The New York Times
nytimes.com

November 3, 2007

OP-ED CONTRIBUTORS

Blazed and Confused

By C. J. FOTHERINGHAM, JON E. KEELEY and PHILIP W. RUNDEL

Los Angeles

IN the last century, a greater proportion of Southern California has burned than that of any other part of the country. Chaparral shrublands — not forest — cover much of our landscape and account for the vast majority of what burns. The United States Forest Service, which devotes more than half of its budget to fire-related activities, spends most of that money to protect residences built in these shrublands.

Yet we have just seen, for the second time in less than a decade, wind-driven fires causing at least $1 billion in damage. The magnitude of these events makes it clear that it is time to re-evaluate the wildfire problem and how we deal with it as a matter of public policy.

There is much confusion over the causes and behavior of these fires. Some people contend that fire suppression is itself responsible for the catastrophic events, because it has allowed for an unnatural accumulation of flammable vegetation. But while it's true that fire suppression has affected fire behavior and intensity in many forests, it is not true of the chaparral that constitutes much of Southern California's undeveloped land, and more than 95 percent of what burned last week.

Fire suppression over the past century has failed to eliminate fire on these landscapes. In fact, recent estimates from the Forest Service suggest that most of the area has burned more often in the past hundred years than in the centuries before that. So it's not as if we have allowed more flammable vegetation to accumulate than when nature alone was in charge.

In any case, fires pushed by strong Santa Ana winds are only weakly affected by the amount of fuel in their path. This is evident from last week's fires, which consumed more than 60,000 acres of the same landscape in San Diego County that burned in the 2003 inferno.

In other words, even the extensive burning just four years ago did little to stop the recent fires. In addition to being inaccurate, the theory that fire suppression is responsible for large destructive wildfires is outright dangerous. It casts blame on firefighters and even suggests that we stop suppressing fires on these shrublands, even though they are home to a large population. And it shifts our focus away from real solutions, which are tied to local land planning and development patterns.

Large, high-intensity wildfires are a natural feature of the Southern California landscape, and we have limited ability to stop those that begin during the autumn Santa Ana winds. The best we can do is alter

our behavior in ways that limit our vulnerability.

There is no one simple way to reduce fire risk, but we can learn many strategies by examining not only where houses have burned but also where they did not. It makes sense to begin by restricting the location and design of new housing developments, requiring the use of fire-resistant building materials and maintaining “defensible” space around houses. Greater use of parks and other open recreational areas on the periphery of neighborhoods that abut undeveloped lands can also contribute greatly to protecting communities from fire.

Downed power lines are responsible for igniting some of the recent large fires as well as previous catastrophic ones. Running power lines underground is expensive, but would be a worthwhile investment given the high cost of fighting fires and the billions of dollars in losses that fires cause.

Most fires in Southern California begin on roads, often when car fires ignite vegetation or when cigarettes are carelessly discarded. Low cinderblock walls built along fire-prone stretches of highways — similar to those that are used along freeways as sound barriers in cities — would greatly limit the spread of fire. And given that many fires result from sparks produced by construction equipment like welders, chain saws, mowers and chippers, it would be useful to limit these activities during the Santa Ana winds.

Trying to eradicate all chaparral wildfires in Southern California will continue to be futile. With the population expected to double in the next 40 years, we can expect fires to only increase. We should think of them as we think of earthquakes: we can’t stop them, so we must accept them as a natural hazard and figure out how to withstand them.

C. J. Fotheringham is a doctoral candidate, Jon E. Keeley is an adjunct professor and Philip W. Rundel is a professor of ecology and evolutionary biology at the University of California, Los Angeles.