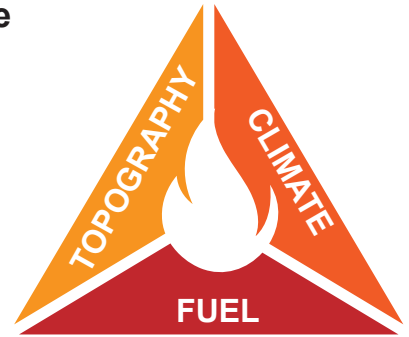


# THE CHANGING PARADIGM OF WILDFIRE PREVENTION

by Dr. Robert Sieben, certified as an inspector by the International Association of Fire Chiefs

Wildfire prevention used to be based on the triad of **topography/climate/fuels**. Assuming you couldn't do anything about the topography or the climate, all you could do was reduce the fuels. But the paradigm, the set of assumptions, has changed.

**TOPOGRAPHY DOES MATTER** as the huge increase in population has exploded into areas humans shouldn't build in. We cannot build in high fire hazard areas and expect access roads to be widened or built for us at government expense. Nor are there enough firefighters available to protect us in these more remote areas. There are laws on the books that specifically limit development, but they are not enforced.



**CLIMATE ALSO MATTERS.** If we don't act quickly to reduce climate change while we still can, the world as we know it will be irreversibly changed. And now, with the corona virus, firefighters will not only be at risk on the front lines. They will be vulnerable while being transported long distances in buses and thousands of them will be densely packed in tent cities where they will work, eat and sleep together for weeks.

**REDUCING FUELS ALSO MATTERS** but there is something missing. That something is us, the homeowners. Wildfires in the Bay Area are caused by humans, and it is up to humans to stop them. When we don't have the resources we need, we must use the resources we have. We are that resource.

**WE NEED A CHANGE IN SOCIAL BEHAVIOR** but no one has figured out how to sufficiently motivate homeowners. We, the homeowners, have **UNREALIZED POTENTIAL** and must step up to the plate by taking positive actions.



- ACTIONS** we can take that are not rocket science
- ACTIONS** that only we can take on our own property
- ACTIONS** that are simple & inexpensive
- ACTIONS** that will help protect our homes & families from fire even when we are not present
- ACTIONS** that when taken together with our neighbors will help protect our greater community exponentially
- ACTIONS** that nobody else can or will do for us



The recommended actions I suggest are limited to relatively minor, easy actions typical homeowners can take on their own. I offer 45 specific actions for you to choose from. I didn't make this stuff up; I experienced it. **BE FIRE SAFE AND LEARN FROM MY MISTAKES.**

# LET'S LOOK AT THE FACTS TO SEE WHICH ACTIONS ARE THE MOST IMPORTANT



**FACT** Throughout America, **90% OF HOMES** lost to wildfires are ignited by embers

**FACT** Throughout America, firefighters **SPEND 70% OF THEIR TIME** doing what homeowners should have taken care of themselves. We need the firefighters to concentrate on **SUPPRESSION**, which only they can do



**FACT** Once a home is ignited it increases the amount of fuel in the air by **15 TIMES**

**FACT** The **SMOKE** produced by a burning home is loaded with **TOXIC CHEMICALS** from electronics and other hazardous waste that may require cleanup by a hazmat crew costing \$30,000



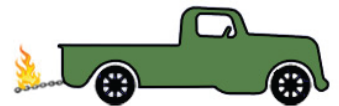
**FACT** If your home goes up in flames your fire insurance will not recover your lost treasures or loved ones, you will still have to pay your mortgage off, you will be stressed for years, and your property will lose much of its value

**THE GOOD NEWS** is that there are a lot of simple things you can do on your own to protect your home, for a fraction of what your insurance costs. This is the **CHEAPEST, MOST EFFECTIVE** fire insurance you can have, and it prevents fire from occurring in the first place!

## HERE'S WHAT YOU CAN DO

### FIRST, DON'T START A FIRE

1. **DON'T** park your car in dry grass with a hot catalytic converter or exhaust
2. **DON'T** throw a lit cigarette out your car window
3. **DON'T** drive dragging metal parts such as tow chains or mufflers that can cause sparks
4. **DON'T** surround your stalled car with flares that can ignite roadside grasses
5. **DON'T** light a charcoal barbecue, use a gas powered tool or smoke outside on a hot, windy day
6. **DON'T** smoke in bed (this + kitchen fires burn far more homes than wildfires)
7. **TAKE** precautions to avoid kitchen fires
8. **STAY** with what you're cooking whether in your kitchen or on your deck
9. **DON'T** store combustibles near your stove, oven, toaster, or kitchen counter
10. **KEEP** a dry chemical fire extinguisher on the exit side of your kitchen to put out a grease fire
11. **NEVER** pour water on a grease fire
12. **SMOTHER** flames with baking soda or cover a flaming pan with a lid
13. **KEEP** a fire extinguisher on your deck to extinguish grease fires in the BBQ catch pan & flying embers landing on the deck
14. **DON'T** charge your cell phone on a cushion or bedding or within a foot of paper towels or Kleenex—use a hard surface



**Ordinary Combustibles:** wood, paper, rubber, fabrics & many plastics

**Flammable Liquids & Gases:** gasoline, oils, paint, lacquer, & tar

**Fire involving Live Electrical Equipment**

**Combustible Metals or Combustible Metal Alloys**

**Fire in Cooking Appliance that involves Combustible Cooking Media:** Vegetable or Animal Oils & Fats

**SECOND, HARDEN YOUR HOME** against blizzards of flying embers that may be coming from a fire front a mile away and be smaller than a grain of rice

15. **SCREEN** vents under your roof or in your foundation with 1/8th inch metal mesh or newly available ember-proof plugs
16. **SEAL** the lower edges of any unsealed siding or keep combustibles including mulch away from the lower edges of unsealed siding
17. **REMOVE** combustibles such as brooms, pieces of lumber, or firewood from under stairs & decks
18. **SCREEN** open spaces below decks or stairs within a foot of the ground with 1/8" mesh
19. **KEEP** decks clear of combustible furniture, baskets, sculptured twigs, dried plants/flowers
20. **KEEP** flammables, including plants, 4 inches away from glass windows and doors
21. **REMOVE** pine needles and leaves from your roof, gutters, decks and stairs, particularly when dry winds are predicted by a Red Flag warning. A leaf blower can be used to blow these off the roof when it counts.



22. **CONSIDER** removing gutters, which catch and hold leaves
23. **DON'T** store gasoline in your garage
24. **REMEMBER** to close the garage door when you leave in a panic



**THIRD, PAY ATTENTION TO FENCES**

25. **STORE** combustibles away from fences
26. **USE** metal sheathing, masonry or stucco as a barrier where a combustible fence attaches directly to your house
27. **BREAK UP** continuity with a gate made of non-flammable materials
28. **REPLACE** wood fencing with a wire or metal fence

**FOURTH, MAINTAIN A NON-IGNITION ZONE** in the zone 5 feet adjacent to your home so that embers landing there will not find enough fuel to sustain a fire

29. **EMBERS** go where leaves are blown, showing where mesh may be needed
30. **REMOVE** dead wood from bushes and ignitable ground fuels beneath them
31. **TRIM** branches away from windows because they can be broken by a small direct flame with disastrous results
32. **DON'T** ask what you should plant, ask why you should plant anything at all particularly so when you have an overhanging roof
33. **IT'S NOT** so much what you plant as how it is maintained that counts
34. **IT IS** best to minimize plantings and use non-flammable materials such as paving stones, pea gravel or large pebbles to interrupt a line of fuels leading directly to your house or wood fence
35. **THIN WOOD** like lattice ignites more quickly than thicker wood (e.g. a 4x4 piece of wood)

## **FIFTH, CREATE DEFENSIBLE SPACE** beyond the non-ignition zone to reduce the intensity of wildfire as it nears your home

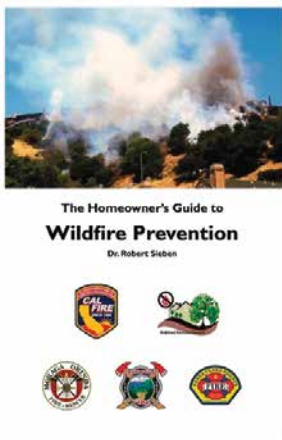
36. **REDUCE** ground fuels such as leaves & pine needles to a maximum depth of 3 inches
37. **REMOVE** dead vegetation and limbs
38. **CREATE** a separation between groups of trees & shrubs both horizontally & vertically
39. **MAINTAIN** defensible space as an ongoing year-round activity
40. **IF YOU LIVE** on a larger lot, create a wildland fuel reduction zone in strategic areas, such as near roads, on ridges, or facing the northeast, where Diablo winds come from
41. **IT IS CRUCIAL** to understand that wildfire protection requires an ongoing effort that involves regular monitoring of your property. No one can do this as well as you, and it does not require any state or local funding
42. **AVOID** triage by making you home salvageable



## **SIXTH, USE AVAILABLE RESOURCES**

### **[www.wildfireprevention.info](http://www.wildfireprevention.info)**

This free website maintained by Dr. Robert Sieben is full of practical, detailed, inexpensive actions homeowners can take to make their home less vulnerable to wildfire.



### **The Homeowner's Guide to Wildfire Prevention**

by Dr. Sieben, is a 67-page illustrated paperback written by a homeowner for homeowners. It is recommended by CalFire, the fire departments of Moraga-Orinda, Santa Clara Co, and Kensington, and the Diablo and Oakland Firesafe Councils, the Claremont Canyon Conservancy, and the North Hills Community Association. It is obtainable through Amazon or directly from the author at [rsieben@gmail.com](mailto:rsieben@gmail.com) with free local delivery.

**Dr. Sieben** is certified as an inspector by the International Association of Fire Chiefs, and is available as a speaker and for on-site evaluation.

**THE HOMEOWNER OWNS THE PROPERTY  
AND, THEREFORE, OWNS THE FIRE AS WELL**