



Southern California Fires: The Big Questions

By Josh McDaniel
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Watching the round-the-clock media coverage of the recent southern California fires I found myself asking if there has been a shift in how we view disaster risk and our collective and individual responsibility to prevent it. The 2003 fires in San Diego actually destroyed more homes and killed more people, but probably received 10% of the media coverage as the latest round of fires. What caused the increased interest all of a sudden? Was it Hurricane Katrina? Fears of climate change? I am not sure, but I definitely feel like there has been a dramatic change in how these events are viewed.

During the southern California fires, TV viewers saw aerial views of flames coming out of the canyons and battering against tightly-packed hilltop subdivisions. Even reporters and viewers who had never heard of the term wildland-urban interface started asking the fundamental question - why are we still building homes in these areas? Friends and neighbors, who knew I had a connection to fire, began asking me the same question. Why do those people in California keep building where they know it is going to burn?



Charred homes on a hillside near Escondido, California. Photo: K.C. Alfred - San Diego Union-Tribune

The answer is also an easy one – California is gaining population at the rate of about 600,000 persons per year. That is the equivalent of adding a Sacramento to the State every year. Those people have to live somewhere. With a constant demand for new housing, developers keep pushing into these fire traps, building homes around places with names like Chimney Canyon and Hell Hole Canyon.

Without serious land use planning, growth restrictions, and building codes the problem is going to continue to grow.

California has actually been a leader in addressing fire risk through local and State programs requiring defensible space and fire resistant construction. The State's defensible space program requires homeowners in high fire areas to maintain 100 feet of cleared vegetation away from the home. Local fire departments conduct inspections and if a homeowner is not in compliance the work may be done for them with the bill added as a lien on their property. While this program has been effective, enforcement is still difficult. Officials across the State inspected nearly 117,000 properties in 2005 and 2006 but issued only 160 defensible-space citations. Officials say that the program only passed in 2003, and that they are giving homeowners opportunity and time to comply voluntarily before they get much stricter. That time may be now.

Building codes are also much stricter in California than they are in most other parts of the West. Most counties require fire resistant roofing and siding materials for new developments, and in some cases double-paned windows. However, very few areas have gone so far as to require retrofitting of existing homes. And, more importantly, as Richard Halsey of the California Chaparral Institute points out in a recent editorial in the San Diego Union-Tribune, defensible space and stucco siding is not going to save a home against 100 foot flames and 80 mph winds if it is located in the wrong place. "When you put a flammable structure in a flammable corridor it's like putting a bowling pin in a bowling alley – ultimately it is going to be taken out," says Halsey.

Even scientists who have feuded for years about the causes of the southern California fires agree that the solutions are only going to come about through serious land use planning that addresses fire risk.

Shelter-in Place Communities

Stevenson Ranch near Santa Clarita in southern California is the model of the master-planned fire resistant community. All of the homes are constructed to withstand radiant heat and flying embers using concrete tile roofs, double-paned heat-resistant windows, and enclosed eaves. Stone and concrete culverts protect homes adjacent to canyons and other open space, and many of the swimming pools are equipped with valves to allow firefighters to draw water. A 200 foot greenbelt with fire-resistant landscaping rings the properties, and the development has been laid out with firefighter access and evacuation in mind.

Fire officials were so confident that the community would survive the recent fires that they allowed residents to shelter in place as the fires approached. Most watched the fires from their lawns, hoses at the ready to extinguish any embers that managed to ignite anything on their property. Not a single home was destroyed in Stevenson Ranch during the latest round of fires.

Obviously, not everyone can afford to live in places like Stevenson Ranch. According to the California Department of Forestry and Fire Protection, over 5 million homes in the State are in high to very high risk to wildfires, and 84% of those are in areas that could be designated wildland-urban interface. It is likely that many new developments will be built according to at least some of the ideas that guided construction of Stevenson Ranch and other communities like it, but there are still a whole lot of existing homes and developments that will remain vulnerable.

What is Needed?

The argument of responsibility over western wildfires has long simmered over the question of forest management versus land use planning. Non-federal entities consistently point to mismanaged forests and fire suppression history as the culprits when fires run wild and homes burn. On the other side, federal land management agencies always drag out statistics on the growth of the wildland-urban interface and the percentage of their efforts and budget that goes to fighting interface fires.

Both sides are correct. Forests have been mismanaged. Too many fires have been suppressed (in most places, but probably not in southern California, as Jon Keeley has pointed out). And, development has been allowed to expand dramatically without any thoughts to risk and planning. We should be well past assigning blame for the causes of the mess. It is time for solutions.

Roger Kennedy, the former director of the National Park Service has argued that federal policies have led to the expansion of the wildland-urban interface. "Taxpayers build roads and power lines into the firetraps and insure the mortgages of those who live there. When the fire closes in, we pay to rescue the victims. Thus we encourage construction while risking the lives of both homeowners and those who rescue them," he argued in a recent New York Times editorial.

Kennedy proposes immediate actions to remedy the problem through the creation of a National Flame Zone Atlas along the lines of the national floodplain maps. The atlas would be used to decide whether subsidies for infrastructure development and mortgage insurance would be granted or withheld.

We already have a good idea of the existing and potential overlap of high risk fire areas and housing. Technology is making it more and more feasible to create detailed maps that could guide fuel treatment efforts on a landscape scale to protect communities and restore forest health, while providing guidance for land use planning. What is lacking is the political will to make the tough policy decisions that will represent dramatic course changes in terms of land management and land use planning – budget allocations, zoning, expansion of wildland fire use – the types of actions that could make a real difference.

Misconceptions persist, but as a society we are becoming much more aware of the human and economic consequences of placing homes and people in the path of hurricanes, floods, and fire. And with awareness comes questions. As members of the firefighting, land management, and scientific communities we better be ready to answer them.

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