

## Is this the solution to California's soaring insurance price due to wildfire risk?

## West Hawaii Today

In the past several years, homeowners across the state have been either burdened with extremely high insurance premiums or have struggled to find coverage at all. Wildfires have sent California's homeowners insurance market into crisis and the situation is only getting worse. So far, 2024 has seen 219,247 acres burned, more than 20 times the amount this time last year. As wildfires become more frequent and destructive, insurers have worked to lower their risk exposure through rate hikes, nonrenewals, and even halting new policies in the state entirely.

New buyers and those whose policies have not been renewed have limited options since the biggest companies, State Farm, Farmers, Allstate, USAA, Travelers, Nationwide and Chubb, have limited or paused new policies in the last few years. Earlier this month State Farm's cancellations of 30,000 homeowner policies mostly in high wildfire risk areas, took effect. In late June, State Farm requested a 31% rate increase, its largest increase in recent history, on the heels of a 22% increase earlier this year. Allstate also recently filed a request for a significant 34% rate increase.

Homeowners are finding the expense and lack of options unsustainable. Sharon Goldman, longtime resident of the Pacific Palisades, has not had her policy canceled yet, but she has seen increases to her premium and worries she could be next. In her ZIP Code the wildfire risk is high, and State Farm decided to not renew 70% of their policies. Starting in 2019, rates of nonrenewals in high- and very high-risk areas grew to 14% compared with 3% and 2% for moderate- and low-risk areas.

Goldman, using her maiden name out of concern for retribution from State Farm, has paid her premiums each year since she bought her home 50 years ago. She has never filed a claim. But she has seen her rate increase 78% in the past two years. Her agent has told her that her fire coverage will be replaced with the state-run FAIR plan in 2025, an increasingly common insurer strategy that leaves homeowners paying more for less coverage.



Goldman and her neighbors are left wondering what options they have left. She hears stories of people paying tens of thousands a year, an impossible amount for her to cover on her retirement budget. She has started looking into moving out of state and out of the home where she raised her children.

While the state does not require insurance, mortgage lenders do. So, going without is not an option for many. Those whose mortgage is paid off, like Goldman, may not be comfortable leaving their home, typically their most expensive asset, uninsured. High rates and loss of fire coverage have pushed desperate homeowners to riskier nonadmitted carriers or to the state-run FAIR plan, meant to be the plan of last resort. But the California Department of Insurance worries that it is quickly becoming overburdened.

Over the past year, Insurance Commissioner Ricardo Lara has been rolling out his plan to increase policy writing in vulnerable areas and get people off of the FAIR plan. One big component of his strategy is allowing insurers to use wildfire catastrophe models to set overall rates. Insurers say the tool would help them more accurately predict the correct rate for the amount of risk.

As a trade-off, Lara says companies that use these models will be required to increase service in distressed areas with a high wildfire risk and a high concentration of FAIR plan policies.

In public workshops held by the Department of Insurance, consumer advocates raised concerns about a lack of transparency with "black box" models that may be used to justify unnecessary rate hikes. Industry advocates are concerned the plan will take too long to implement when they desperately need changes now.

How likely is it a house will be damaged in a wildfire?

There are many versions of catastrophe models. Each modeling company has their own proprietary analysis but they all generally use the same data inputs to answer the same question.

Each modeled event starts with an ignition, the probability that a fire will start at that location, spread, the probability that the fire will travel based on the land cover in the area, and property characteristics. Using those data, the model simulates a large number of possible outcomes for a given location, estimates the likelihood that a structure will burn from wildfire, and calculates the loss for any buildings there.



The USDA Forest Service developed a national analysis of wildfire risk that is similar to what models created for insurance companies would look like. Based on vegetation and fire-behavior fuel models, topographic data, historical weather patterns and long-term simulations of large wildfire behavior, their wildfire likelihood map shows the probability of a fire in any given year.

A critical part of predicting the potential spread of the fire is the available fuel. The Forest Service's land cover classifications are used in many wildfire models. They specify 40 different fuel types such as grass, shrub, timber, and nonburnable types. Each category is further subdivided based on depth of the cover and humidity or aridity of the climate.

For example, in an arid climate, coarse continuous grass at a depth of 3 feet would have a very high spread rate. A combination of low grass or shrubs and dead leaves or needles in the forest would have a low spread rate.

Property characteristics such as the type of roof or whether the siding is fire-resistive make a significant difference in whether a structure will ignite from wildfire embers. The Center for Insurance Policy and Research found that structural modifications can reduce wildfire risk up to 40%, and structural and vegetation modifications combined can reduce wildfire risk up to 75%.

All of these factors are combined in the model with information about the rebuilding cost and level of coverage to generate an amount of risk unique to the individual property.

Could these models turn the industry around?

Currently, companies are required to calculate their projected losses, on which their overall rates are based, using a historical view of wildfire loss over the previous 20 years. As wildfires increase, however, this means that the average loss trails behind the current state of wildfire risk.

Nancy Watkins, an actuary and principal at the insurance consulting firm Milliman, said that she believes the inclusion of catastrophe models could save the industry. She analyzed the effect of a model on rates compared with using just historical experience. While the rates would generally be higher, the increases would be more even.

In April during a public meeting, Allstate said that if wildfire catastrophe models were allowed, they would



once again start writing new policies in the state.

But wildfire catastrophe models are already used by insurance companies in California for some business decisions and have been for some time. They use models to determine where to write or renew policies, which is one of the reasons nonrenewals have disproportionately happened in high-risk areas.

In recent rate filings, Allstate, Farmers and State Farm cited a modeled wildfire risk score as the basis for not renewing policies. Allstate used CoreLogic's Risk Meter score in 2019 to classify all policies that fell above certain risk thresholds as ineligible for renewal. A 2023 filing from Farmers documents eligibility guidelines for new and renewing policies that sets a risk level using Verisk's FireLine and Zesty.ai's Z-FIRE scores. State Farm's recent 30,000 nonrenewals are based on CoreLogic's Brushfire Risk Layer.

Amy Bach, executive director of United Policyholders, says that wildfire models worked their way into rates without enough state oversight. "We didn't regulate the use of risk scores and now [they] are having a dramatic impact on the market and the genie is out of the bottle."

Some companies use models to assess relative risk between properties and adjust individual rates accordingly. State Farm multiplies its base rate by a location rating factor, calculated using catastrophe models produced by CoreLogic and Verisk. Areas with high wildfire risk have seen dramatic increases in the location rating factor in the past few years.

This process is called segmentation and the Department of Insurance is aware that it is opaque. Department spokesperson Michael Soller says, "People do not know what their risk score is. They don't know what goes into the risk score. It's a black box. Yet, the risk score can be used to [charge you] double what somebody else pays."

While these situations are significant for some, they generally only apply to select high-risk properties. The median effect of the location rating factor has remained fairly stable.

But under the commissioner's new policy, model results could also be incorporated directly into the overall rate. Soller says that one important difference in this new regulation is that for a model to be valid, it will need to incorporate property and community level risk mitigation into rates, including state agency forest thinning and utility company efforts. As more investment goes into making communities safer, in theory the rates should decrease.



## Only you can prevent forest fires?

Wildfire mitigation happens at the state and local level. Since 2020, in addition to baseline spending, California has allocated more than \$2.6 billion towards its wildfire and forest resilience package. 872 communities in the state are registered participants in Firewise USA, a program administered by the National Fire Protection Association that sets standards for fire safety.

For an individual, retrofitting one's home for wildfire resistance is not cheap. On average, homeowners spend \$15,000 on a new roof.

As of October 2022, companies such as State Farm that use wildfire models in segmentation are already supposed to give mitigation discounts. A February filing from State Farm breaks down how their discounts would work in a low-, medium- and high-risk area.

For the low-risk group, the dollar amount saved may not be worth the investment in mitigation. For the high-risk group, the slightly lower percentage reductions would still result in more substantial dollar amounts saved.

According to the State Farm documents, these discounts are given at a set rate for all properties across the state. Granular catastrophe models take into account the impact of mitigation on the property level, nearby community mitigation and any recent wildfire history that might indicate a temporarily reduced risk.

However, a complaint raised several times during the regulation workshops was that when homeowners do spend money, often thousands, on lowering risk, they do not see any changes in their insurance premiums. Some say their policies were still dropped.

Goldman has already completed the property-level mitigation work. She has a class A Spanish tile roof. She does the brush clearance every year. This past year it cost about \$1,200. She even has an outdoor sprinkler system. But she did not learn about mitigation from her insurance company. Instead, it was on one of Bach's monthly educational community calls where she got the idea to install fire-resistant vents.

And yet, she has not received a mitigation credit from State Farm and has not received any information about how to receive one. When she asked her agent whether the work she had done on her home



qualified for a discount he said no. The Department of Insurance says that they review consumer complaints for rate accuracy and conduct regular examinations of insurance companies. They noted that concerned consumers should contact them to review their specific situation.

## Making models a reality

The catastrophe modeling regulation requires insurers to submit their modeling information to the Department of Insurance for review by an internal model advisor and any necessary consultants. Some proprietary information is allowed to remain confidential but proponents of the plan say that the regulators will have all the information they need to assess the models even if the general public does not.

The department says it is still considering public input from the most recent workshop and has no further plans for additional workshops. Once the regulation is finalized there will be a public hearing. Commissioner Lara plans to have this regulation and the rest of the Sustainable Insurance Plan in place by the end of the year.

In addition to forward-looking catastrophe models, Lara's plan will introduce the ability for insurance companies to include reinsurance costs in rates and to increase coverage in the FAIR plan. Details for both of those changes are expected to be released this month.