

## Opinions

# From Yosemite to Colorado, our approach to wildfires is all wrong

By Stephen Pyne

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To grab the attention of politicians or the public, a fire has to do at least one of three things: It must burn lots of houses, kill people or involve celebrities (a celebrity landscape will do).

This year’s big fires have done all three.

The [Black Forest fire](#) in Colorado killed two people and wiped out 511 houses. Arizona’s [Yarnell Hill fire](#) immolated a crew of 19 firefighters. California’s [Rim fire](#) in and around Yosemite National Park has become the third-largest blaze in state history. And now, new wildfires are relocating the threats from San Francisco’s Sierra Nevada reservoir to its exurbs at Mount Diablo.

These blazes illustrate the major challenges of the American fire scene: Black Forest is a textbook example of fires that burn [where houses and natural fuels intermingle](#) dangerously. Yarnell Hill tragically highlights the limits of fighting fires and the costs of doing so. And the Rim fire is an unhinged wildland scene, where landscapes with once-manageable fires have turned feral.

These are not new problems. The vulnerability of its workforce has haunted the fire community since the Big Blowup of 1910 overran the northern Rockies and killed 78 firefighters. Concern over fire’s removal — from wildlands and agricultural areas that traditionally relied on routine burning — inspired an intellectual revolution that sought to replace fire repression with fire management, even restoration. Policy reforms came to the National Park Service in 1968 and the Forest Service 10 years later. Still, this was a revolution from above; the hard slog of translating ideas into programs came fitfully. The Yellowstone fires that mesmerized the media for much of the summer of 1988 revealed the difficulties of translating policy into practice.

By then the campaign to create a pluralism of fire programs had stalled. By the time it rebooted after the 1994 season, the climate had flipped from soggy to droughty, the politics had switched from bipartisan reforms to partisan attempts to roll them back, the workforce had shrunk and begun privatizing, and sprawl had sparked

Take those burning houses. As early as 1986, the U.S. Forest Service and the National Fire Protection Association launched an initiative to protect homes in fire-prone areas. Today, the issue is no longer just ill-sited McMansions but a giant retrofit for 30 years of irrationally exuberant sprawl. The National Association of State Foresters estimates that more than 72,000 communities are at risk and only 20 percent have a plan for protection.

Retrofitting up to a third of America's housing is a challenge as daunting as rebuilding its crumbling bridges. It means not only replacing combustible roofs but enacting building codes, zoning reform, fire taxes and other infringements on private property. Meanwhile, climate change may flip the script of people constructing houses where fires are, with fires instead coming to where houses are. Some 83 percent of the communities at risk are in the Southeast; the 2011 blowup in Bastrop, Tex., may show what will happen if the Western fire scene moves east.

More basically, we have long misdiagnosed the problem. The emphasis has been on the wildland half of the equation, not the urban one. But it makes more sense to think of homes in hazardous settings as fragments of cities — exurban enclaves and suburban fringes with forested landscaping — rather than as wildlands cluttered with two-by-fours. We know how to keep houses from burning. And we should know that if we build houses in the fire equivalent of a flood plain or a barrier island, the primary responsibility for protecting them is ours.

Regime change when it comes to wildland fire is even trickier. Prescribed, or controlled, fire is a foundational principle in the Southeast, where places such as Florida are succeeding in replacing wild fire with tame fire, but it has foundered in the West. Efforts to get ahead of the flames are meager. The largest, the Four Forest Restoration Initiative in Arizona, proposes to treat up to 50,000 acres a year for 10 years by thinning and burning. As a point of comparison, the nearby 2011 Wallow fire burned 538,000 acres in one savage swipe.

America's firescapes also have a dangerous backlog; every wildland fire put out becomes a fire put off. The land eventually combusts as it must. Some burns are severe, some benign. For reasons of cost, firefighter safety and ecological integrity, fire officers will have to work with the handful of fires — the 1 percent or so — that are doing the burning for all. Such megafires now account for more than 85 percent of costs and burned area.

Out of the legacy of such monsters, we must reconstruct more fire-resilient landscapes. But our institutional landscapes demand preparation as much as our natural ones. We need the ability to move quickly when breaks in the weather occur. We can't rely on single-site projects or approval processes tied to the lottery of bad fire years. We need torch-ready projects with approvals and funding on hand.

Yet, we have underinvested in fire for so long that the catch-up costs seem staggering. The traditional inclination is to rely on emergency interventions rather than systemic reforms; in this way, fire management resembles public health. There is ample money and will for a response when a crisis is at hand, but little for the patient labor of prevention, inoculations and general wellness. Worse, the cost of emergencies is

stripping away everything else. For example, the Forest Service just took \$600 million from elsewhere in its budget to pay for fighting fires this summer.

And finally, the workforce. Our attempt to suppress fire in a paramilitary fashion has unhinged landscapes and provoked fires that firefights alone cannot contain. The fire community is growing weary of throwing crews at flames in a vain and sometimes lethal attempt to battle what, under extreme conditions, cannot be controlled. It may instead opt for a hurricane model in which warnings are issued, people board up windows and clean gutters, and then leave or stay as they choose, while crews wait for the flames to blow through before returning. The fact is, you control wildland fires by controlling the countryside.

What we need as much as money is consensus about how we live in that countryside, or at least agreement about how to decide. This year’s blazes also show why the National Cohesive Strategy for fighting fires — a project set in motion by Congress to protect against bad fires, promote good ones, and assemble a workforce and the resources to do so — is both necessary and tricky. The strategy is a bold attempt to gather the federal government and volunteer fire departments, states and counties, public agencies and private landowners around the fire they all share. But they need to face one another across that fire, not stand with their backs to the flames and use them to animate some other message to special interest audiences. And then Congress needs to join them. The legislation that mandated the national strategy has already stumbled because of underfunding.

It’s probably too late to do more than flee skillfully from the fires we face today. But we can begin positioning ourselves for the ones to come.

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