INSTITUTE FOR LOCAL GOVERNMENT℠

Building Fire-Adapted Communities: A Roadmap for California Leaders

TUESDAY, SEPTEMBER 9, 2025 | 11 AM – 12 PM

INSTITUTE FOR LOCAL GOVERNMENT℠

Promoting Good Government at the Local Level

THANKS FOR JOINING US TODAY!

Host & Moderator

MELISSA KUEHNE
Director of Enterprise Programs and Special Projects
Institute for Local Government

OVERVIEW

Welcome & Introductions

Presentations & Discussion on Wildfire Risk Reduction:

- **Jonathan Holtzman** – Renne Public Law Group
- **Dave Winnacker** – Retired Moraga-Orinda Fire District Chief and RPMG Consultant

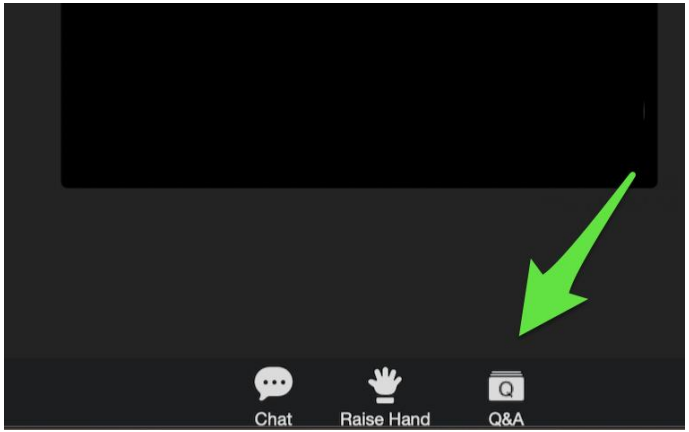
Audience Q&A

Wrap Up & Adjourn

We welcome your written questions and comments in Zoom's Q&A feature throughout the webinar!

TECH OVERVIEW & HOUSEKEEPING

- All webinar participants will be on **MUTE** for the duration of the event.
- Please type any questions for into the **Q&A BOX** at any time during the session.



- A recording of the session will be available shortly after the webinar.

ABOUT THE INSTITUTE FOR LOCAL GOVERNMENT (ILG)

NON-PROFIT, NON-PARTISAN AND HERE TO HELP

- The Institute for Local Government is the non-profit training and education affiliate of three statewide local government associations
- Together with our affiliates, we serve over 2,500 local agencies – cities, towns, counties, and special districts
- We provide practical and easy-to-use resources so local agencies can effectively implement policies on the ground

LEAGUE OF CALIFORNIA CITIES

CSAC

CSDA

California Special Districts Association

Districts Stronger Together

ILG'S PROGRAMS AND SERVICES

Program Areas

- Leadership & Governance
- Workforce Development & Civics Education
- Public Engagement
- Sustainable & Resilient Communities

Our mission is to help local government leaders **navigate complexity**, **increase capacity & build trust** in their communities.

Services

- Education & Training
- Technical Assistance
- Capacity Building
- Convening

THIS IS JUST THE BEGINNING OF THE CONVERSATION

- Wed, Oct. 1, 11 AM – 12:30 PM | Measure Twice, Cut Once: Creating the Right Wildfire Risk Reduction Plan for Your Community
- Thu, Nov. 13, 11 AM – 12:30 PM | Controlling Your Own Destiny: A Local Leader's Toolbox for Reducing Wildfire Risk
- Mon, Jan. 26, 2026, 11 AM – 12:30 PM | Ch-Ch-Changes: CEQA and How It Impacts Your Wildfire Risk Reduction Efforts

Registration Now Open!

TODAY'S PANELISTS

Jonathan Holtzman
Founding Partner
Renne Public Law Group

Dave Winnacker
Retired Moringa-Orinda Fire District Chief
RPMG Consultant

RPMG
MANAGEMENT GROUP

Demystifying Urban Fire Loss

Dave Winnacker
Jon Holtzman

Sept 2025

Why Are We Here

Increase in Fuel Loading*

1. Legacy of logging increased tree density in forested landscapes
2. Establishment of fire exclusion policies following the Big Burn of 1910
3. Industrialization of fire suppression following WWII

Development of Vulnerable Communities in Fire Dependent Landscapes

4. Lack of WUI building code prior to 2008 (CBC Chapter 7A)
5. Inadequate defensible space

Compression of Rainy Season and Drought

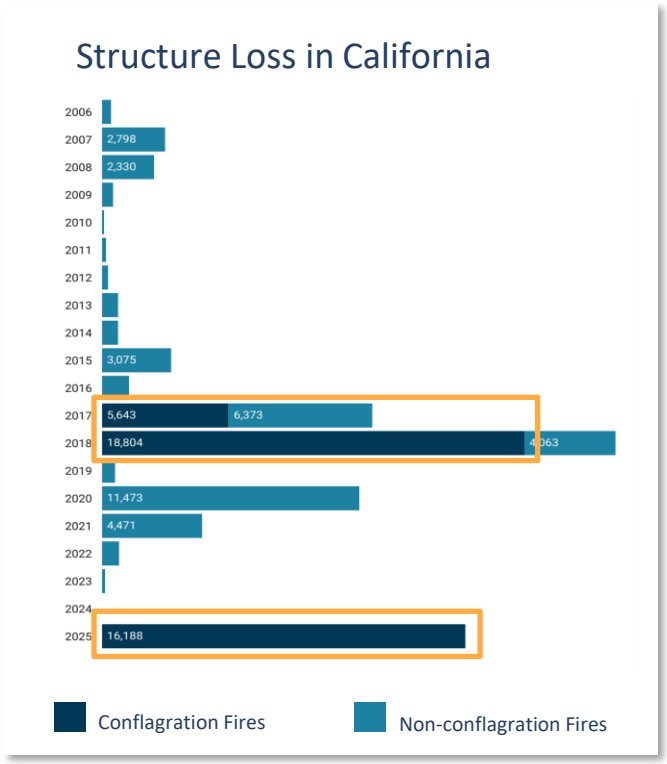
6. Increase in available vegetative fuel availability
7. Increase in vapor deficit

Hotter & Dryer Days

8. Increase in the number of days capable of supporting extreme fire behavior

*Southern CA has increased fire return interval in 26% of FRA landscape

Major Loss, Few Fires



Only 4 Fires Account for 50% of California's Structure Loss

These fires were characterized by high spread rates under extreme weather conditions

80,745
Total Structures Burned

40,110
Conflagration Structures Burned

50.3%
Conflagration Rate

Not the New Normal

- Historic annual fire area
  4.44M acres

- 2020 fire area
  4.2M acres

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Available online at www.sciencedirect.com
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Forest Ecology and Management xxx (2007) xxx–xxx

Forest Ecology and Management

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Prehistoric fire area and emissions from California's forests, woodlands, shrublands, and grasslands

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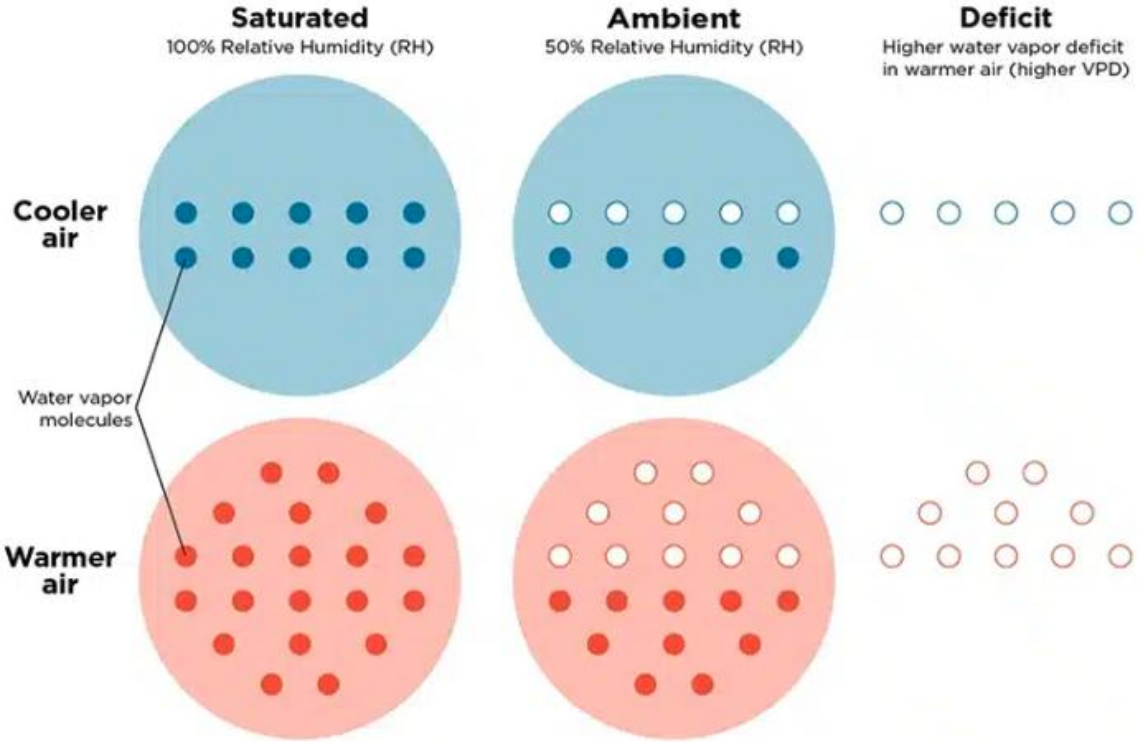
Abstract

In the majority of US political settings wildland fire is still discussed as a negative force. Lacking from current wildfire discussions are estimates of the spatial extent of fire and their resultant emissions before the influences of Euro-American settlement and this is the focus of this work. We summarize the literature on fire history (fire rotation and fire return intervals) and past Native American burning practices to estimate past fire occurrence by vegetation type. Once past fire intervals were established they were divided into the area of each corresponding vegetation type to arrive at estimates of area burned annually. Finally, the First Order Fire Effects Model was used to estimate emissions. Approximately 1.8 million ha burned annually in California prehistorically (pre 1800). Our estimate of prehistoric annual area burned in California is 88% of the total annual wildfire area in the entire US during a decade (1994–2004) characterized as "extreme" regarding wildfires. The idea that US wildfire area of approximately two million ha annually is extreme is certainly a 20th or 21st century perspective. Skies were likely smoky much of the summer and fall in California during the prehistoric period. Increasing the spatial extent of fire in California is an important management objective. The best methods to significantly increase the area burned is to increase the use of wildland fire use (WFU) and appropriate management response (AMR) suppression fire in remote areas. Political support for increased use of WFU and AMR needs to occur at local, state, and federal levels because increasing the spatial scale of fire will increase smoke and inevitability, a few WFU or AMR fires will escape their predefined boundaries.

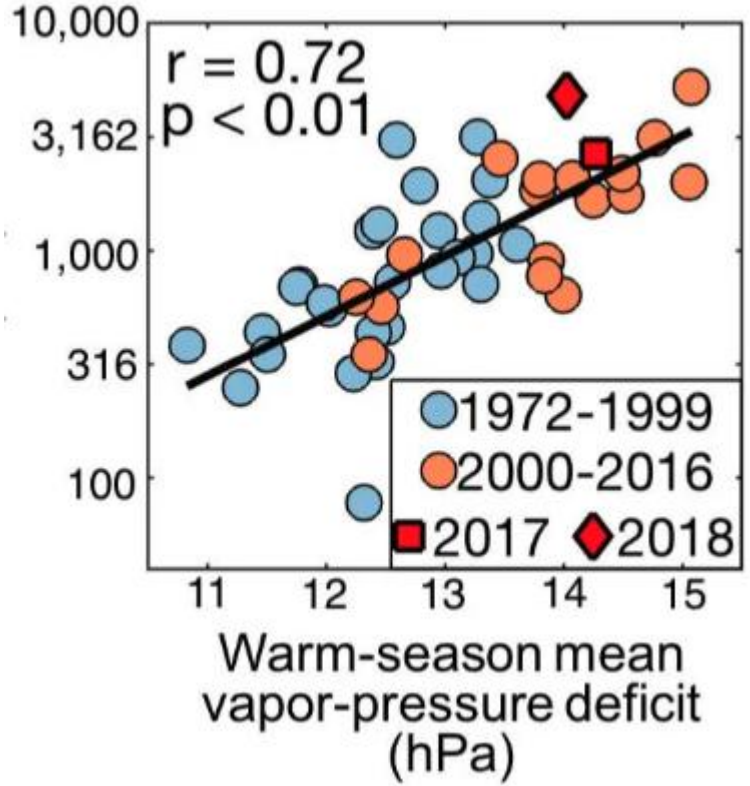
Keywords: Wildfire; Fire regime; Fire policy; Fire suppression; Fire rotation; Smoke; Air resources; Air quality; Particulates; Fire exclusion; Carbon

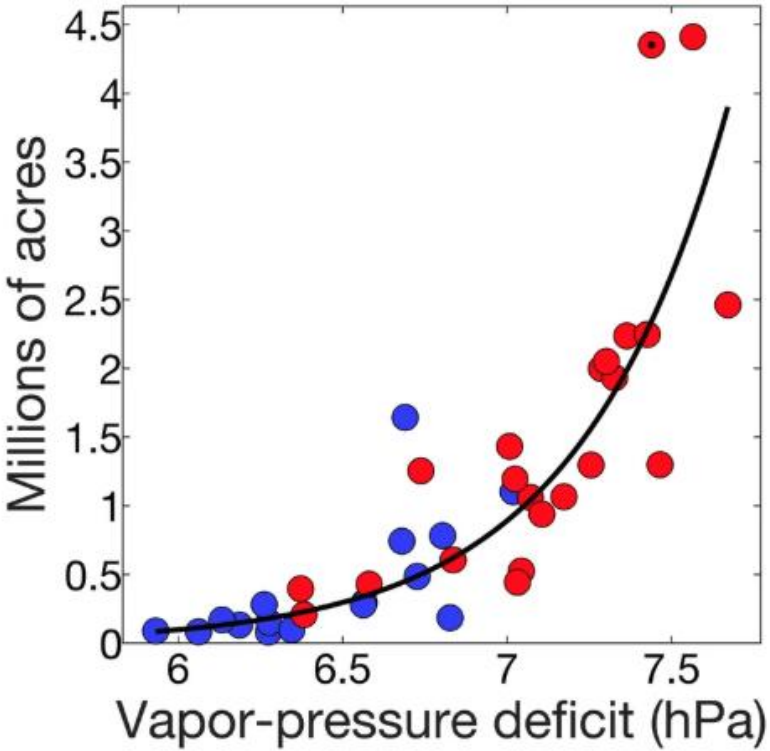
Vapor Pressure Deficit



California's Thirsty Future: The Role of Vapor Pressure Deficit in Our Changing Climate and Drought-Partida, J.

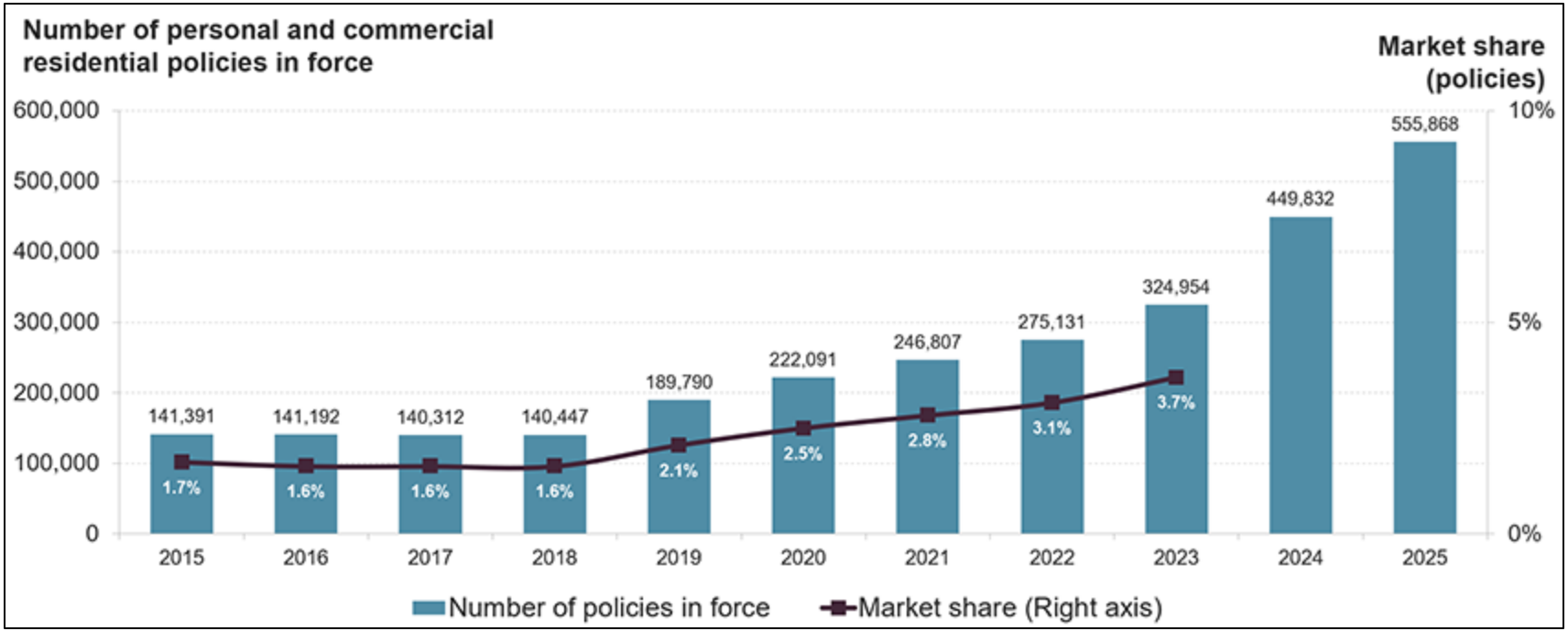
Vapor Pressure Deficit



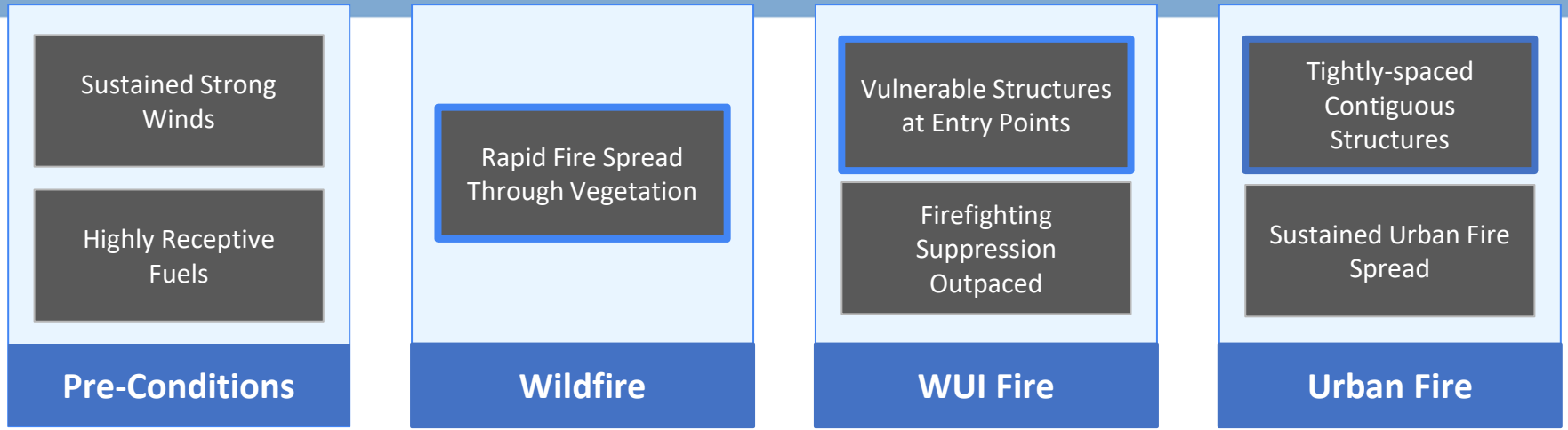


Observed Impacts of Anthropogenic Climate Change on Wildfire in California- Williams et al

Insurability and FAIR Plan Usage



Urban Fire Loss Framework



Vegetation Fire Pathways

Where will fire move most rapidly across the landscape and expose values at risk?

Urban Fire Spread

How will fire travel within the built environment?

Fire Spread Mechanisms

Phase: Wildland Fire
Fire spreads from vegetation to vegetation through ground and ember components

Mechanism: Ground Fire
Wind-driven fire burning through surface vegetation

Mechanism: Vegetation Embercast
Burning material carried by the wind produced by vegetation

Phase: Transition
Initial structures are ignited by vegetation, creating new fire behavior dynamics.

Phase: Urban Fire
Fire burns through structures, landscaping, and other built environment elements.

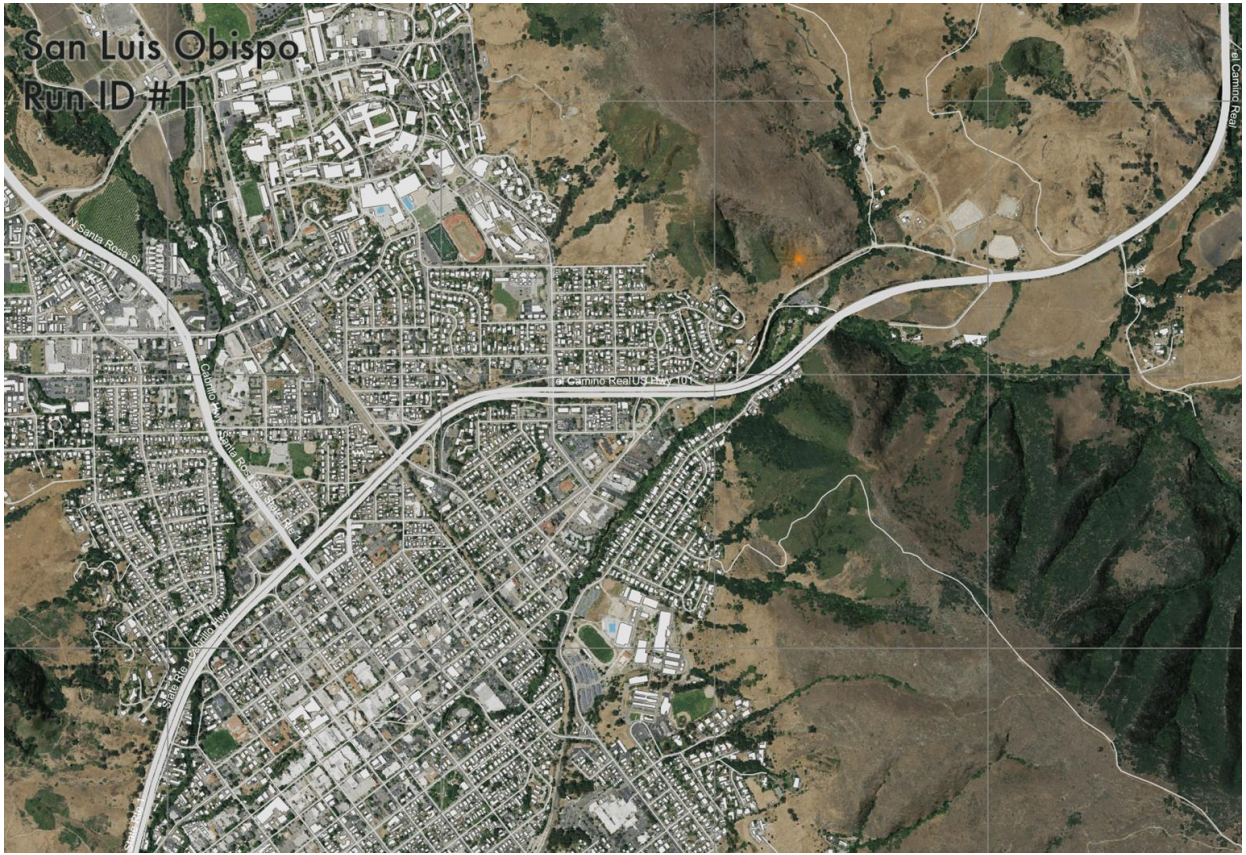
Mechanism: Structure Embercast
Burning material carried by the wind produced by structures. Heavier and carry more energy than vegetation embers.

Mechanism: Direct Heat Transfer
Radiant and convective heat transfer from burning structures to neighbors.

Mechanism: Surface Fire Spread
Surface fire spread between landscaping elements and adjacent structures.

Phase: Structure to Vegetation
Structures can ignite vegetation through embers, direct heating, or surface spread.

Modeled Fire Spread



Community Wildfire Risk Reduction Measures

Risk reduction activities designed to reduce fire spread in the built environment can either reduce the sources of exposure (reduce upwind fire spread and embers) or reduce the susceptibility of the targets (harden homes and create defensible space).

Vegetation Management
Limit speed and connectivity of fuel around structures. Reduces upwind ember generation into the community.

Parcel Hardening at Points of Transition
Reduce vulnerabilities in areas exposed to ground fire front. Reduces likelihood of vegetation-to-structure fire transition.

Ember Hardening
Reduce ember vulnerabilities on parcels in range of embers produced by vegetation. Reduces the susceptibility of structures.

Harden High-Propagation Blocks
Reduce vulnerabilities in areas where fire is likely to travel through and lead to significant consequences. Reduces the susceptibility of structures.

RPMG

MANAGEMENT GROUP

Policy Barriers

The Power of Privets

Why Not Zone Zero?
Didn't castles have moats?

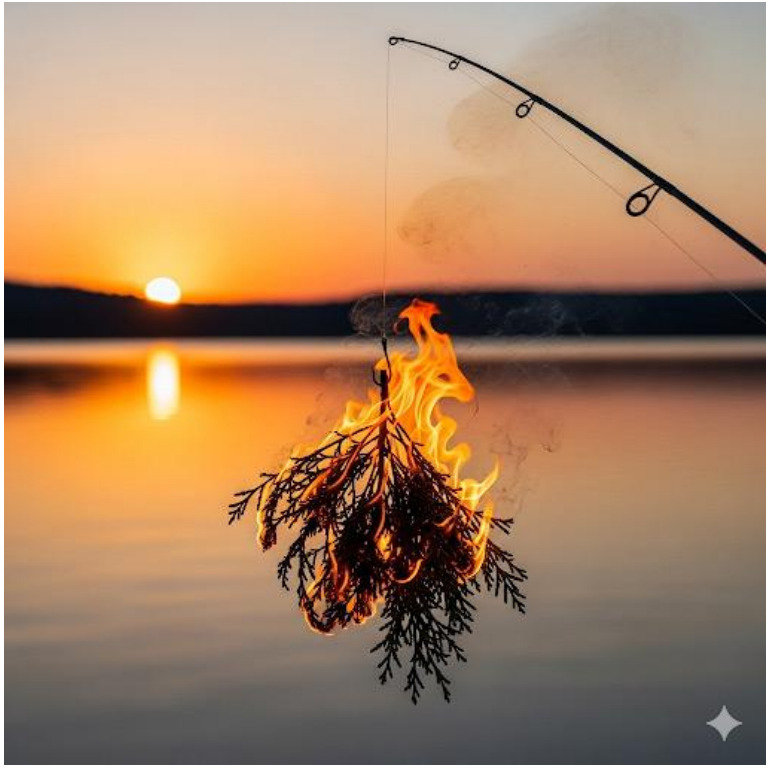
Dead Trees host woodpeckers... and fire?

If your home is your castle, aren't the castle grounds yours too?

Housing Concerns

The confusion between housing needs and fire concerns

The Legislature takes the bait...



Interjurisdictional Issues

Special Districts as Landowners

CalFire and Bd. of Forestry

Cities and Counties vs. Fire Districts

Other Barriers

State Inaction

Tragedy of the Commons

The Enforcement Challenge

AUDIENCE Q&A

What questions or comments do you have for us?

DON’T MISS THE REST OF THE SERIES!

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RECORDING AVAILABLE SOON

The recorded presentation and materials will be shared electronically with all attendees a few days after the webinar.

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