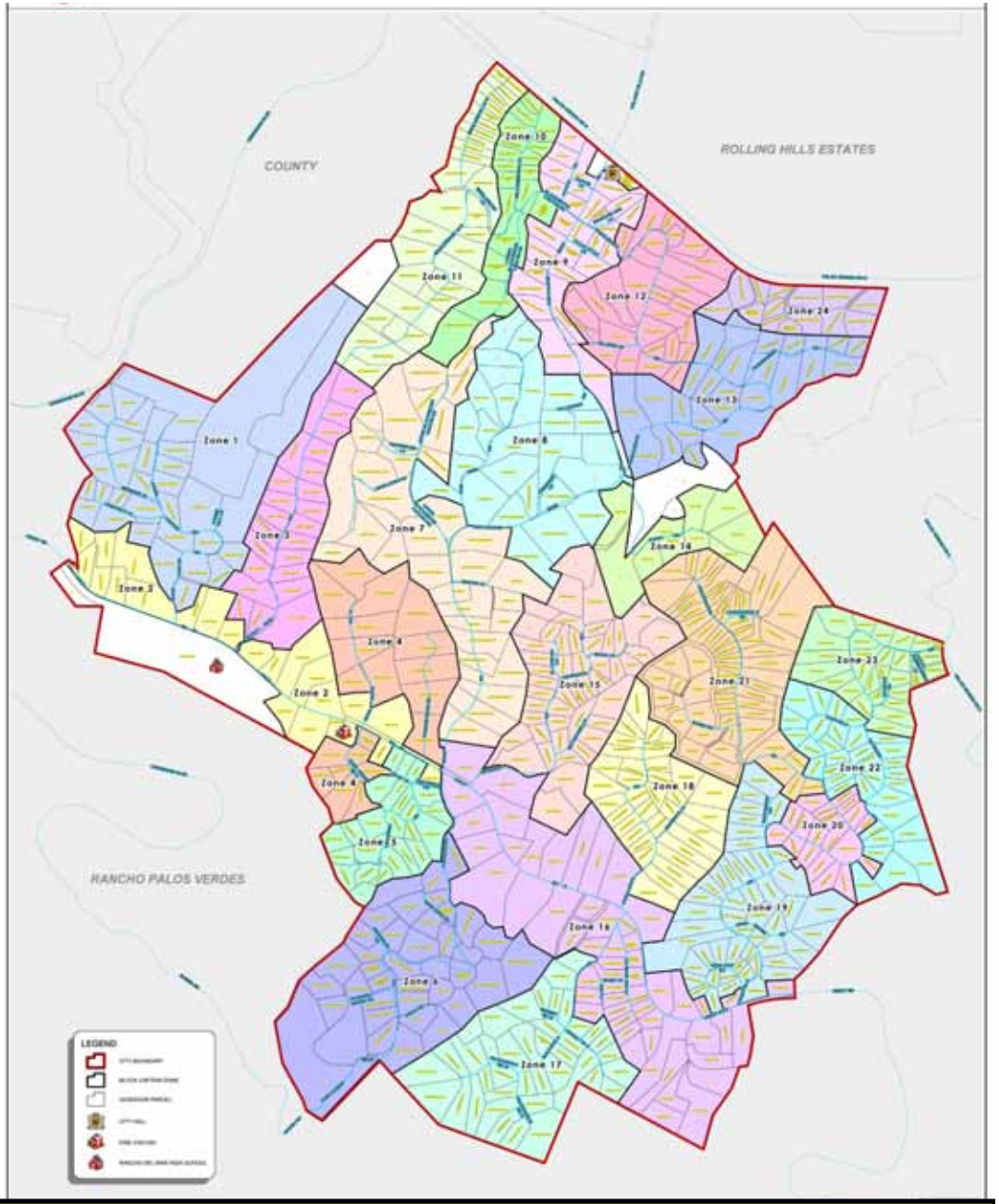
Community Wildfire Protection Plan Meeting



July 14, 2016 – City of Rolling Hills

Introduction

Purpose: To explain why CWPPs are important and how to develop one.

Theme: A fire hazard on one property is likely to affect other properties.

Speaker:

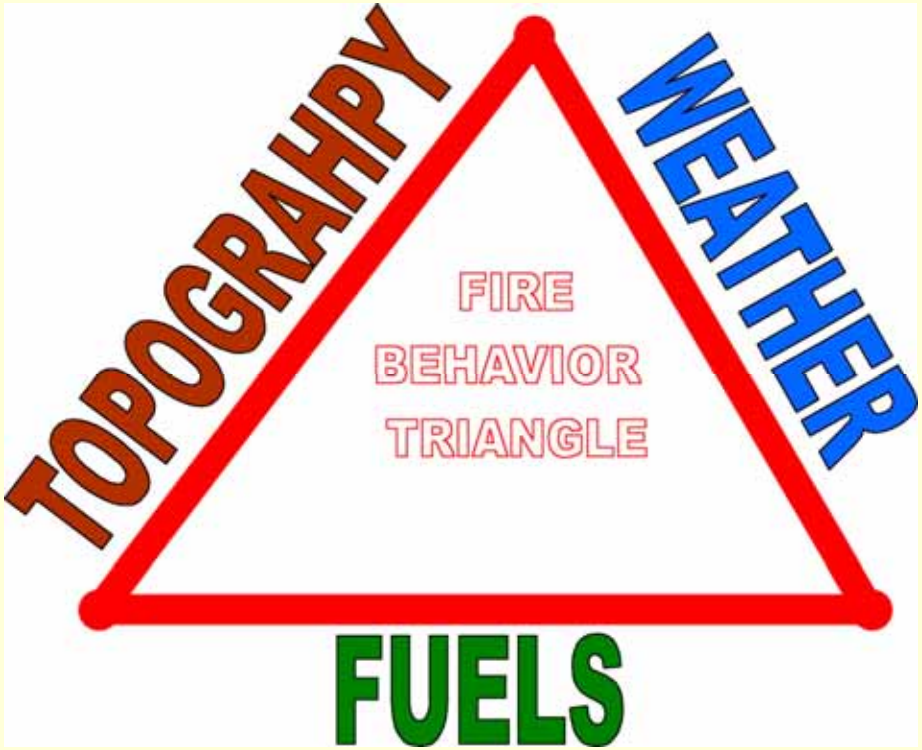
- J. Lopez, Assistant Chief, County of Los Angeles Fire Department Forestry Division

Meeting Organizers:

- City of Rolling Hills
- J. Lopez, Assistant Chief, County of Los Angeles Fire Department Forestry Division


Wildfire Behavior

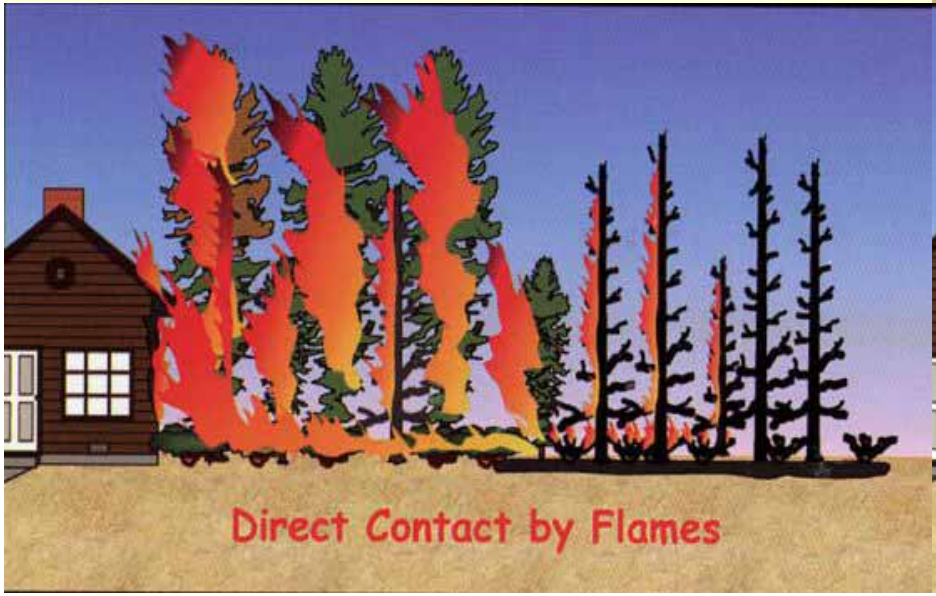
Fire Behavior

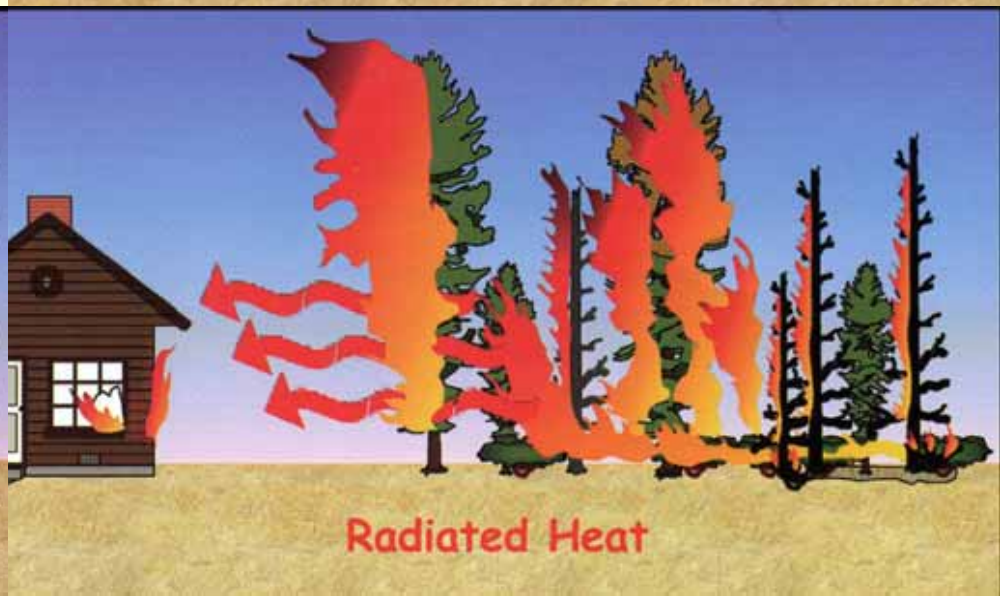


- All we can change is fuel
- Topography relative to house location affects how much fuel needs to be modified.
- Ridge tops (fire moves 16x faster up hill)
- Canyons – (like a chimney, channels wind and fire)
- Saddles - channel winds

How Homes are Destroyed

- Direct flame
- Radiant heat
- Convective heat
- Embers
- 30’ defensible space standard is based on radiant heat
- 100’ – 200’ standard addresses safety and begins to address embers

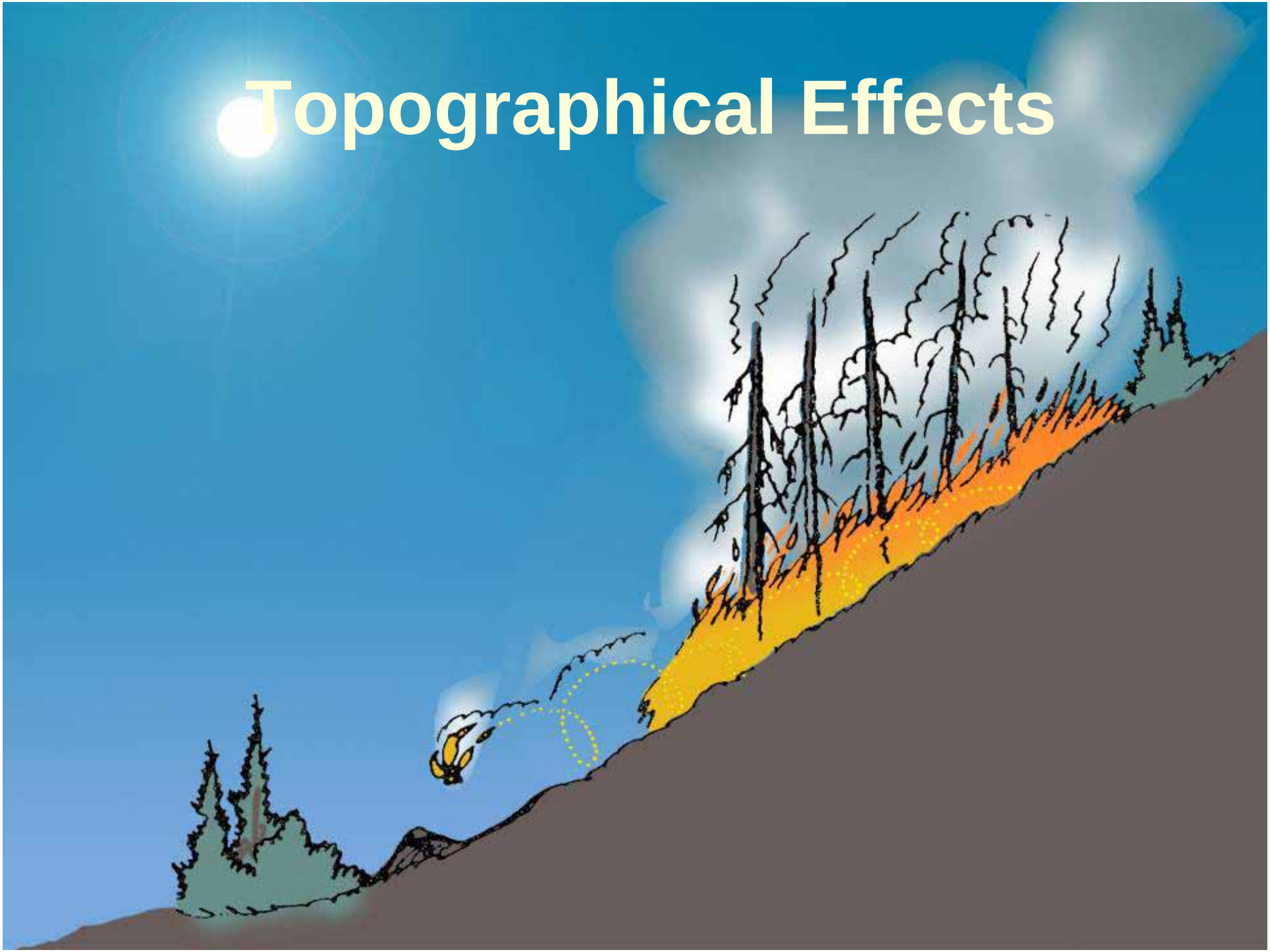





Fire Intensity


Fuel Continuity

Topographical Effects



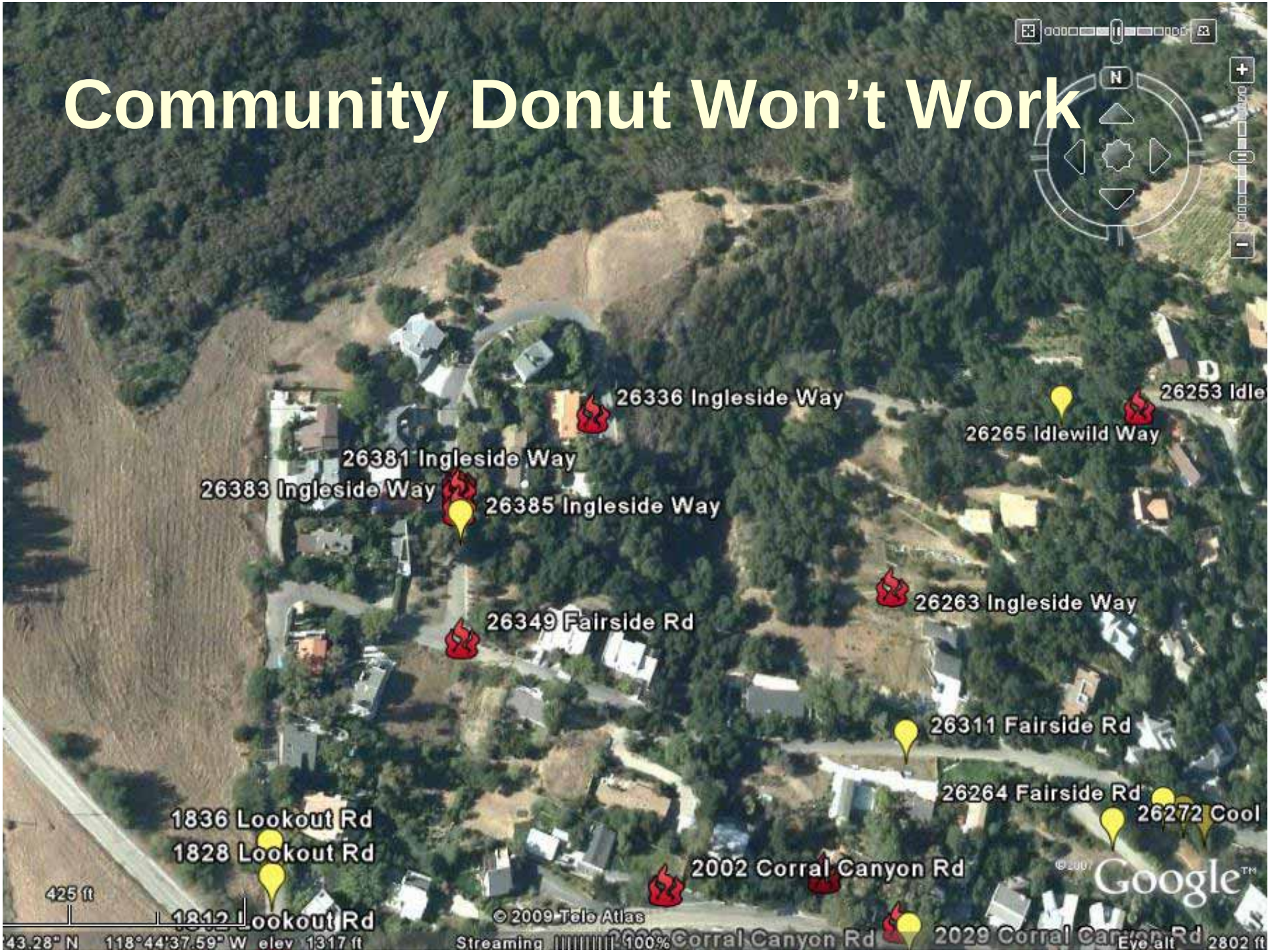

Convective Heat

How is Your Ember Exposure?

- entry into vents
- landing on horizontal surfaces
- slipping under doors

House Donut Won't Work

Community Donut Won't Work



Fire Jumped this Fuelbreak

Photo: Jon Keeley, USGS WERC

Structure Vulnerability

USDA

United States Department of Agriculture

RS-TP-026b

June 2008

Home Destruction Examination

Grass Valley Fire

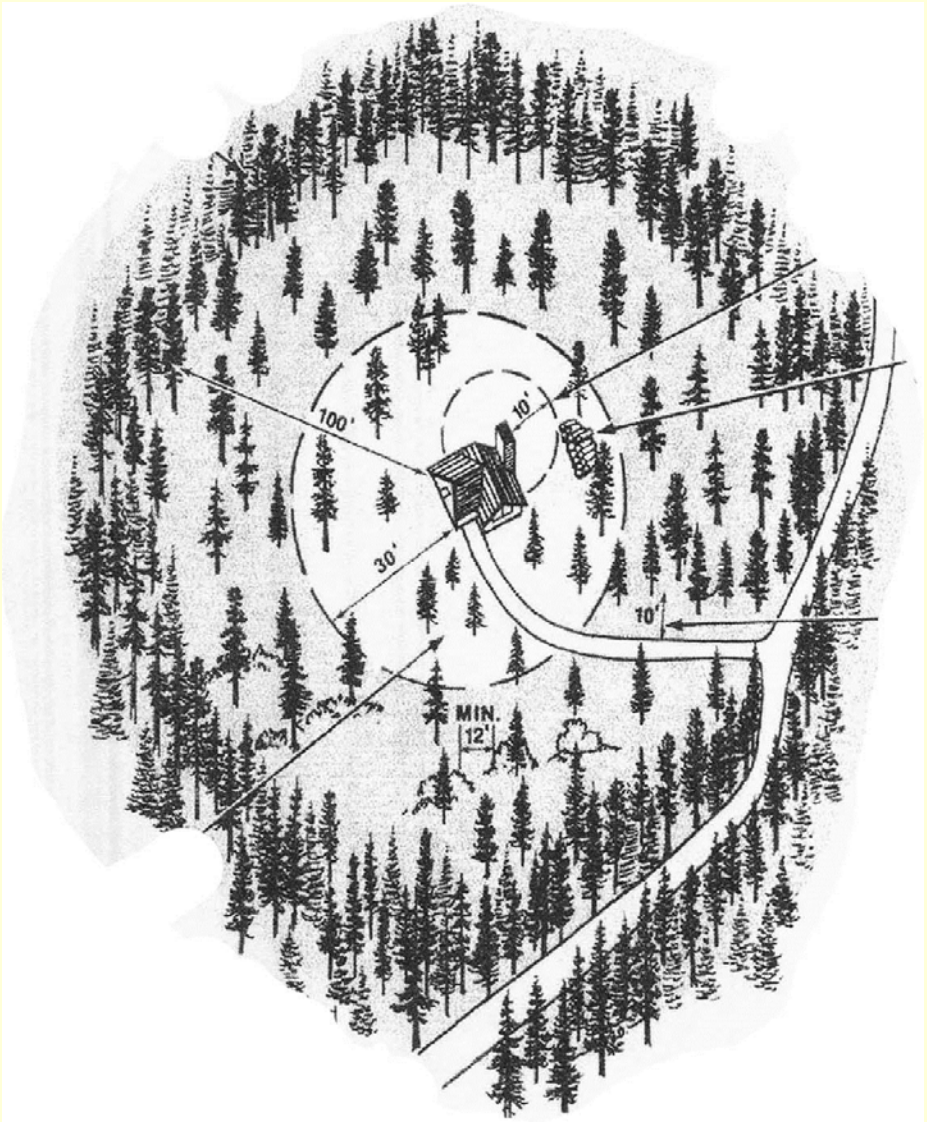
Lake Arrowhead, CA

Grass Valley Fire, Lake Arrowhead October 2007

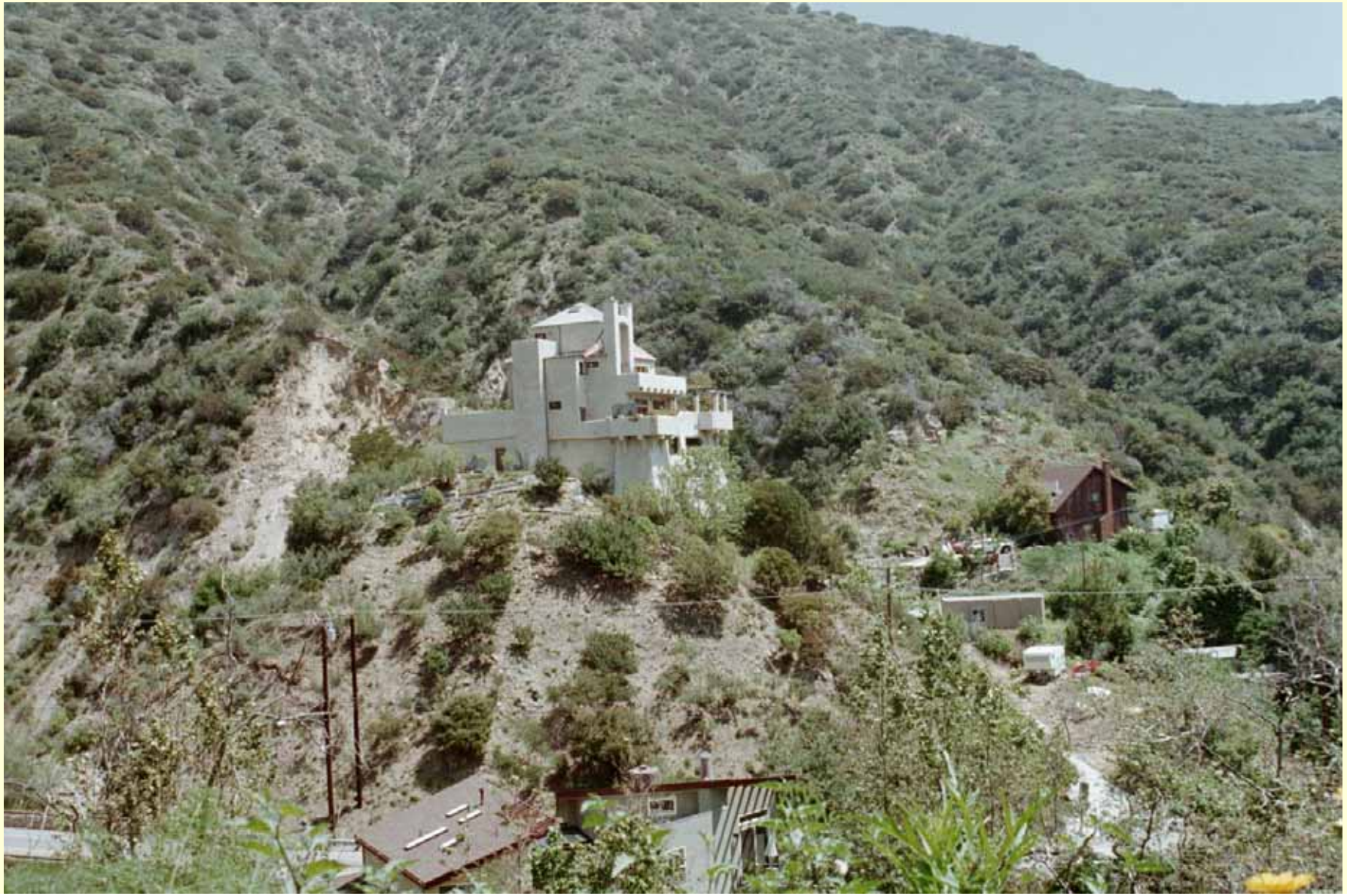
- **122 out of 199 houses were damaged or destroyed by house-to-house ignition, not fire carried by vegetation**

Defensible Space from the House Out

- A house surrounded by a “donut” fuelbreak with fuel in the center will not survive
- Brush clearance without addressing structure vulnerability and urban fuels is not enough



Slope Vulnerability



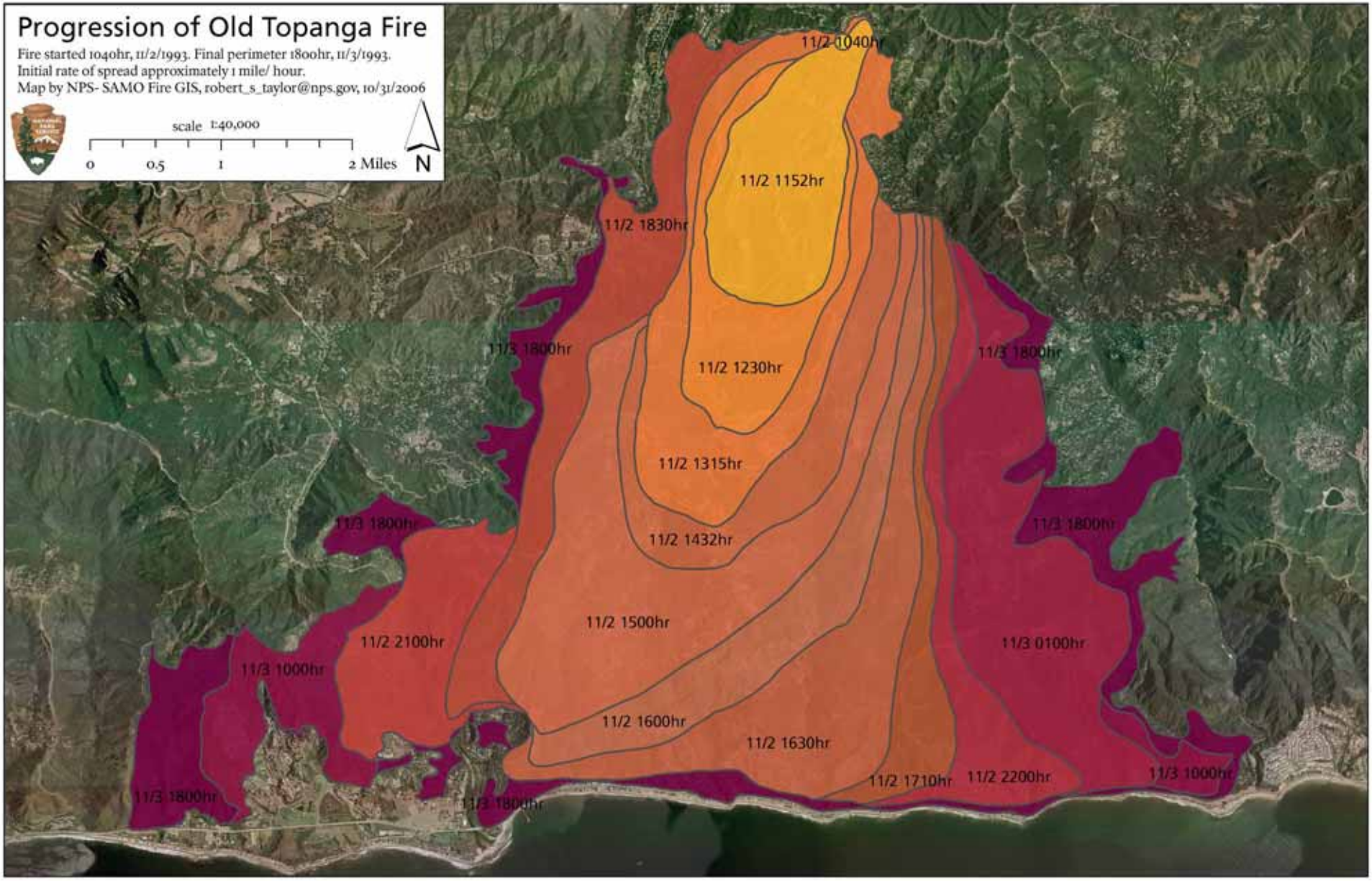
Extreme Fire Behavior

- Rapid rates of spread
- Firefighter safety
- Defensible space / triage
- Resource limitations
- Need to create “Stand alone homes”

Malibu Road Fire - 1 / 8 / 07

- 3 hours
- 20 acres
- $60 million - property loss

LA Times, January 9, 2007



1993 Old Topanga Fire - Initial rate of spread = approximately 1 mile / hour

Jesusita Fire 2009

Tea Fire 2008

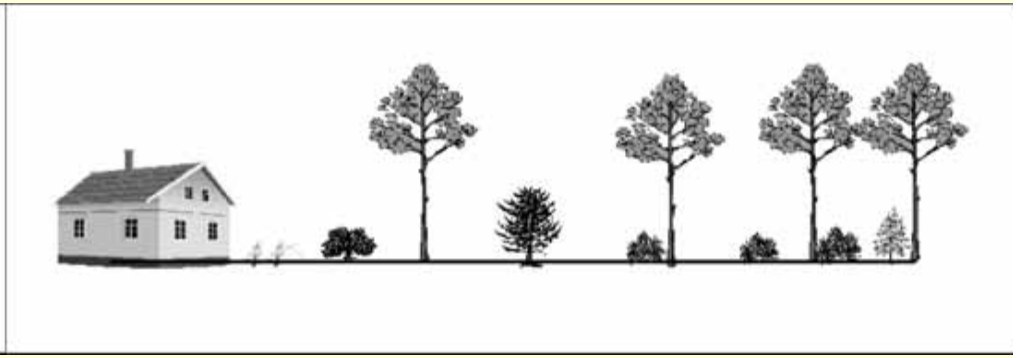
Michael Macor / The Chronicle

1,940 acres, 230 homes destroyed, 18 residential structures damaged


Defensible Space

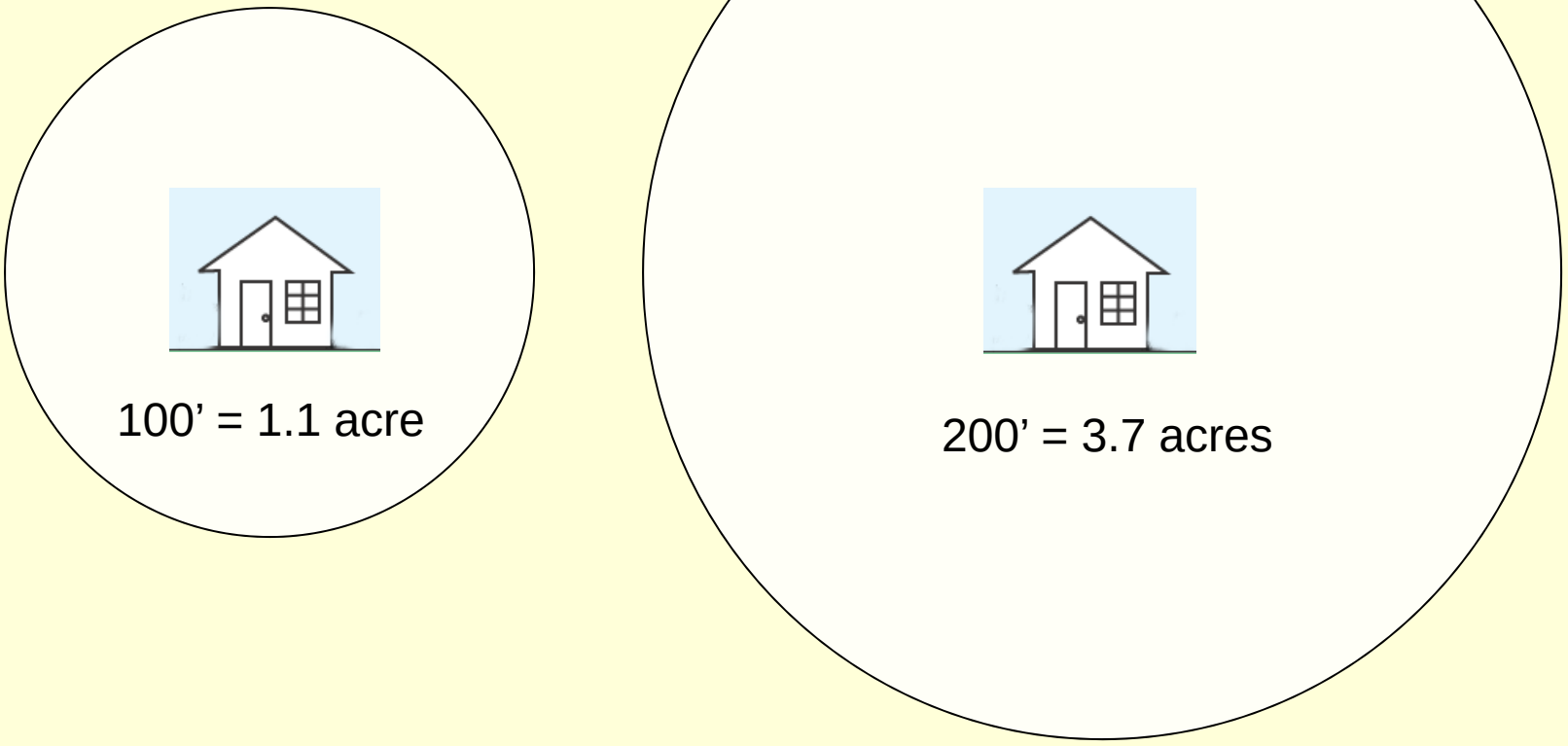
Fire Hazard Reduction – LA County Requirements

- Brush clearance (410B)
- Fuel modification plan (post 1996)
- WUI building code

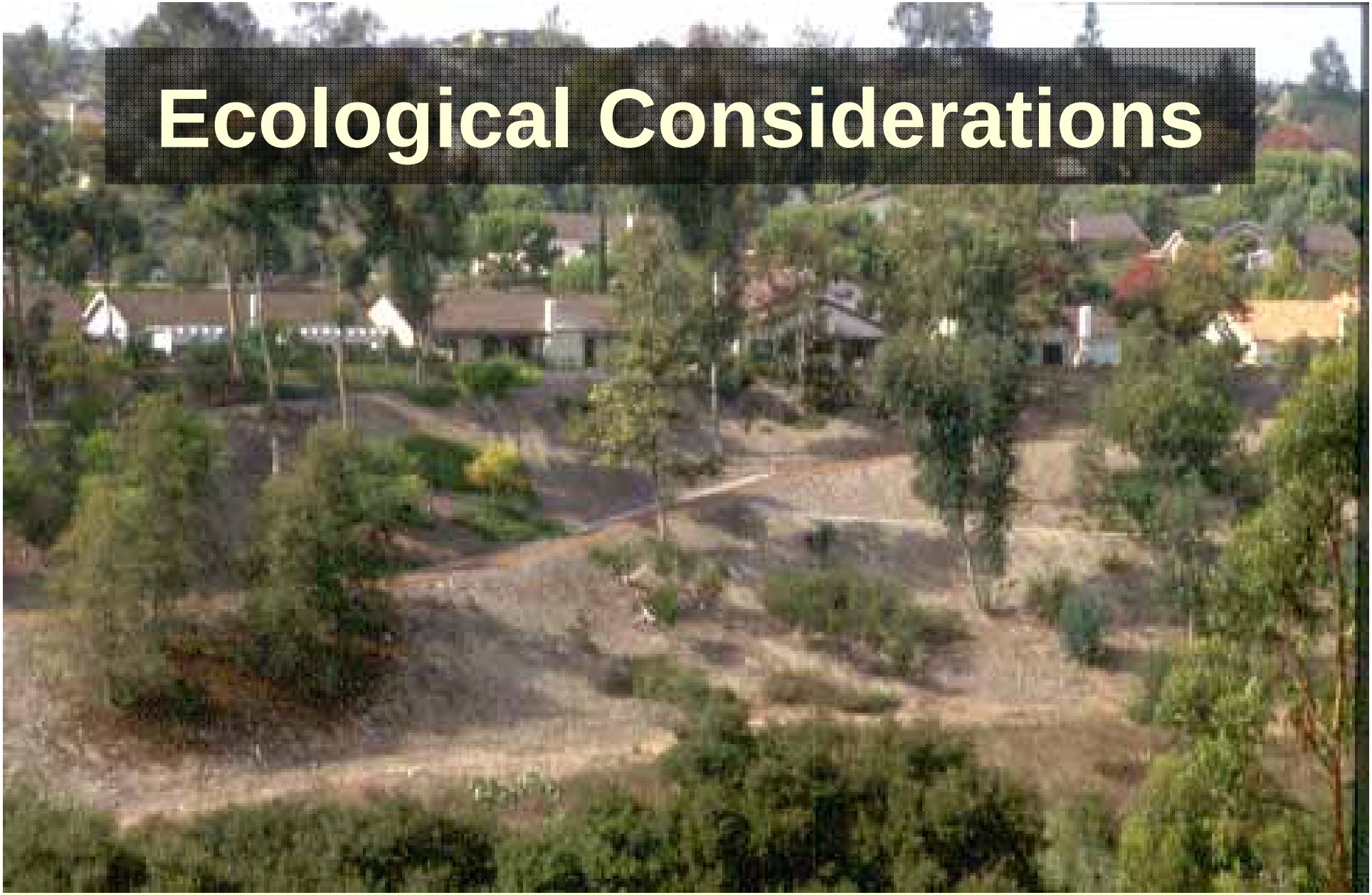


Ecological Considerations

- Defensible space standard increased from 100’ to 200 ‘
- More than tripled (x 3.4) the land involved



Ecological Considerations



Clearance Isn’t A Clear-cut!

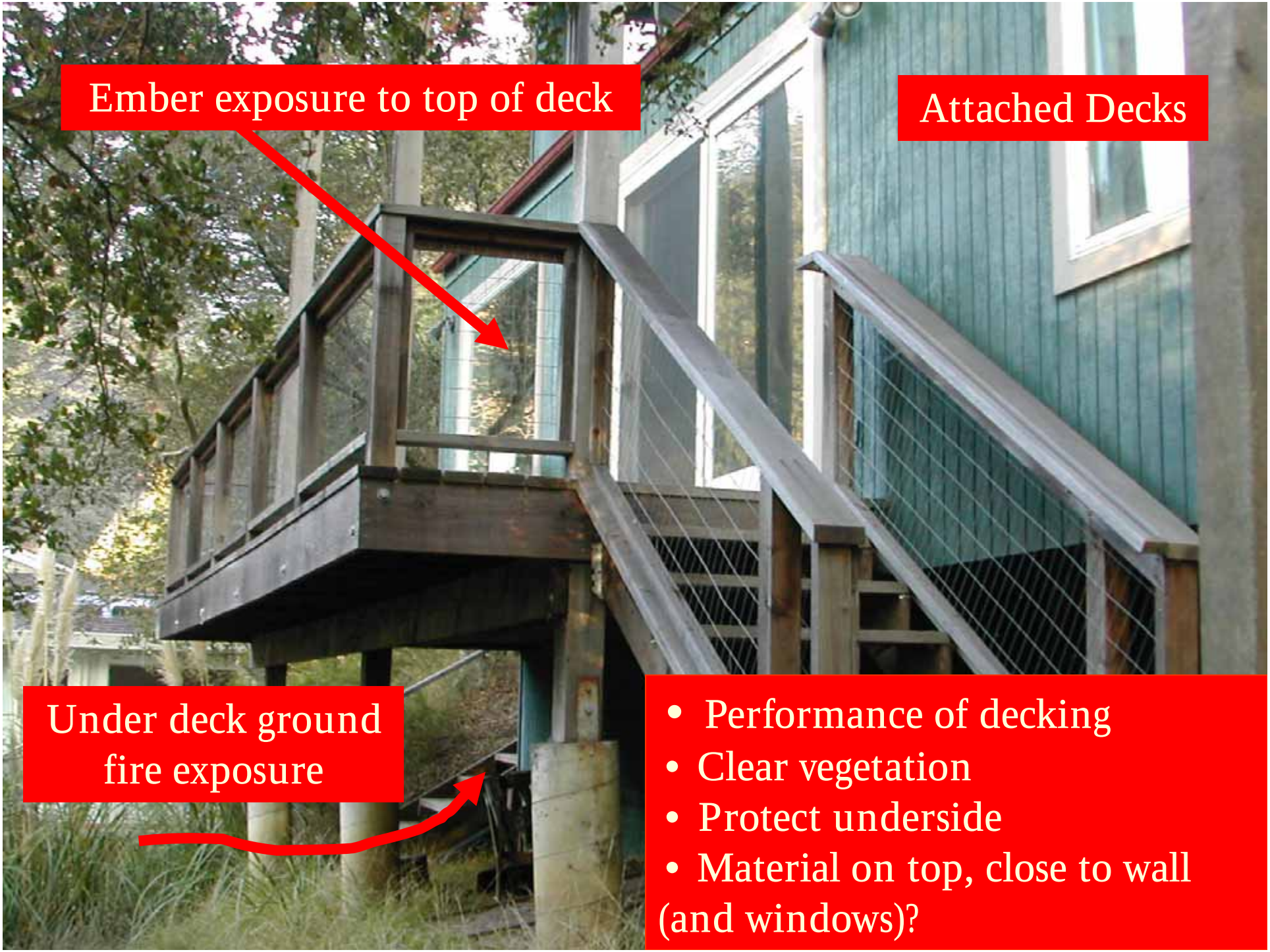
Spurge Invaded Fuelbreak

- The top 3 invasive weeds found in fuel modifications: Russian thistle (associated with disking), terracina spurge (tolerates mowing), and fennel
- Weed impact affects more than just the edge – loss of biodiversity, increased ignitions, soil changes, slope instability

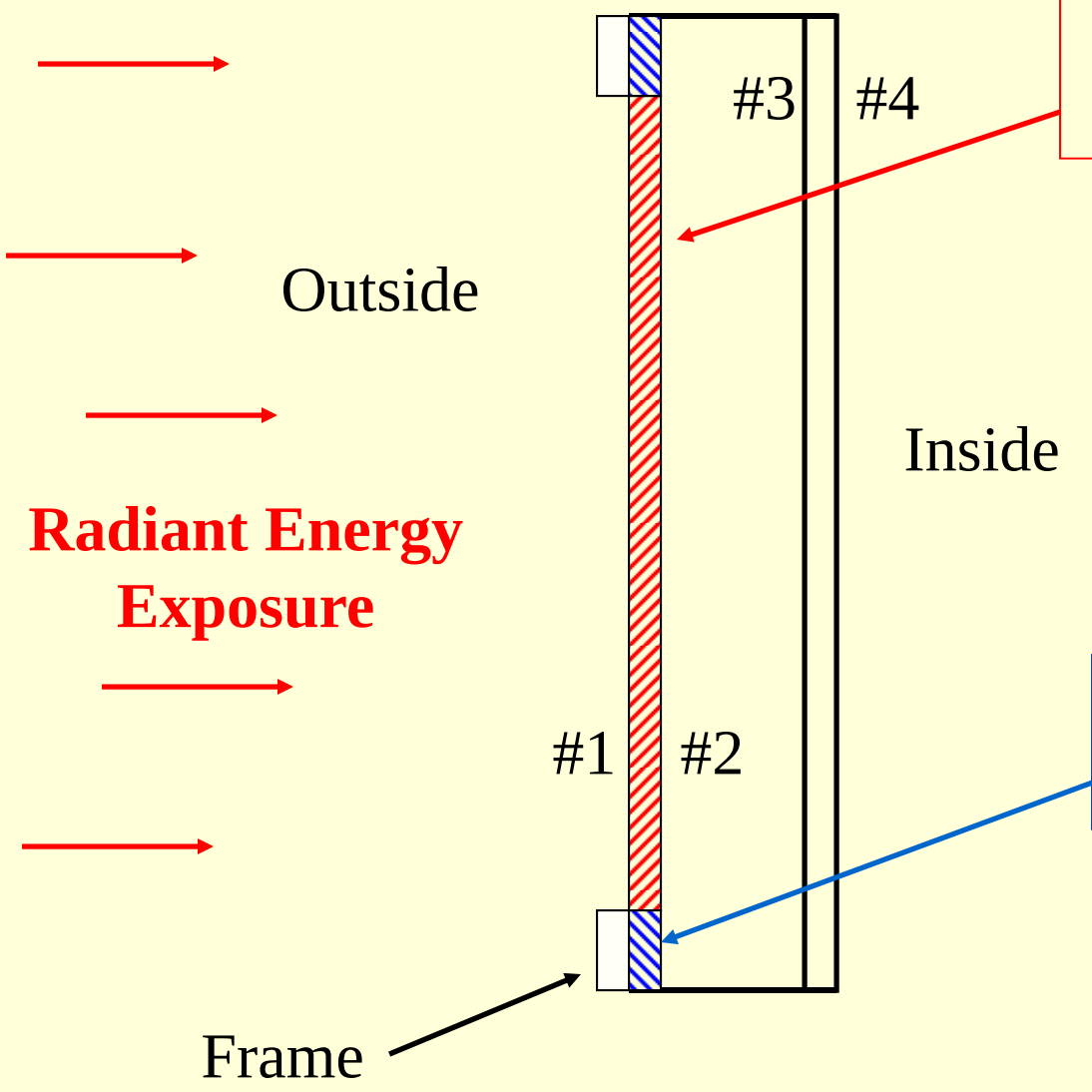
Structure Integrity

- Ember resistance
  - roof, vents, decking, siding, windows, doors
- Home improvement ideas
  - small $, big $

This metal gutter will remain attached if the debris is ignited, increasing exposure time at the roof edge. Vinyl gutters (plastic), will detach from the roof edge relatively quickly. Therefore most of the debris in the gutter will burn on the ground, exposing near-house vegetation, and your siding if it is combustible.


Ember exposure to top of deck
Attached Decks
Under deck ground fire exposure
• Performance of decking
• Clear vegetation
• Protect underside
• Material on top, close to wall (and windows)?

Dual-pane window



Warmer, greater thermal expansion

Thermal stresses resulting in crack propagation from the edge of glass is the cause of glass breakage

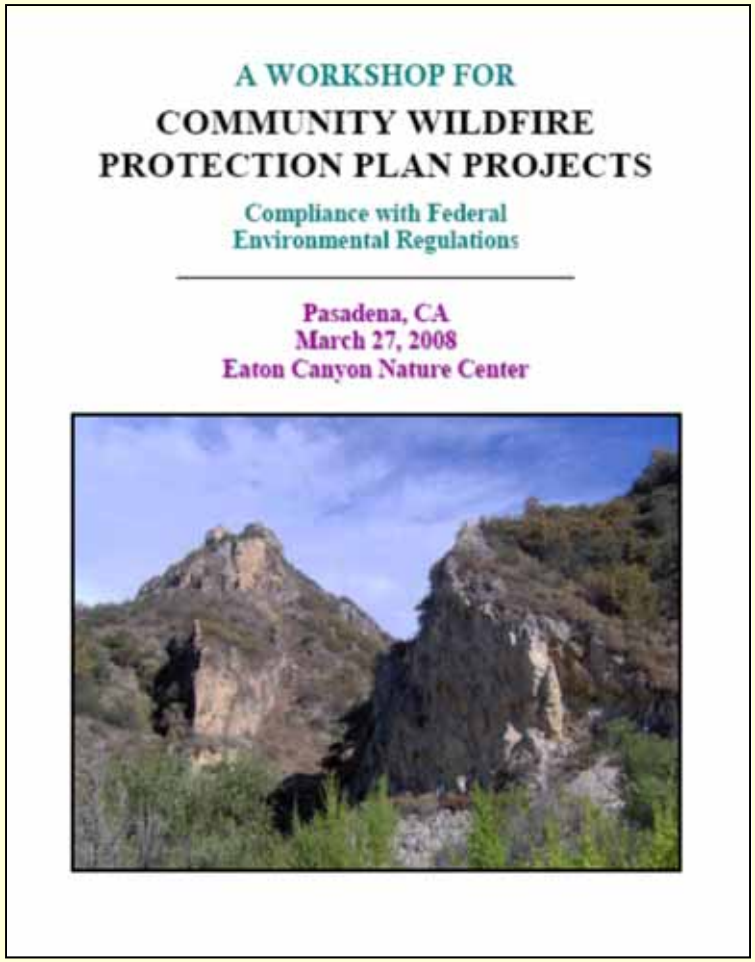
Cooler, lower thermal expansion

Low E coating can be on #2 surface or #3 surface

Don’t Forget Urban Fuels

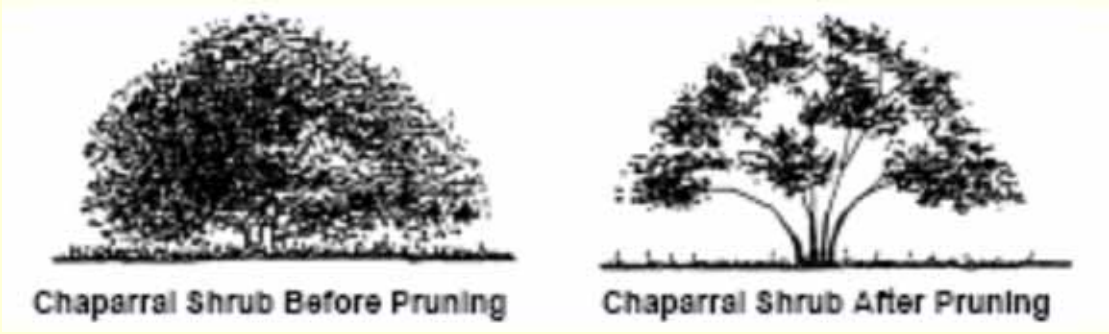
Beware of stringy flammable mulch!

Environmental Compliance for CWPP Projects

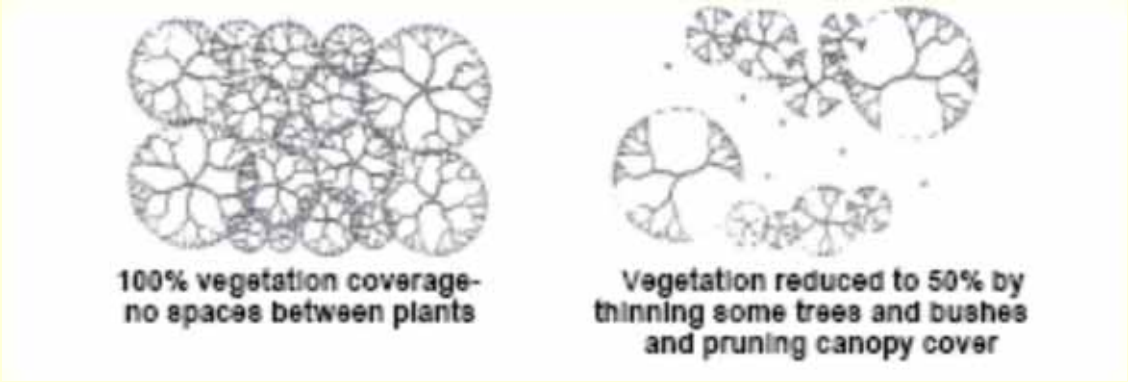


- Endangered Species Act
- Migratory Bird Treaty Act
- National Historic Preservation Act

Best Management Practices



- Learn about T&E / sensitive species in and around your community



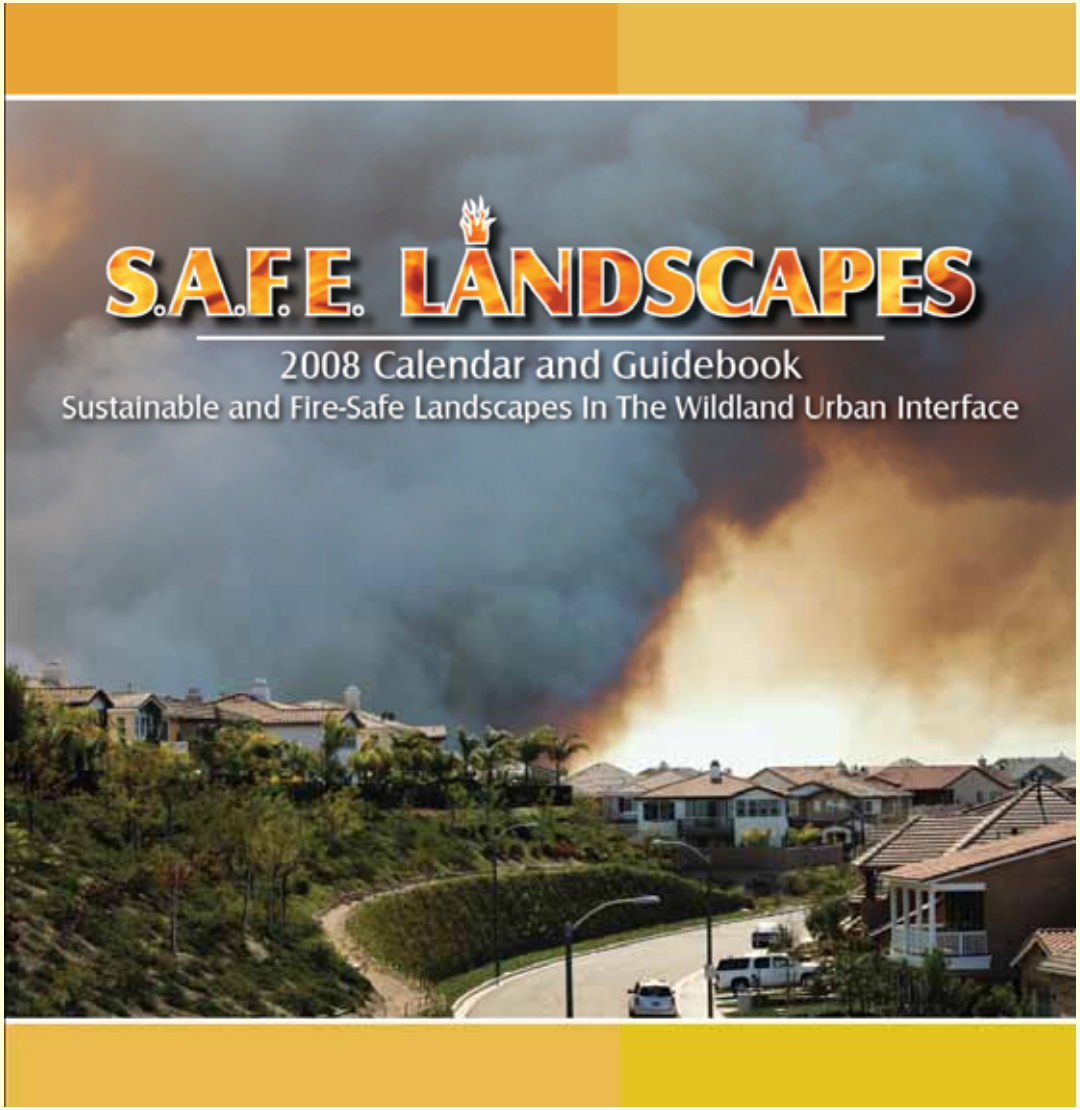
Use established Best Management Practices to minimize impacts

Ecological Considerations

- Fire Hazard Reduction need monitoring and maintenance
- Most projects are not a one-time treatment
- Long term commitment is required

Ecological Considerations

- Parks care about safety
- Defensible space from house out is the best way to protect both the community and parks



Lots of Tools in the Toolbox!

…grinding, goats, chipping, cutting & piling, mowing, weed-wacking, etc. …






Community Wildfire Protection Plans

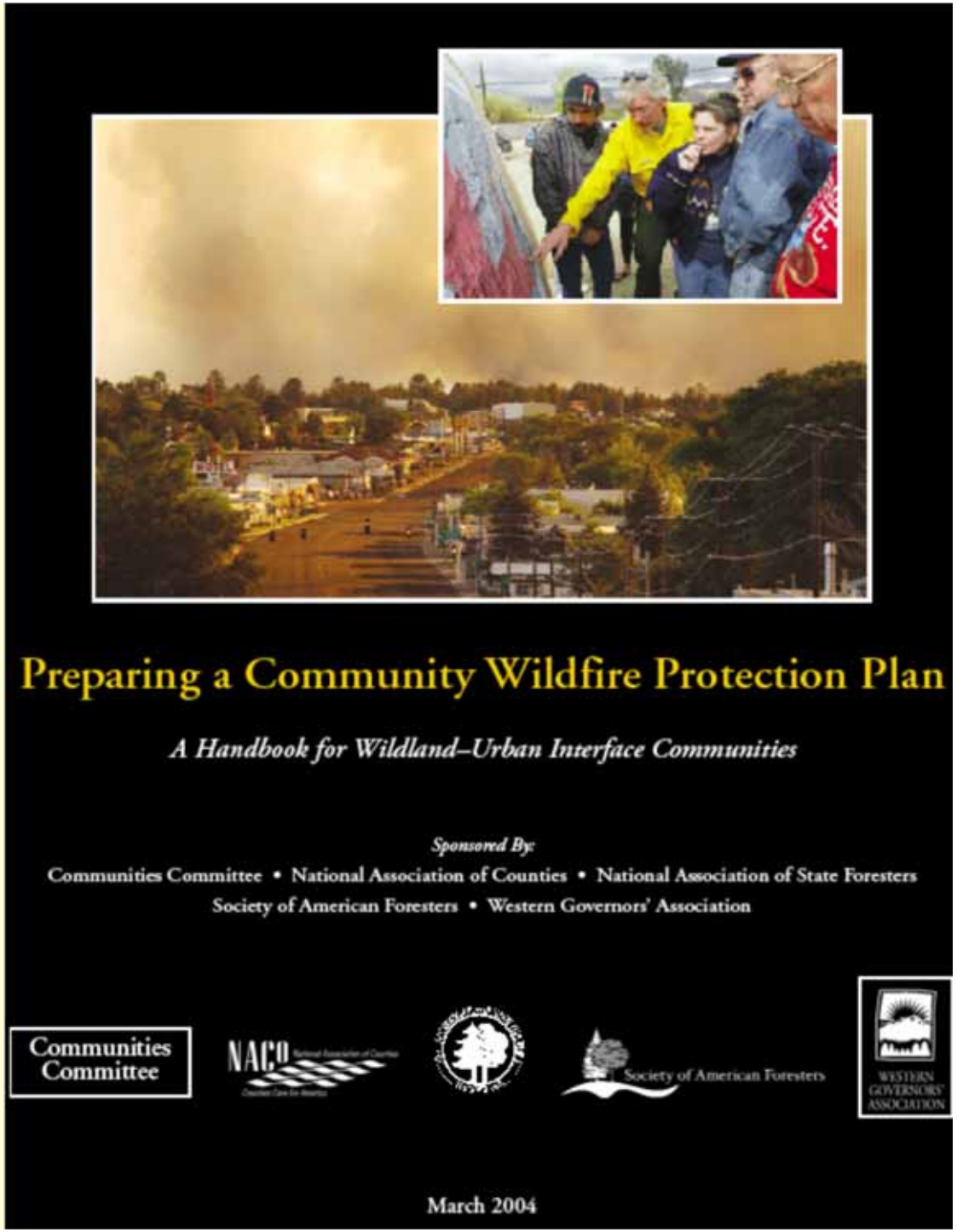
CWPP – What? Why? How?

Three requirements:

a) Collaboration

b) Priortized fuel reduction

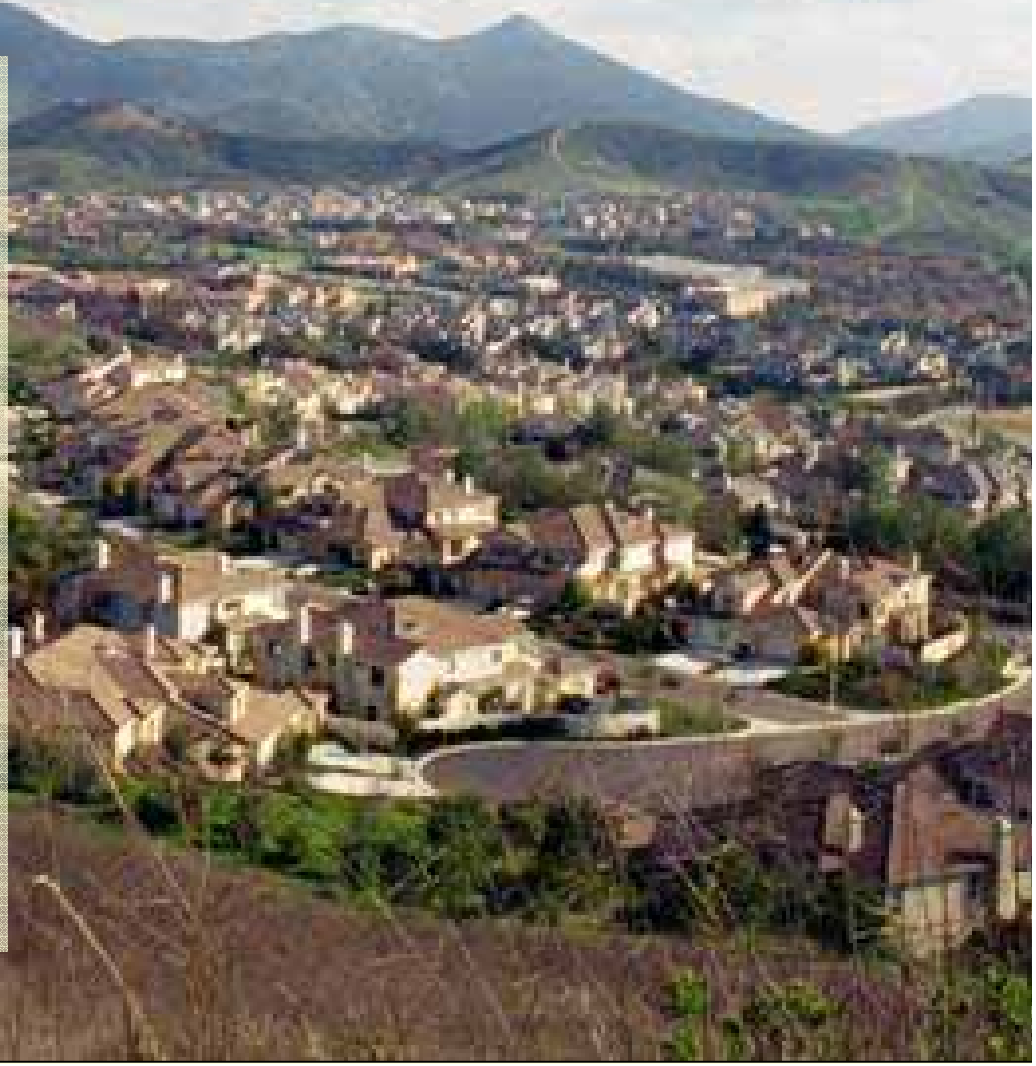
c) Treatment of structural ignitability



Collaboration is Key

Community must work together – hazards on one property threaten other properties

- House to house ignition
- Embers cast far and wide
- Evacuation & fire access roads are shared
- Water supply is shared



CWPP: What is it?

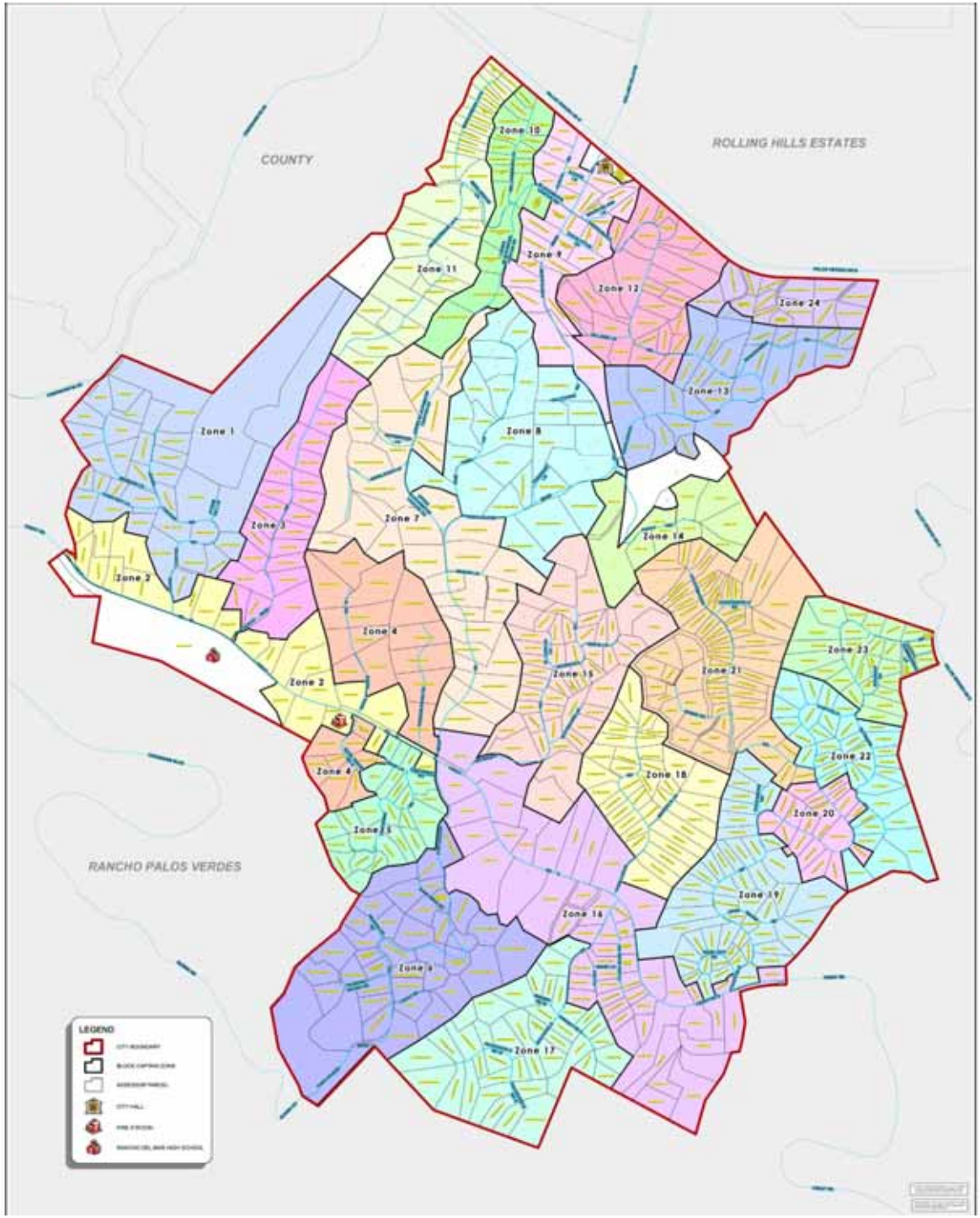
- CWPPs are authorized and defined in the Healthy Forests Restoration Act (HFRA), passed by Congress in November 2003
- Allows communities to define their own WUI (wildland-urban interface) and their own priorities for fire hazard mitigation
- Provides mechanism for using Goverment funds on non-federal lands
- Requires approval by local government, local fire department, and CDF/Cal Fire.

CWPP: Why? – the Benefits

- Hazard identification
- Community education
- Empowerment
- Increased safety through mitigation
- Decreased potential for $ loss
- Community relationship building
- Eligibility for federal funding

CWPP: How? – the Process

- Gather decision-makers (local / state government)
- Engage interested organizations & stakeholders
- Establish a community base map
- Develop a community risk assessment
- Establish priorities and recommendations
- Develop an action plan and monitoring strategy
- Finalize CWPP
- Implement projects and actions
- Track progress and update CWPP



Break up the Community into Smaller Units

Example

Next Steps for Your CWPP

- Identify community team leaders for your CWPP & projects.
- Establish a regular meeting
- Write a community description.

  --history, current population, number of structures, other community assets, neighboring landowners and / or nearby communities
- Organize property owners.
- Begin initial inventory of hazards on each property.


Discussion