Reducing wildfire dangers with facts

By Richard Halsey

As we all search for causes of the catastrophic wildfires that devastated so many lives in San Diego County, it is critical we get the facts straight. Otherwise, fire management decisions will be made that will build a solid foundation for another horrific disaster in the future.

It is a common perception that wildlands are unnaturally overgrown with a half-century's worth of combustible old brush because of successful firefighting efforts since the 1950s. In addition, environmental groups and burdensome government regulations are being blamed for preventing thinning and prescribed burns to help alleviate this buildup because of misguided priorities. When applied to the brushlands of San Diego County, both of these beliefs are dead wrong.

There is no question many of our nation's forests are overgrown due to fire suppression, a policy designed to save timber rather than maintaining a safe environment. However, without understanding the dramatic differences between national forests and the chaparral-covered hills in San Diego County, some are promoting a single solution to deal with the threat of wildfire everywhere. This will not only lead to inappropriate use of scarce resources, but will do little to prevent the kind of disaster we experienced last month.

Would things change if we employed a strategy of prescribed burning, torching alternative sections of the backcountry every year? Despite the strong opinions of some, the data do not support such a program.

The notion of prescribed burning as a way to control chaparral wildfires was encouraged in a paper by Richard Minnich in 1983. His ideas are important because they have been used by government agencies to develop fire management policies. Minnich claimed to show that during the 1970s fire size was larger north than south of the Mexican-California border. From this observation, he made the questionable conclusion that differences in fire size were the result of different fire management strategies.

According to his theory, a century of fire suppression in Southern California has caused an unnatural accumulation of brush that has consequently led to large, destructive chaparral fires. Minnich's conclusions have been tested by Jon Keeley and several other scientists. They have found zero evidence that large catastrophic chaparral fires are the result of modern fire management.

Since 1910, the mean size of fires in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside and San Diego counties has remained constant. The timing of fires is equally consistent, with most igniting June through November with September representing the most flammable period.

By examining the California Statewide Fire History Database, it becomes clear that burn patterns have not changed significantly since 1878. A study of seabed charcoal deposits off the coast of Santa Barbara County has shown that the frequency of large, Santa Ana driven fires has not changed over the past 500 years. Similar results are produced even when comparing years before and after 1950 when advanced fire suppression technology was developed and utilized on a massive scale. The only important change revealed by these studies has been an increase in fire frequency during modern times, not a decrease.

Fire in chaparral is a natural, unpredictable event. Despite all our efforts to control them, large chaparral fires have continued unabated since our arrival in California. The assumption that old stands with an "unnatural accumulation of old brush" encourage fires to spread and become more dangerous is inaccurate. Studies by Max Mortitz from the University of California Santa Barbara tested whether fuel age affects the probability of burning even using some of Minnich's data. He found it doesn't.

Paul Zedler, a former professor at San Diego State University, examined the same question through mathematical modeling and arrived at the same conclusion. Under Santa Ana conditions, fire rapidly sweeps through all chaparral stands, regardless of age. Once the flames start, everything burns.

Years of fire suppression have not affected fire exclusion in chaparral landscapes. Relying on prescribed burning will prove to be equally useless.

What is the solution then? Unfortunately, developers will continue to be allowed to push farther into the backcountry as the population continues to grow. Homeowners will become complacent again as time goes on and allow dangerous, fire-prone landscapes to creep close to their homes.

The best way to prevent the type of catastrophic firestorm we experienced in San Diego County is to allocate scarce fire management resources at the urban interface between development and chaparral and develop strict building codes reducing wildfire risk. This includes new regulations requiring the removal of fire dangers present now such as wood shake roofing and volatile Eucalyptus trees near homes. Leave the rest of the landscape alone.

A 1999 report from the California Department of Forestry provides additional suggestions dealing with fire ignition reduction.

It is neither constructive nor accurate to blame environmentalists or past fire management practices for what has happened to us. Let's examine all the facts and make rational decisions based on science, not misguided perceptions.

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