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

Grass Valley Fire, Lake Arrowhead, CA

- 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
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
Tea Fire 2008

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

100’ = 1.1 acre
200’ = 3.7 acres
Ecological Considerations

Clearance Isn’t A Clear-cut!
• 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.
• Performance of decking
• Clear vegetation
• Protect underside
• Material on top, close to wall (and windows)?

Ember exposure to top of deck
Under deck ground fire exposure

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

Warmer, greater thermal expansion

Cooler, lower thermal expansion

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

Three requirements:

a) Collaboration
b) Prioritized 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 Government 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.