

“Hardening” Homes Against Wildfires In California Has Been An Uphill Battle

Hardening your home against wildfires is a necessity if you live in a state like California. Over the past four years, dark clouds of ash and smoke from hundreds of out-of-control blazes have blanketed the Golden State.

“Every year we make records in terms of destruction,” says Cal Fire Chief Daniel Berland in an investigatory meeting held virtually in December 2020. “And the loss of life is at an all-time high.”

California isn’t the only state dealing with massive infernos like the Camp Fire, which killed 86 people and destroyed a whole town in the northern part of the state. In fact, 2020 was a record for the entire country, says the Center for Disaster Philanthropy. Nine million acres were incinerated, double that of last year.

Wildfires may be everyone’s problem, but California is ground zero. California’s Insurance Commissioner Ricardo Lara hosted a virtual meeting in December 2020 of scientific experts, community activists and firefighters to discuss the most effective technique for fighting fire: “Hardening.”

What is hardening? At the most basic level, it makes a “fire fortress” out of your home. Working outward, it creates a “defensible space” around both your home and your community. It also means that home insurance companies should reward—not punish—homeowners and communities that take these steps to protect their properties.

Ultimately, and most controversially, California must stop looking backward at a past that can no longer predict the future, and come up with a viable fire predictor. This science has to determine where blazes will start, how big they’ll grow, whether to build more homes in fire-prone areas and how much those who want to live there should pay in home insurance premiums.

Hardening Your Home To Build A Fire Fortress

Hardening a home starts with creating a fortress on the inside to prevent sparks and flying embers that could come from a firestorm 10 miles away from entering your dwelling. It could be as simple as making sure the garage door shuts tightly when you first smell smoke. If the fire is getting closer and your electric service is out, you'll need a battery backup to control the door.

“Block any birdstops,” says Chief Berland. That means caulk the space between the roof and rafters. And while you're up there, make sure gutters are free of debris. Cover the chimney and stove pipe outlets with a mesh screen, which allows smoke to get out but won't let sparks in.

Other home modifications can range upward in price. These include replacing any wood “shake” roof with asphalt, installing metal gutters, fire resistant siding and—for wealthy homeowners—spraying the outside with fire retardant.

Tempered glass could be a viable option for windows.

Search the Insurance Institute for Business & Home Safety (IBHS) website for a complete list of home hardening techniques.

On Feb. 8, 2021, Lara announced a partnership between the California Department of Insurance and Gov. Gavin Newsom's administration to establish consistent statewide standards for hardening homes and communities. The goal is to reduce wildfire risk, protect people and property, and make insurance more available and cheaper to residents and businesses.

Your Home Insurer's Monetary Responsibility

When fire-proofing modifications become expensive, homeowners need to know if their insurance companies will lower premiums to reflect these improvements. Consumer advocates point out that auto insurers provide discounts for motorists who prove they're driving safer by using telematics programs such as usage-based insurance.

But home insurers may see things differently. Newspaper accounts indicate that homeowners who upgraded on their own initiative didn't get much in return from their home insurers. “We need more science to better gauge whether specific mitigation measures work,” says Jeff Czajkowski, who directs policy research at the National Association of Insurance Commissioners (NAIC).

This raises the complex issue of “catastrophe modeling.” Unlike some other states, California won’t allow private companies to use computer technology to decipher the fire code that shows where the most vulnerable areas are located. But that could change as pressure mounts.

“We know they’re going to do something,” says Executive Director Amy Bach of United Policyholders and a California resident. “If red states like Florida, Alabama and South Carolina did it, then ‘blue’ California will do it.” The state should require a 5% rebate for homeowners who harden their homes and hope insurers will offer even more back, suggests Bach.

This might also indicate that new construction in the millions of acres of the Wildlife Urban Interface, dubbed the “Wooie” by one prospective catastrophe modeler, could be curtailed—rather than keep building with skyrocketing home insurance premiums. Some residents there now say they’re lucky to find just one insurance company to insure them.

Creating ‘Defensive Space’

Homeowners may find that nothing will help prevent damage if they live less than 30 feet from a neighbor whose home catches fire. The “radiant heat” is likely to set their home ablaze anyway. This is one reason why homes in wealthier communities built on larger properties could fare much better than residents living in trailer parks.

According to fire experts, the key to creating “defensible space” is to clear anything that could burn, such as brush, mulch, lawn furniture, wood fencing and even an outdoor tool shed.

“A non-combustible bubble” at least 5 feet from the home is critical, says Yana Valachovic, a forest advisor at the University of California. Others say the defense should extend out 100 feet.

Slow Burn

One way to create the bubble is to allow communities to do their own “low intensity burns.” Under the direction of a fire official, California residents actually set these fires themselves and let them burn downhill until the fires near their homes. This deprives a future fire of fuel.

“We’ve been doing it for seven years now with no escapes,” says Margo Robbins, a founder of the Cultural Fire Management Council. “Fire [control] must be returned to the hands of the people.”

State fire officials admit it's not a bad idea. Having snuffed out so many fires for so long the forests are now overgrown and ripe for monster firestorms. "There used to be 100 trees an acre [in some areas]," says Chief Berland.

"Now it's up to 1,000."

Community activism is fundamental as to which homes will be saved, and which will be lost, according to studies by Resources for the Future, a non-profit environmental group. "In the heat of the moment, fire managers have to make tough decisions . . . in choosing how to deploy resources," says co-author Matthew Wibbenmeyer. "They face . . . pressure from politicians and influential community members."

So, it will come as no surprise that "well-off communities are able to advocate for themselves more effectively," he says.