

Preparations for the 2023 fire season:

Reason for Hope

Mono County Board of Supervisors

Yana Valachovic, UC Cooperative
Extension Forest Advisor

June 13, 2023



Photo: Insurance Institute for Business and Home Safety

WILDFIRE RESILIENCE workshops

Week of outreach

- ✓ Great team in the Eastern Sierra
- ✓ Adaptation does not happen overnight
- ✓ Pace and scale takes time
- ✓ Sustained commitment
 - Partners in action
 - UC Master Gardeners
 - Contractors
 - Realtors
 - Retail- building materials suppliers



WHITEBARK
INSTITUTE

Cultivating Resilient Landscapes and Communities

**MONO COUNTY**
JUNE 2023

**INYO COUNTY**
JUNE 2023

11 Science On-Tap Wildfire Trivia SUN @ June Lake Brewing	15 Wildfire Resilience Tour THURS Bishop Paiute Tribe
12 Lunch & Learn MON Contractors/Landscapers Working Toward Resilience	15 Science On-Tap Wildfire Trivia THURS @ Mountain Rambler Brewery
12 Realtors & Home Assessors MON Wildfire Insurance for Home Sales Virtual Option Available for Both Counties	16 Wildfire Resilience Tour FRI Independence Communities
12 Fire-Adapted Presentation MON Virtual Option for Both Counties	16 Happy Hour FRI Contractors/Landscapers Working Toward Resilience
13 HOA & House Dwellers TUES Defensible Space Tours	
14 Lunch & Learn WED Crowley Lake Community Resilience	

Workshop Instructor- **YANA VALACHOVIC**
UC Forest Advisor, Humboldt - Del Norte County Director
Yana is a registered professional forester and scientist who is passionate about helping communities learn to live with wildfire. She will bring key insights into building and landscaping design strategies to improve wildfire resilience.



For event times and locations, visit
www.whitebarkinstitute.org/copy-of-calender



Funding for this project provided by the California Department of Forestry and Fire Protection's Fire Prevention Program as part of the California Climate Investments Program.

Wildfires are increasing in size and intensity

In the last 10 years in California.....

- **1 of every 8 acres has burned**
- **Over 43,000 structures have been destroyed**
- **173 lives have been lost**
- **Insurance industry is sending strong signals that change is required**

Wildfires hurting our economy

- \$150 billion loss in 2018
 - \$28 B in capital losses
 - \$32 B in health care costs
 - \$89 B in indirect losses
- **Landfill** service life is being shortened with fire debris
- Accelerated **road** wear and tear
- **Insurance** availability affects our future
- **Tourism** impacts



A call to action and a vision for resilience

Functioning insurance market

Facets of Fire Resiliency



Proactive management protects communities and improves forest health

No treatment

Thinning and Rx fire

Thinning

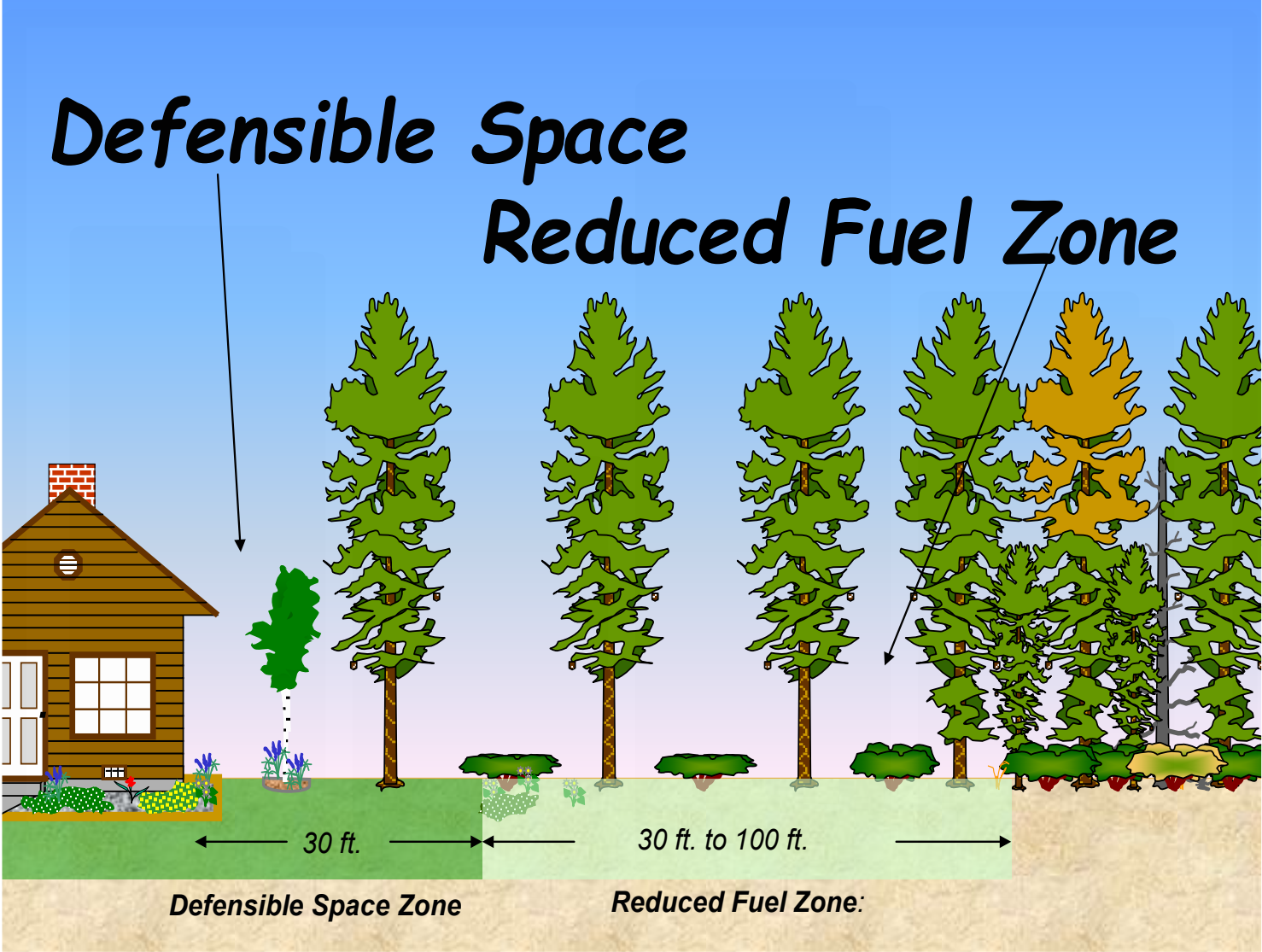
Bootleg Fire 2021



Photo: Courtesy Eric Knapp

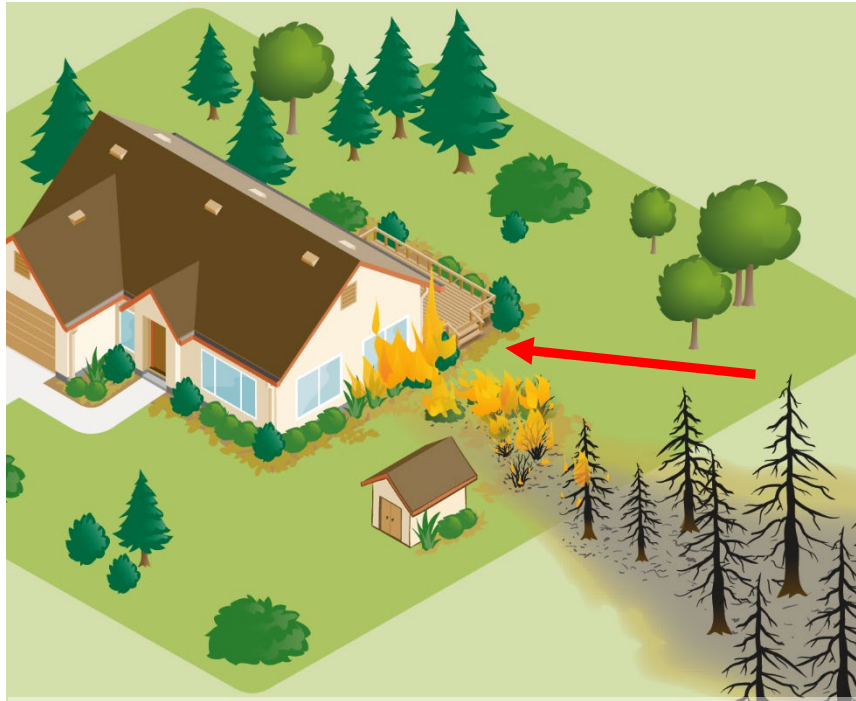


Wildfire mitigation is evolving



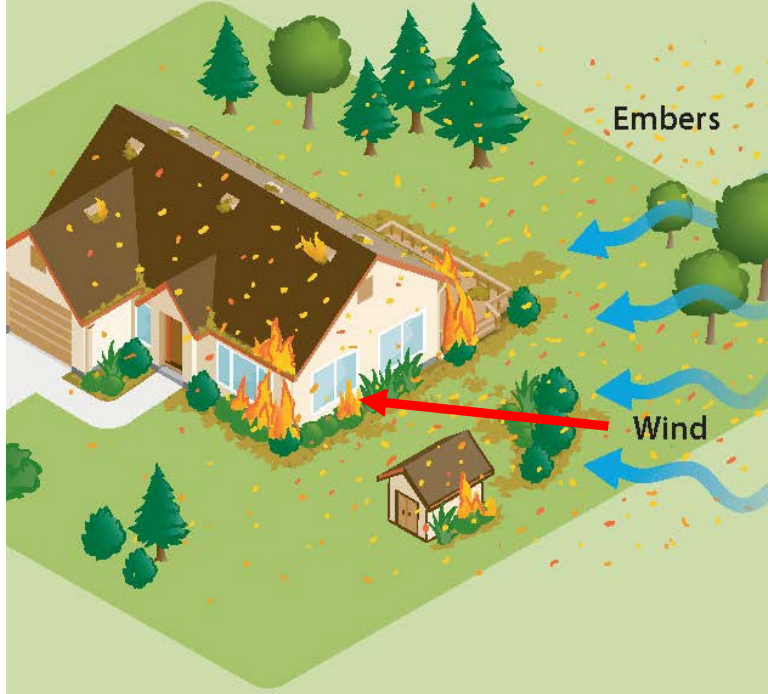
Pathways for wildfire

Direct flame contact



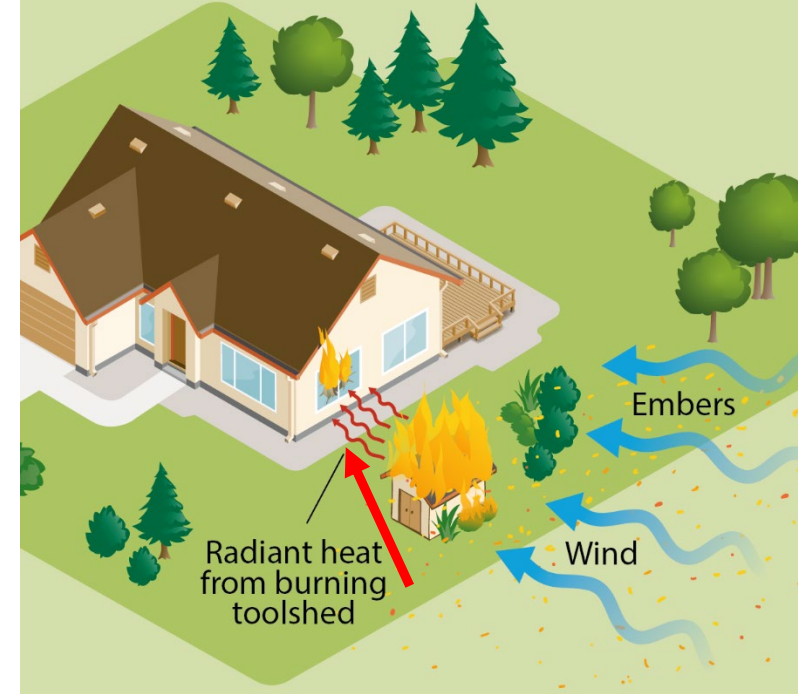
Defensible space implementation interrupts fire pathways and reduces the potential for direct flame contact

Embers



Home hardening with defensible space can help mitigate ember exposure

Radiant heat



Home hardening and fuel reduction can address potential radiant heat exposure



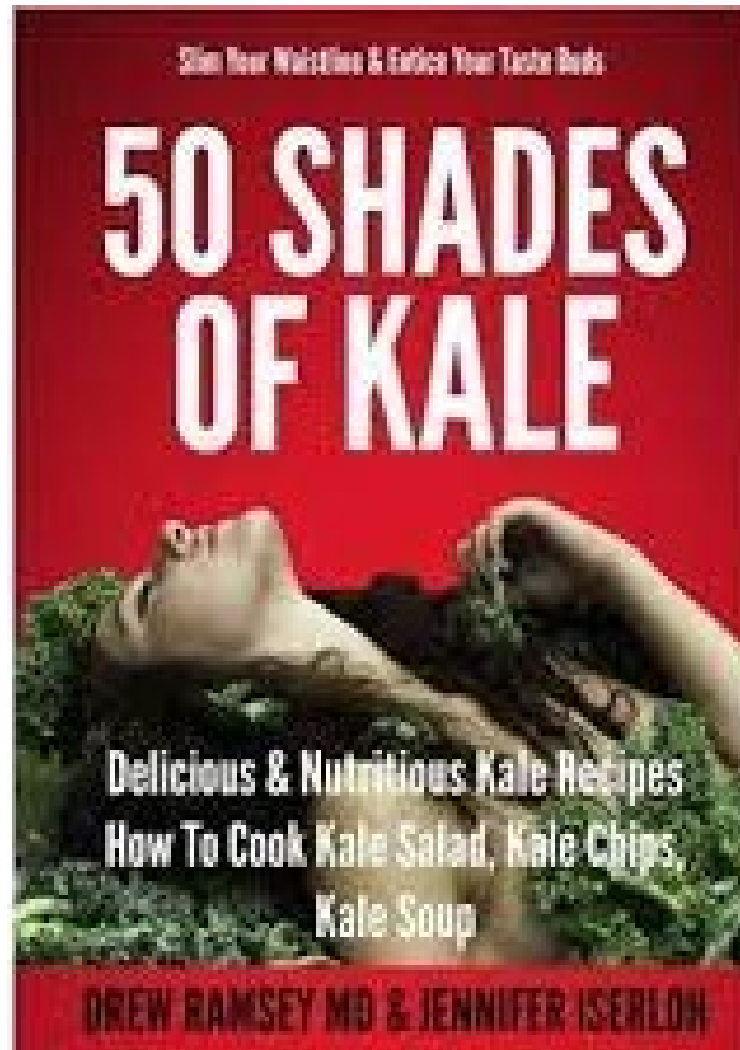
**A firefighter works to put out
spot fires from embers**

Source: LA Times

Kale, car seats, and fire mitigation- what's the connection?

If we can make kale “sexy” and popular, we can do anything..... including fire mitigation.

Change does not come overnight!



Today's conversation

☐ Review recent wildfires

- Camp Fire, Butte County, Nov. 2018
- Marshall Fire in Boulder, Colorado, December 2021
- Oak Fire, July 2022
- Research programs

☐ Opportunities

- Home loss is predictable
- There are actions within our control that can make a significant difference

☐ Insurance

- <https://ucanr.edu/blogs/Green/index.cfm?tagname=Yana%20Valachovic>

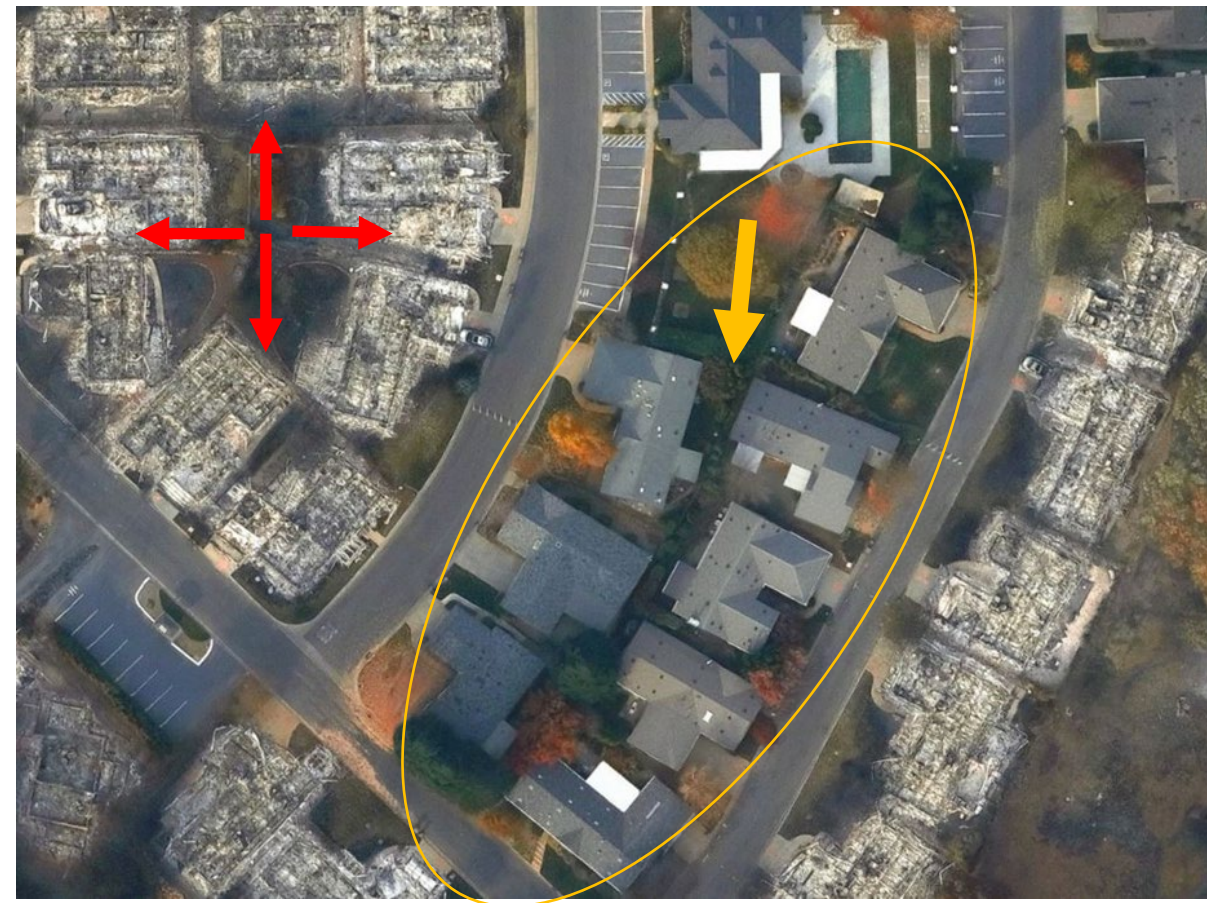
Camp Fire, Paradise, CA



Photo courtesy of Zeke Lunder

Neighborhoods requires community solutions

73% of homes were ≤ 18 m of a destroyed structure



2018 Camp Fire, Paradise, CA

Photos courtesy: Deer Creek Resources and WaldoAir

Knapp, E.E., Valachovic, Y.S., Quarles, S.L. et al. Housing arrangement and vegetation factors associated with single-family home survival in the 2018 Camp Fire, California. *Fire Ecology* 17, 25 (2021). <https://doi.org/10.1186/s42408-021-00117-0>

Lessons from the Marshall Fire Boulder, Colorado

Fire Date: December 30, 2021

Yana Valachovic, University of California Cooperative Extension
Steve Quarles, University of California Cooperative Extension and Insurance Institute for Business and Home Safety
Daniel Gorham, Insurance Institute for Business and Home Safety
Faraz Hedayati, Insurance Institute for Business and Home Safety

 **University of California**
Agriculture and Natural Resources



Photo By Tristantech - Own work, CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=113868246>





Fire fighter response prevented additional spread

Home loss is predictable until we make changes

Roof-to-wall



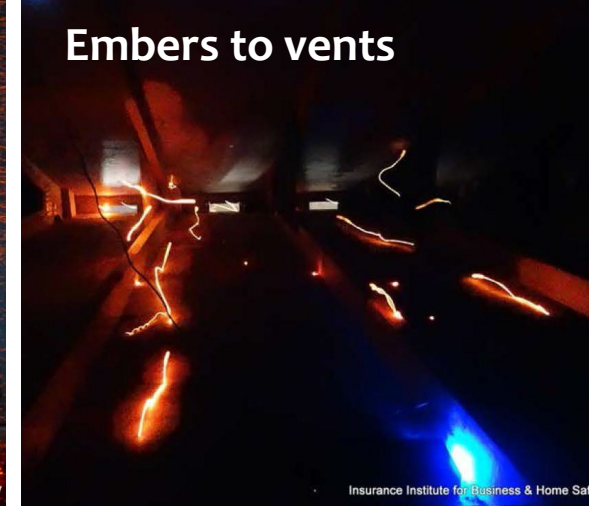
Fence to house



Rain gutter to roof edge



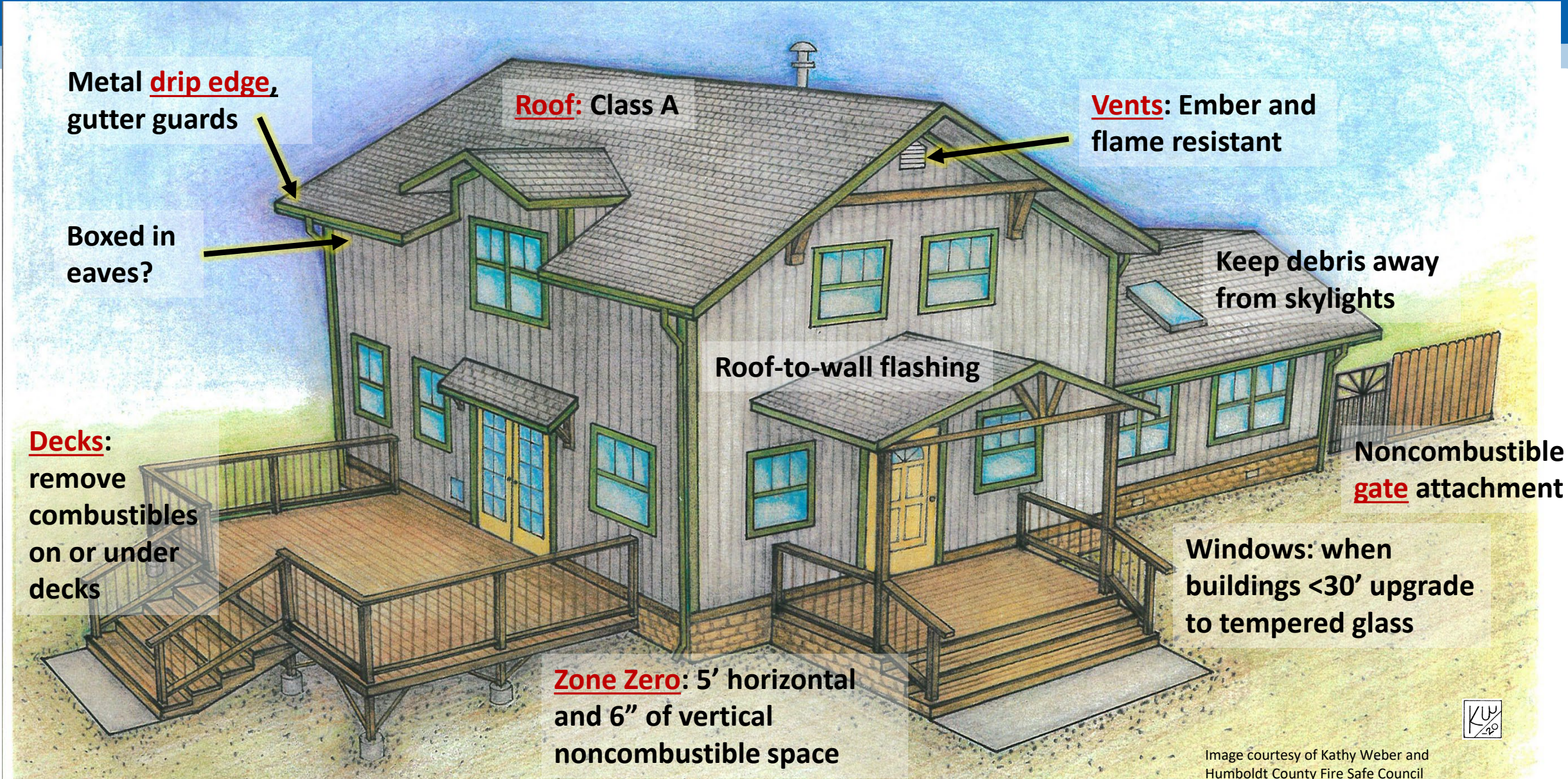
Embers to vents



Home hardening makes a difference

- ✓ **New construction-** CA Building Code for homes in the WUI
- ✓ **Existing buildings-** need incentive programs
- ✓ Need programs to assist the **most vulnerable**

Home hardening priorities



Does defensible space work?

- Oak Fire (July 2022)
- Homes that were non-compliant with the defensible space were **6 times more likely to be destroyed**
- Within the Oak Fire, 149 homes were inspected before the fire



Credit: CARLOS BARRIA (REUTERS)

Fire Insurance- Options?

- **Shop around-** Farmers is still writing policies
- Make a home **attractive to underwrite** (defensible space and home hardening) and lower fire score
- Insurance “plan of last result”: California **FAIR plan**

- **Independent assessment**
 - Department of Insurance- Safer from Wildfire Program (discount program)
 - Insurance Institute for Business and Home Safety- Wildfire Prepared Home
- **Fire Wise** Community designation

Working with the Fair Plan- Two policies

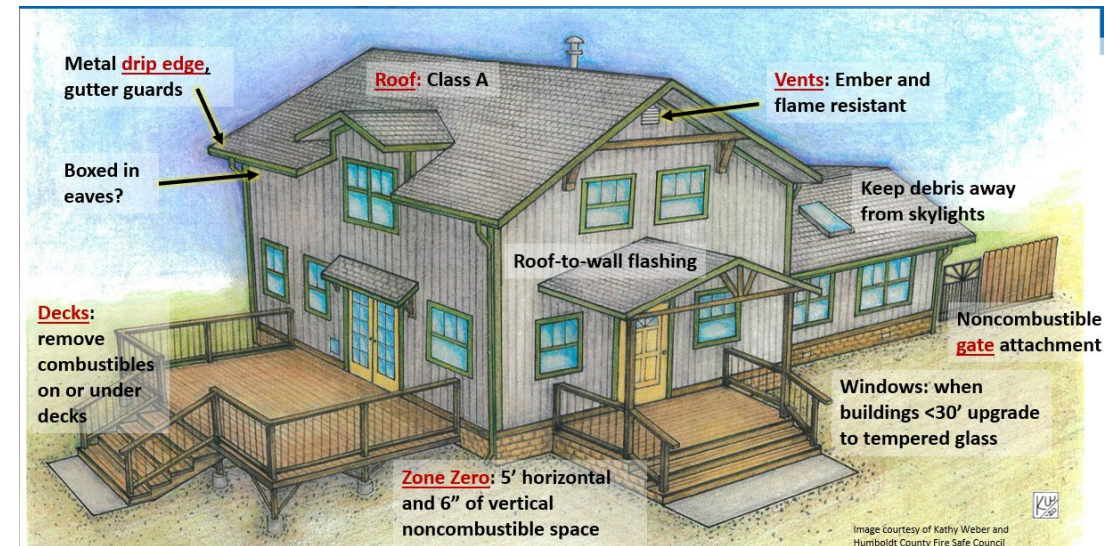


Where to get help

- California Department of Insurance www.insurance.ca.gov
- United Policyholders www.uphlep.org
- California FAIR Plan www.cfpnet.com
- Independent Insurance Broker- find someone who represents multiple insurers
- Low-cost retrofit list: https://osfm.fire.ca.gov/media/p0elt0sp/low-cost-retrofit-list-update-2_17_22.pdf

Conclusions

- Wildfire policy and action evolves
- Seismic response was slow
- The wildfire paradigm needs to shift to reflect other vegetation types and include ornamental vegetation
- Shared vulnerability across all of California's ecosystem types and development patterns
- **There is a reason for hope:** the mechanisms of loss from wildfire are now much better understood
- Coupled approach: Defensible space and home hardening



What actions will you take to prepare for wildfire season?



Source: Elaine Thompson/AP (2012)

Resources

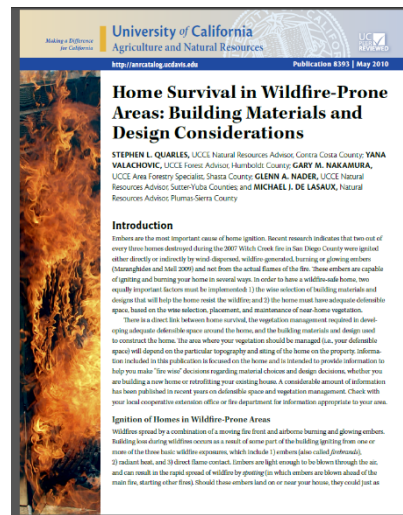
- <https://ucanr.edu/sites/fire/>
- <https://disastersafety.org/wildfire/>
- <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA/Firewise-USA-Resources/Research-Fact-Sheet-Series>
- <https://firesafemendocino.org/homehardening/>
- http://www.readyforwildfire.org/wp-content/uploads/Wildfire_Home_Retrofit_Guide-1.26.21.pdf
- <https://www.firesafemarin.org/>
- <https://humboldt.gov.org/2468/Fire-Safety-Resources>

CA Building Code Chapter 7A WUI construction

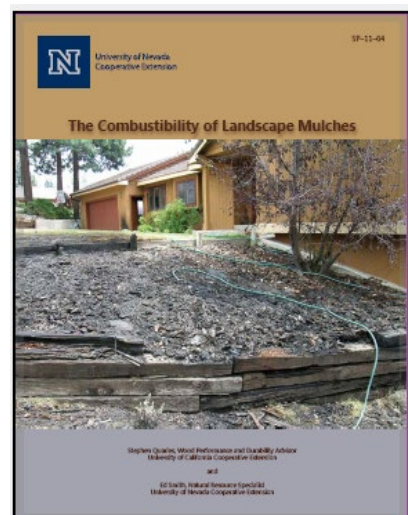
- <https://osfm.fire.ca.gov/divisions/code-development-and-analysis/wildfire-protection/>
- <https://calfire.govmotus.org/BMLSearch/Index>



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