Annual Partner Meeting
- Fellows Seminar Series
- Hot Topic Seminars on Drought, Fire, and Forest Health

RESEARCH

- Climate Ready Trees Study
- STEW MAP
- Tree Planting Preference Study
- Environmental Justice and Tree Plantings

ACCOMPLISHMENTS

OUTREACH

- Arborfest
- Tree Plantings
- Research Database

Executive Oversight Team



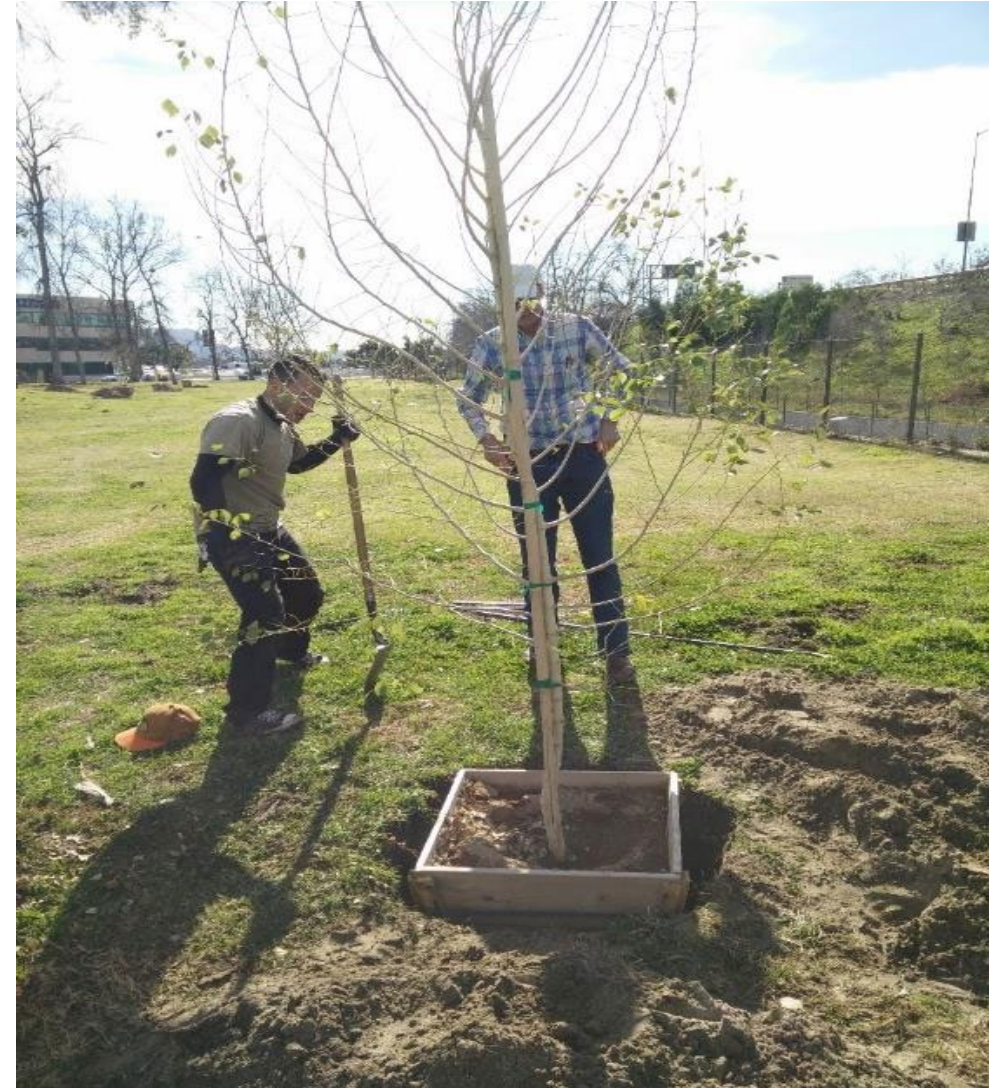


Ongoing Research Programs

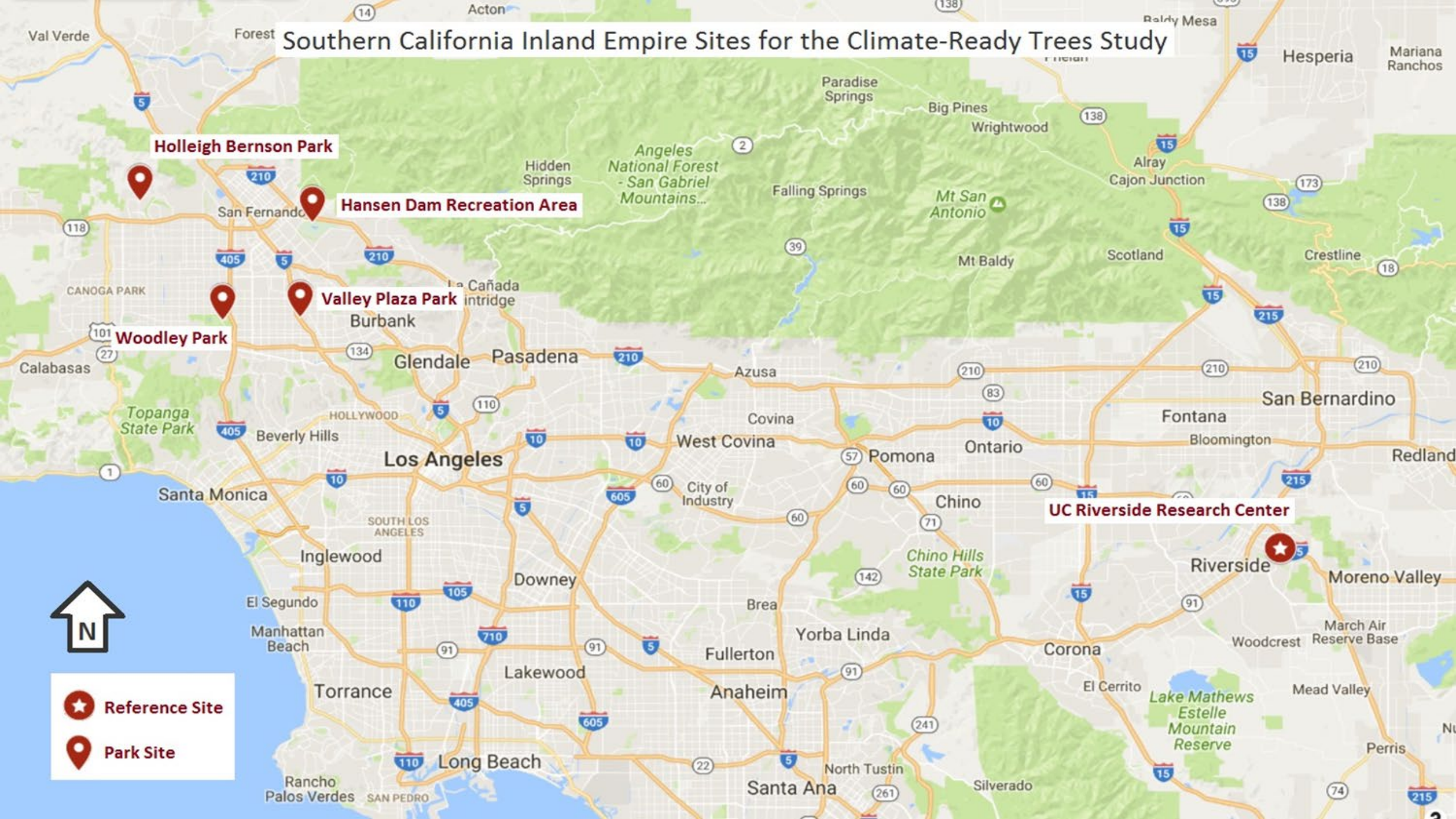


Climate Ready Trees

- **A 20-year study** to test tree species based on:
 - a) Qualities as urban trees
 - b) Potential resilience to anticipated climate change impacts



Southern California Inland Empire Sites for the Climate-Ready Trees Study



-  Reference Site
-  Park Site

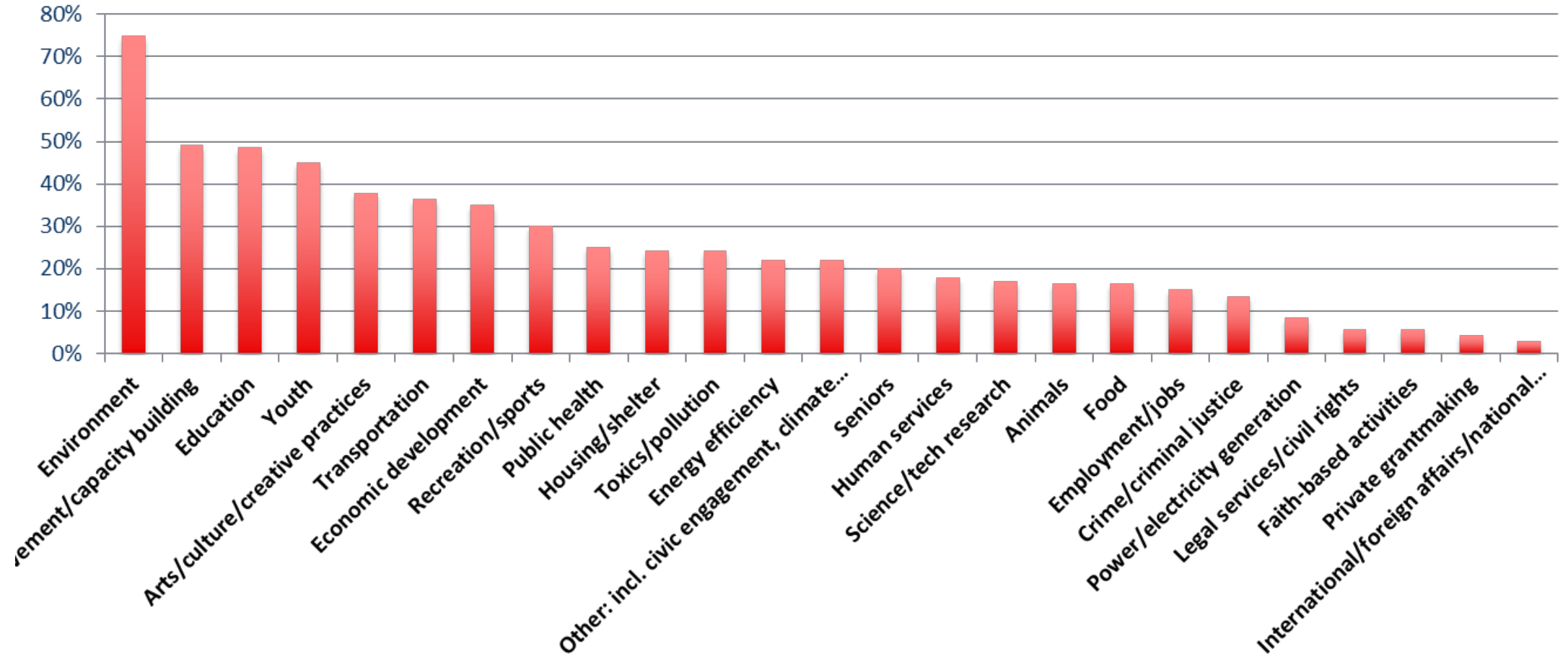
Tree Stewardship Best Practices in Environmental Justice Communities

- A research pilot program that applied the a community-based social marketing to the challenges of urban tree stewardship



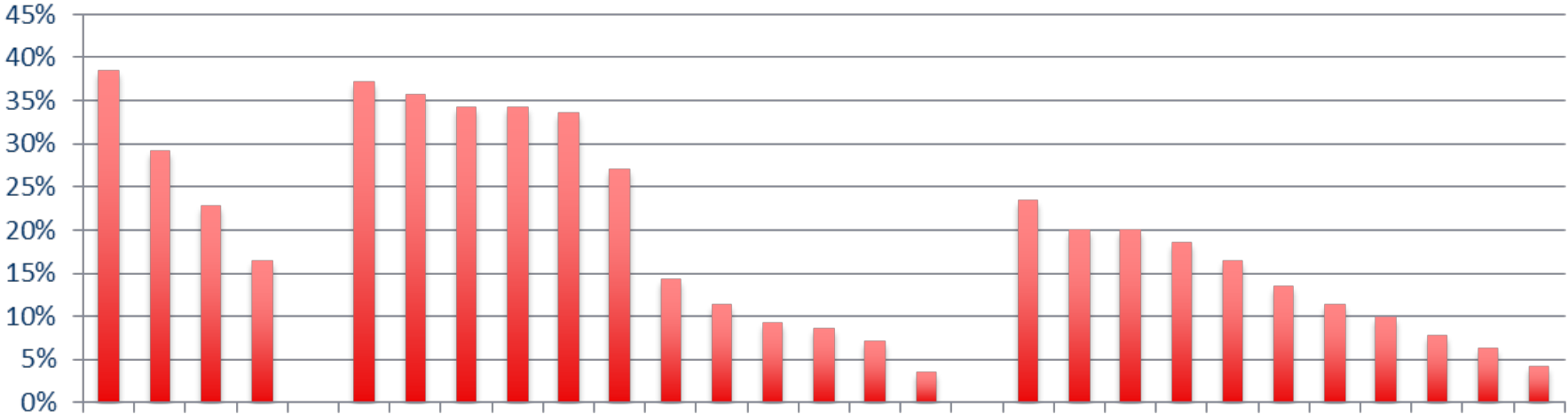
What do you work on? Select all that apply.

N=136



Where do you conduct stewardship activities? Select all that apply.

N=130



Water-related



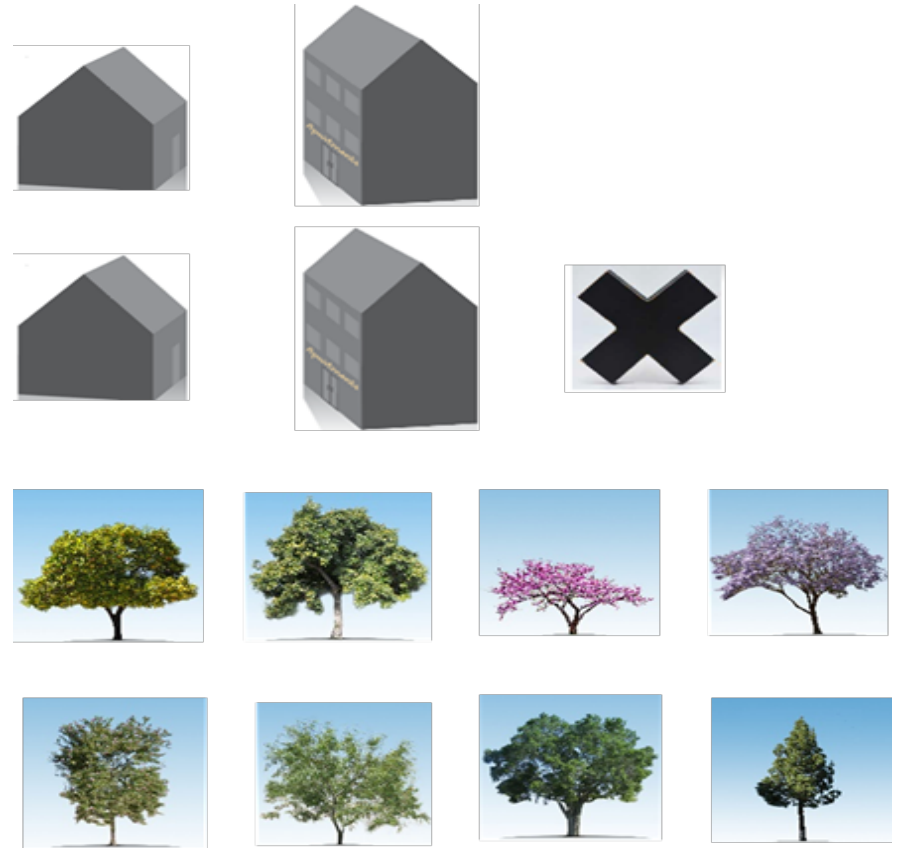
Land-related



Building-related

The Plant Your Street Game: Tree Preference Study

- The study aims to improve understanding of urban tree planting preferences and public engagement by plant your street research game





Fellowship Program



Announcing the 2020-2021 Science Fellowship cohort

The LA Urban Center Executive Oversight Team is pleased to announce the selected 2020-2021 Science Fellowship cohort:

Stephanie Piper

University of California, Riverside

Research Topic Area:

Urban Tree Canopy & Air Quality

Christian Benitez

California State University, Los Angeles

Research Topic Area:

“Quantifying Bird Habitat Using LiDAR,” Urban Tree Canopy Biodiversity, Urban Tree Canopy and Green Infrastructure, Urban Tree Canopy and Environmental Justice

Corinne Bassett

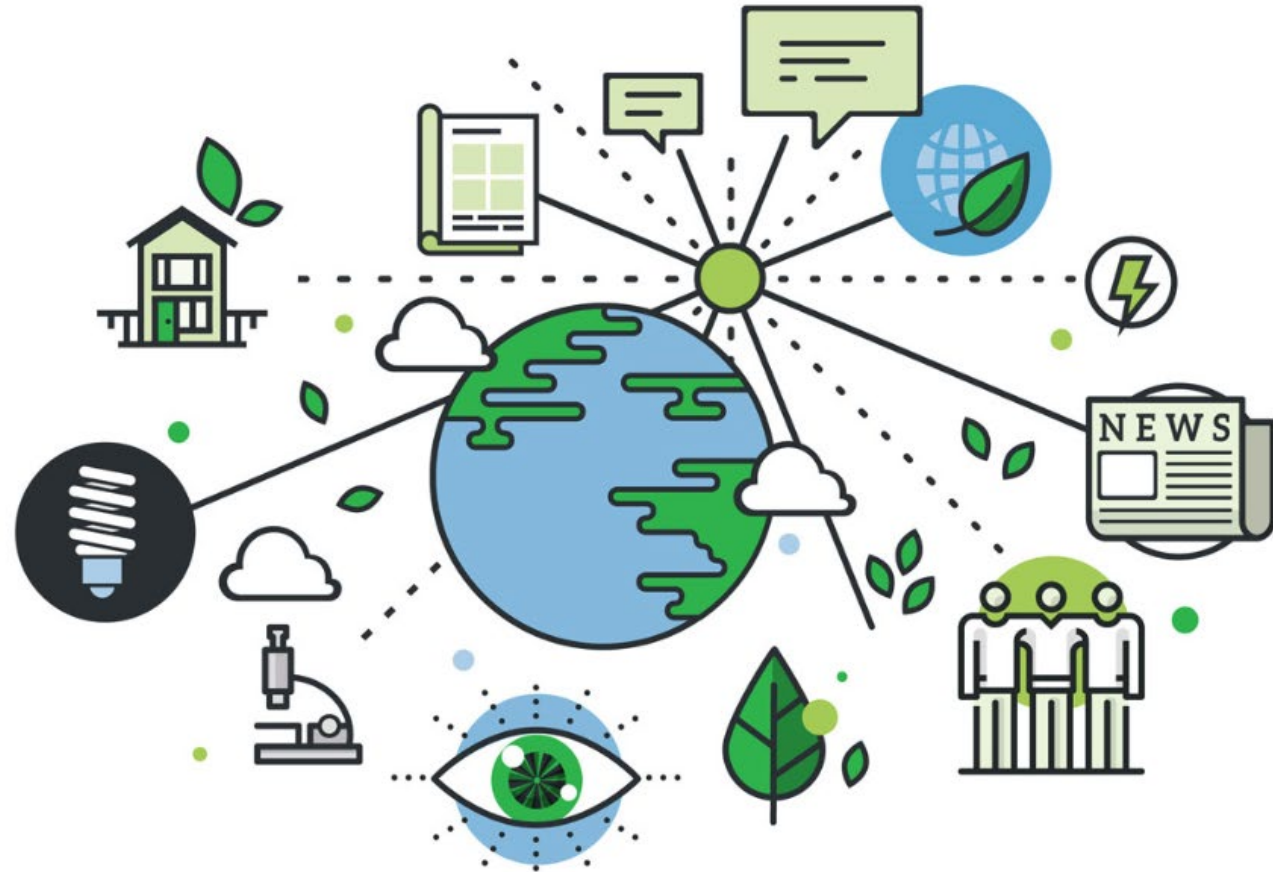
University of British Columbia

Research Topic Area:

Urban Tree Canopy Change Analysis & Impacts of Development



Online Resources



Urban Natural Resources Research Database

A curated database of scientific work on environmental, urban ecosystem, urban natural resources and socioeconomic topics relevant to the southern California region.

Search the database:

Author last name

Title

Keywords

Description

Year to

Publication type

<input type="checkbox"/> Book	<input type="checkbox"/> Book chapter
<input type="checkbox"/> Conference proceedings	<input type="checkbox"/> Journal article
<input type="checkbox"/> Presentation	<input type="checkbox"/> Slideshow
<input type="checkbox"/> Technical report	<input type="checkbox"/> Website
<input type="checkbox"/> Other	

Search

Keywords

aerial and satellite imagery aesthetics air pollution removal air quality Albuquerque allometric equations arboriculture arid and semi-arid climates Asian longhorned beetle Australia Baltimore benefit-cost analysis best management practices biodiversity biovalues BVOCs carbon cycle carbon footprint carbon market carbon sequestration case study children and youth climate change community gardens community participation compensatory valuation computer modeling contact with nature crime denaturation Denver design drought ecological integrity economics ecosystem disservices ecosystem services ecosystem services valuation ecosystem structure and function education emerald ash borer energy conservation engineered soil environmental justice fauna field study forest health forest regeneration forest remnants forest structure gardens GIS governance greenhouse gases greenhouse gas offsets green infrastructure greenspace groundwater gypsy moth habitat hazards and risks hedonic valuation history human health and well-being I-Tree Eco I-Tree Streets impervious cover invasive species inventory irrigation isoprene jobs land cover landscape architecture land use leaf area life-cycle analysis Los Angeles machine learning manuals monoterpenes native species natural regeneration New York noise reduction non-profits nonpoint source pollution nursery open space ozone parking lots parks park trees pests and diseases planning policy prioritization property values public health public perception race and ethnicity rainfall interception recreation remote sensing residential restoration review risk management roadside vegetation Sacramento safety Salt Lake Santa Monica Seattle shade trees similarity index social benefits socioeconomic software soil soil carbon spatial analysis species composition species diversity species importance value spruce State Implementation Plans stewardship stormwater management streetscapes street trees surveys and interviews sustainability temperature moderation timber harvest traffic-generated pollutants transpiration transportation tree canopy assessment tree canopy cover tree density tree growth tree health tree planting tree planting initiative trees on private property UFORE urban-wildland interface urban agriculture urban canyons urban densification Urban Forest Health Monitoring urban forest management urban forestry urban green urban greening Urban heat island urbanization urban nature urban planning urban woodlands valuation vegetative barrier Water water-use efficiency water quality watersheds wildfire wildlife wood utilization wood waste

New entries:

Do you have a suggestion for a database entry? Send us an email with the title and link.

Research Database

A method for locating potential tree-planting sites in urban areas: A case study of Los Angeles, USA

by C Wu, Q Xiao, EG McPherson

Urban Forestry & Urban Greening 7(2):65-76

2008

In support of Los Angeles's Million Tree Initiative, a method was devised to determine if there were sufficient potential tree planting sites for the project. Remote sensing technology and QuickBird satellite imagery were used to classify land cover into four tree-relevant categories: impervious surface, trees, irrigated grass, bare soil/dry grass. An algorithm was developed to find suitable planting spaces (land cover of grass, bare soil, or dry grass; tree trunks a specified distance from impervious surface; minimum square feet of pervious surface available; no crown overlap with existing trees). The algorithm featured two modules, the first to identify planting sites and the second to "plant trees" within those areas. It was designed to be run repeatedly, with each iteration adding trees to appropriate areas that remain open. Ground-truthing was performed to assess accuracy. A total of 2.2 million suitable planting sites were found.

Keywords: aerial and satellite imagery, computer modeling, GIS, land cover, remote sensing, tree canopy cover, tree planting initiative, and urban forestry

Link: <http://www.treesearch.fs.fed.us/pubs/30226>

Engaging Youth



Be a Green School.

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VISIT

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Learn more about the forest and all that they have to offer! Enjoy these science tips and fun facts to help you appreciate and conserve our natural lands.

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DISCOVER the
FOREST

Tools & Presentations



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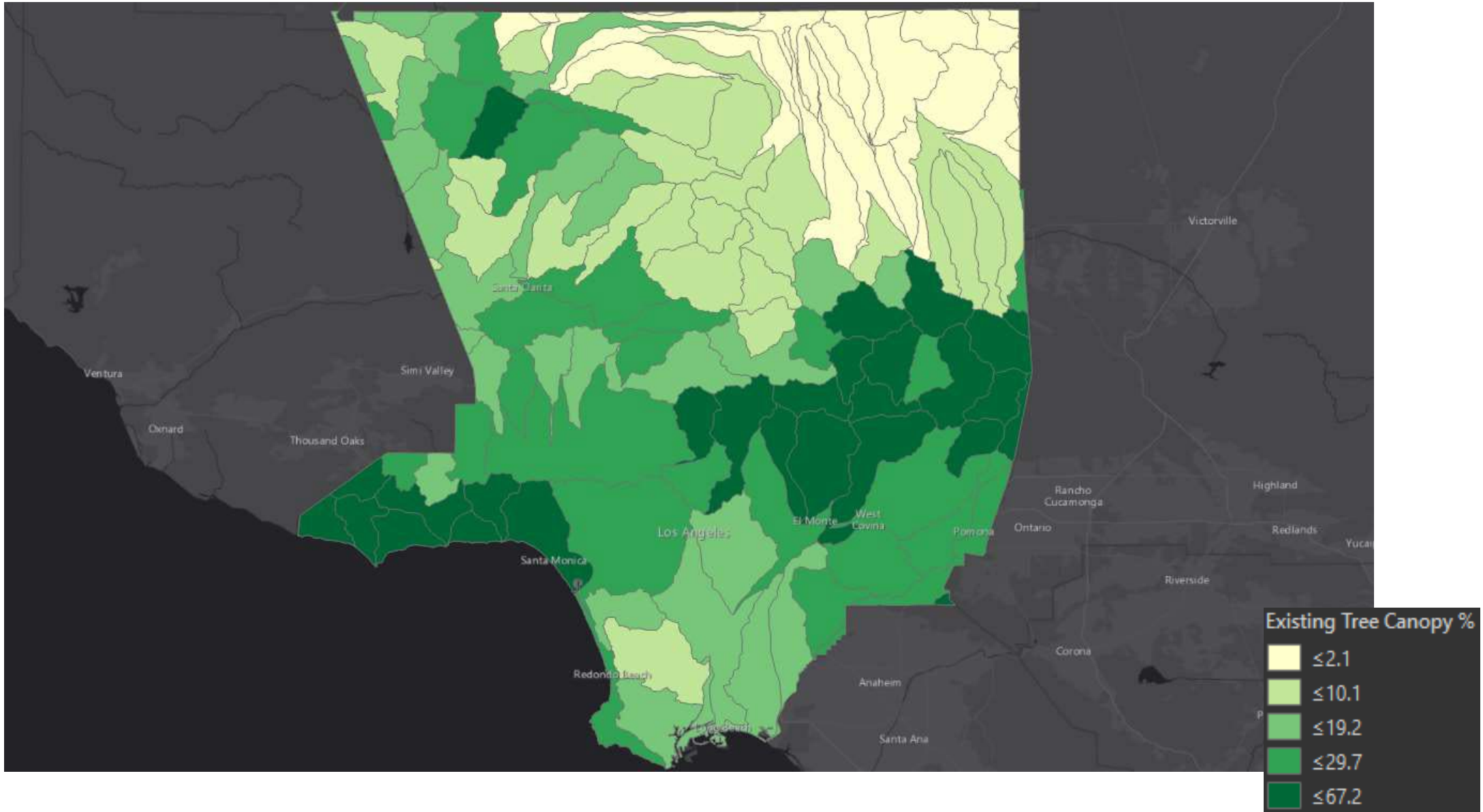
Stewardship Mapping and Assessment Project

The Stewardship Mapping and Assessment Project (STEW-MAP) is an online, searchable GIS database that helps people identify and locate environmental stewardship organizations, partnerships, and opportunities in their city.

[VISIT](#)

*Coming Soon
LiDAR Online
Viewer*





How to Engage With the LA Urban Center



Partners meetings / workshops / science seminars



How to Engage With the LA Urban Center

Connect with ongoing studies.

Share your work /
resources / products



How to Engage With the LA Urban Center

Join an outreach event – connect with urban publics & the next generation of conservation leaders



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