



CLIMATE CHANGE, PUBLIC HEALTH, AND ENVIRONMENTAL JUSTICE

# CALIFORNIA'S URBAN FORESTS

WORLD FORUM ON URBAN FORESTS | MANTOVA, ITALY | NOVEMBER 2018

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# THE BUILDING BLOCKS

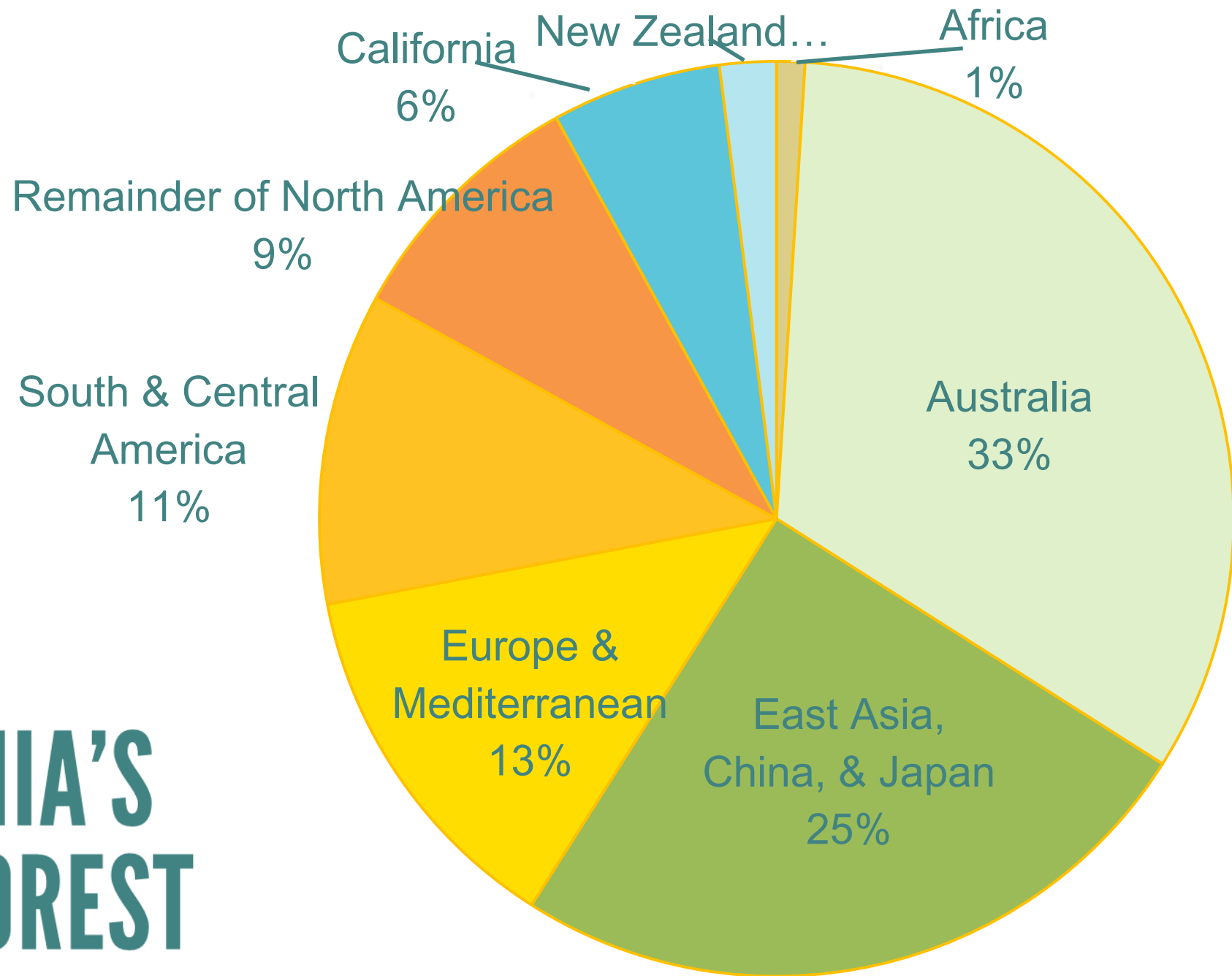








# CALIFORNIA'S URBAN FOREST







**OAKLAND, CA**





**2 MILES AWAY...**





**EQUALITY**



**EQUITY**





STRUCTURE



FUNCTION



BENEFITS



VALUE





SEQUESTER OVER  
**100M TONS CO<sup>2</sup>**  
+  
REDUCE HEATING USE  
VALUED AT  
**\$3.1B (USD)**





**REDUCE ELECTRICITY USE  
VALUED AT  
\$4.78B (USD)**

**+**

**AVOID EMISSIONS OF POLLUTANTS  
VALUED AT  
\$3.9B (USD)**





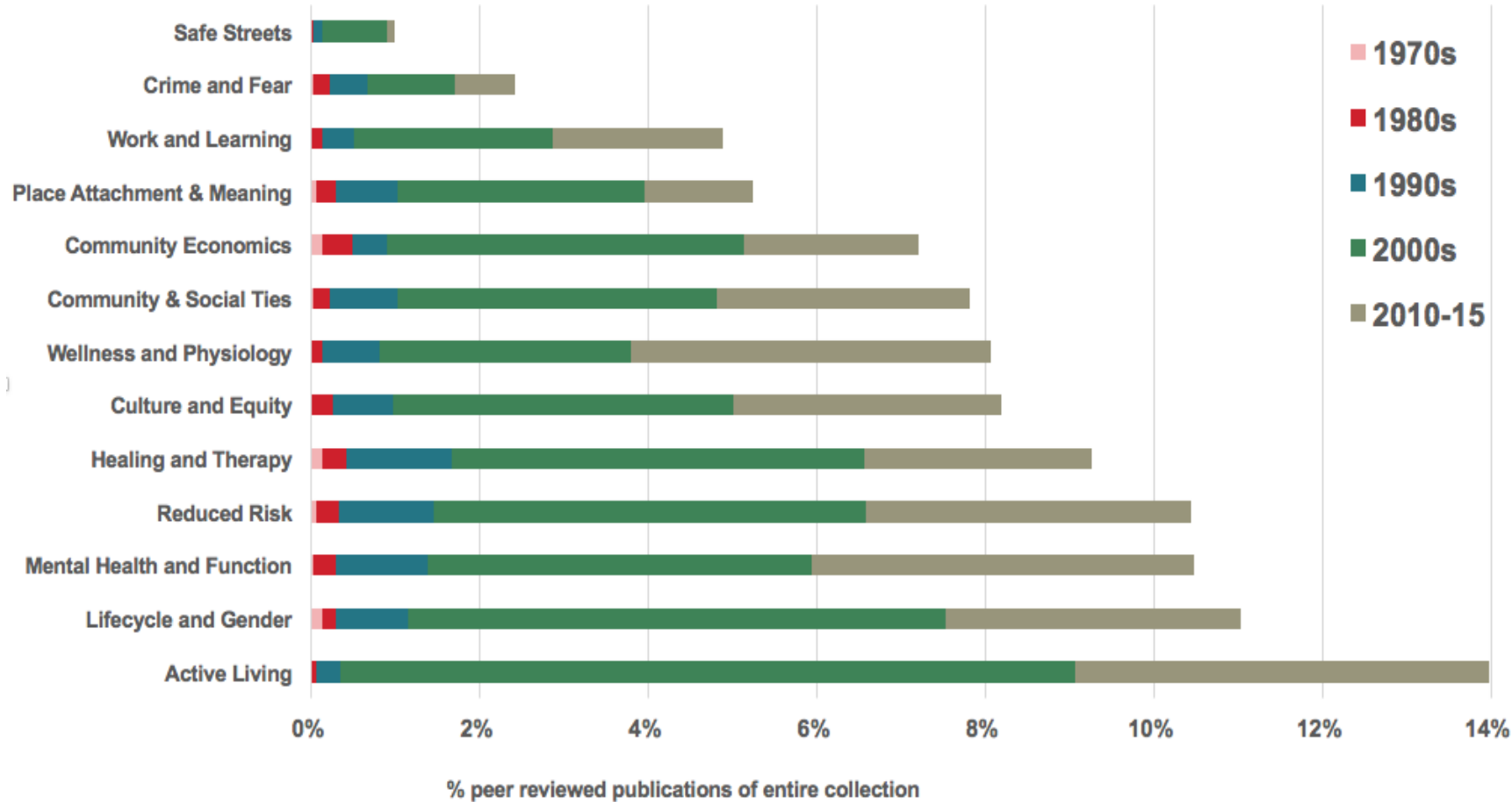


# GROWING TREES AS CITY ASSETS



# Green Cities: Good Health

web site database of >3,500 peer-reviewed publications



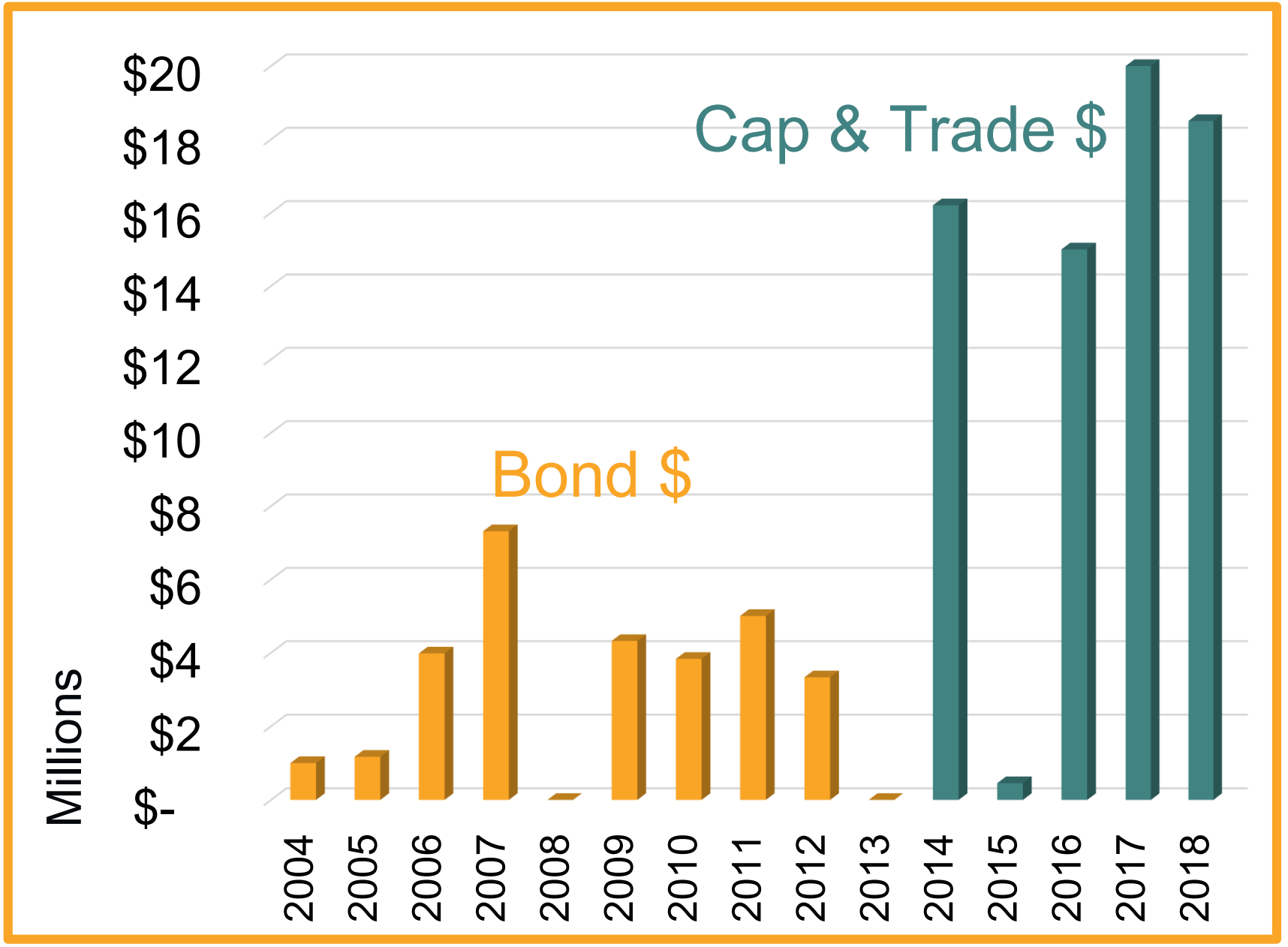
**HUMAN HEALTH  
AND  
WELLBEING**

“A public health focus was the most likely to elicit emotional reactions consistent with support for climate change mitigation and adaptation”

Article: A public health frame arouses hopeful emotions about climate change



# CALIFORNIA URBAN FOREST FUNDING





**Affordable Housing and Sustainable Communities**  
**Integrating affordable homes and sustainable transportation**





**POWERFUL FORCES**



**UF BIOPHYSICAL  
BENEFITS RESEARCH**



**POWERFUL FORCES**






**UF BIOPHYSICAL  
BENEFITS RESEARCH**



**UF HUMAN HEALTH BENEFITS RESEARCH**



**POWERFUL FORCES**



**UF BIOPHYSICAL  
BENEFITS RESEARCH**

**UF CARBON PROTOCOL +  
USFS CALCULATIONS**




1504.73



**UF HUMAN HEALTH BENEFITS RESEARCH**

**POWERFUL FORCES**





UF BIOPHYSICAL  
BENEFITS RESEARCH

UF CARBON PROTOCOL +  
USFS CALCULATIONS




CAP+TRADE



UF HUMAN HEALTH BENEFITS RESEARCH



POWERFUL FORCES



**UF BIOPHYSICAL  
BENEFITS RESEARCH**



**UF CARBON PROTOCOL +  
USFS CALCULATIONS**



**CAP+TRADE**



**UF HUMAN HEALTH BENEFITS RESEARCH**



**REQUIRED FOCUS ON  
DISADVANTAGED COMMUNITIES**

# POWERFUL FORCES





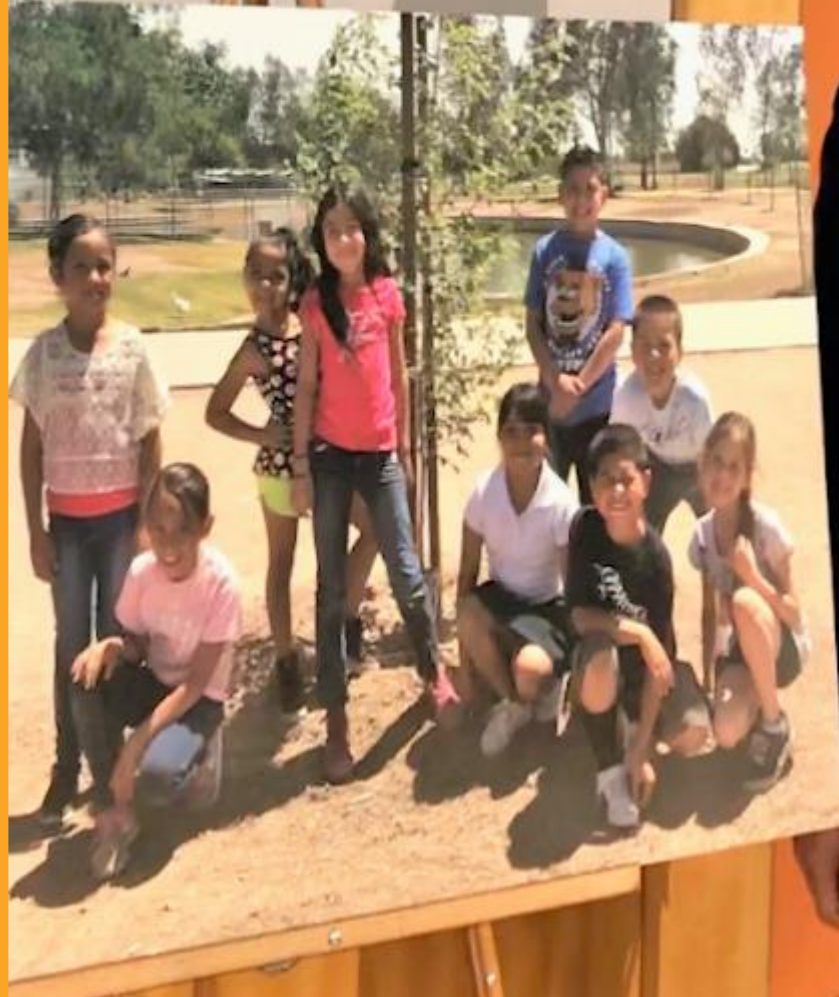
CALIFORNIA STRATEGIC GROWTH COUNCIL







**Lorena Gonzalez  
Fletcher**



**Eduardo Garcia**



**\$53 Million**



**99,000 Trees**



**360,000 Metric Tons**





# THE BUILDING BLOCKS



# THANK YOU!



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# CITATIONS

Slide 5:

Ritter, M.(2011) **A California's Guide to the Trees Around Us**. Berkeley, CA: Heyday.

Slide8:

State of California (2018) *Cap-and-Trade Auction Proceeds Third Investment Plan*. Retrieved from Agency Website: [https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/revised-draft-three-year-investment-plan-highlights.pdf?\\_ga=2.202074065.1581034877.1542819911-1942264434.1538164639](https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/revised-draft-three-year-investment-plan-highlights.pdf?_ga=2.202074065.1581034877.1542819911-1942264434.1538164639)

Slide 19:

Wolf, K. (2018). *Livable Cities*. Retrieved November 21, 2018, from <https://depts.washington.edu/hhwb/>

Slide 20:

Myers, T.A., Nisbet, M.C., Maibach, E.W., Leiserowitz, A.A. (2012). A public health frame arouses hopeful emotions about climate change. *Climatic Change* 113: 1105-1112.



# RESOURCES

California ReLeaf: Resources Page: <http://californiareleaf.org/resources/>

California Urban Forest Council Resources Page: <https://caufc.org/resources/>

Matt Ritter Resources Page: <http://www.mattritter.net/>

iTree Homepage: <https://www.itreetools.org/>

CA Climate Investment Programs Urban Forestry Page: [http://calfire.ca.gov/resource\\_mgt/CCI](http://calfire.ca.gov/resource_mgt/CCI)

Green Cities: Good Health (Dr Kathy Wolf): <https://depts.washington.edu/hhwb/>

US Forest Service Technology and Science Delivery Page: <https://www.fs.fed.us/research/urban-webinars/>

## What California Climate Policy Means for Urban Forests

October 8, 2014

Chuck Mills, California ReLeaf

John Melvin, CAL FIRE

Greg McPherson, USDA Forest Service

## Urban Forests for Human Health and Wellness

September 10, 2014

Kathleen Wolf, University of Washington

Teresa M. Hazen, Legacy Health

## The Science and Future of i-Tree

May 13, 2015

David Nowak, USDA Forest Service