



CO2 COALITION SCIENCE & POLICY BRIEF

January
2020

5 Ways to Reduce Wildfire Risk in California

By Jim Steele and Genesis Torres

Data from the California Department of Forestry and Fire Protection show that 2019 was another year of wildfire disaster. As of November 25, 7,860 fires had burned 259,823 acres, destroyed 732 structures, claimed three lives, and dangerously reduced air quality. A U.S. Geological Survey researcher reported that: “Since the year 2000 there’ve been a half-million acres burned due to powerline-ignited fires, which is five times more than we saw in the previous 20 years.” Many of the most devastating fires were ignited by power lines, but arson and negligence played a major role.

California’s primary strategy to prevent fire damage has been to cut off electricity. During a period of near-freezing temperatures, California residents went days without light and electricity for appliances. Spoiled food, silent cell phones, dead water pumps, and intermittent internet service disrupted daily life. That’s no strategy at all. People’s essential needs must be met.

As the ash settles on the latest tragedy, what can be done to reduce the impact of future fires? Scientific evidence suggests five ways to do this. All five must be pursued aggressively. This is an emergency – treat it as such.

About the Authors

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First, broaden tree trimming around power lines, waiving regulations if needed, and clear out ground fuels under them. Pacific Gas & Electric has a huge backlog of needed maintenance on lines and towers, and underbrush clearance. Some lines could be buried in vulnerable places, at a cost of about one million dollars per mile. Compared to 2018 fire losses of \$11.4 billion, released by state officials, that’s a bargain.

Second, get serious about prescribed burns. Every locality in fire country needs to work promptly and aggressively to reduce fuel loads that increase fire intensity. The current method of fire suppression has increased ground fuels and promoted over-crowding. Overcrowding

increased competition for ground water, killing and weakening millions of trees during natural droughts, which creates ideal conditions for bark beetle infestation of California's conifers. Mechanical thinning and selective harvesting can also play important roles. Preemptive burns and thoughtful forest management would greatly reduce these problems.

Third, replace invasive vegetation with fire-resistant native species. This is especially useful and would significantly reduce accident-related ignitions along highways. Wildfires leave gaps within vegetation that create an environment leading to higher susceptibility to invasive species. Sparks rarely ignite trees, but a single spark readily ignites dead grass. Dead grasses are classified as a 1-hour fine fuel, meaning they become highly flammable in just one hour of warm dry conditions, setting the stage for an explosive fire.

Historically, due to scant surface fuels, sagebrush habitat burned about every 60 to 100 years. However, invading annual grasses, like cheatgrass, now extend the fire season and promote large fires every three to five years. **Targeted holistic grazing is another strategic and profitable approach to wildfires, in which cows, sheep, or goats can reduce those easily ignited fuels.**

Fourth, improve regulations for building and zoning in fire prone areas. Increased development in the urban-wildland interface virtually guarantees wildfire problems. Smarter home building through local and statewide regulations on building codes that require the use of fire-resistant materials, creating defensible spaces and disclosure of fire risk during a sale would considerably reduce the risk of destruction related to wildfires. Current homes in "ignition zones" should be required to follow best practices on clearing surrounding vegetation.

Finally, reduce human ignitions by arson and negligence. People ignite 84% of all fires in America's lower 48 states, accounting for 44%

of all burned areas. The U.S. Fire Administration estimates that arson accounts for 20% of California's fires, 55% of Kentucky's and is the leading cause of Florida's fires. More resources are needed to address arson as well as to increase public education programs to reduce careless fires. Educational programs combined with aggressive patrolling, prosecution, and fines would reduce both arson and negligence.

Readers may notice that one popular remedy is missing from our list: **reducing emissions of the warming gas CO₂. Warming plays virtually no role in California's fires**, which occur across a broad range of temperature and moisture. The only human-caused "climate change" connection to the wildfires is the CO₂-phobia that has raised the price of electricity by 50 percent and reduced the power companies' available personnel for maintenance.

The Manhattan Institute's Steven Malanga, writing in the *Wall Street Journal*, cites a Credit Suisse report that California has required PG&E to spend \$2 billion on wind and solar, "at five times the going rate" of fossil fuels. These mandates should be suspended so that more funds are available for the true task at hand, reducing California wildfires.

Science & Policy Briefs

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