

Editor:

The San Diego Fire Recovery Network (SDFRN) was founded on October 30, 2003, to help respond to the recent tragic firestorms in our county. This growing coalition of more than 120 professionals, representing scores of scientific and community organizations and public agencies, is working to foster the recovery of our human and natural environment through sound science, public education, and land and community restoration. Above all, SDFRN is dedicated to ensuring that our post-fire recovery efforts are well reasoned, scientifically valid, and truly beneficial to the people of San Diego County—and that we avoid similar disasters in the future through wise choices today.

Unfortunately, recommendations based on myths and half-truths are circulating about fire safety and recovery in the aftermath of this heartbreaking disaster, including calls for frequent prescribed burns and broadcast seeding of nonnative grasses. In response we prepared some common-sense guidelines based on the best available science. These guidelines reflect input and review from leading fire scientists and disaster specialists, including Drs. Jon Keeley, Richard Minnich, Rick Halsey, Patrick Abbott, and Jack Cohen. While scientists won't always agree on the technical details of their field, these experts agree unanimously on the following:

Avoid building in fire-prone locations, such as in or near chaparral, on ridgetops or steep slopes, or on topography subject to strong Santa Ana winds. Where we cannot totally avoid such conditions, minimize risks by configuring developments to reduce the total amount of urban-wildland edge: cluster and condense development and avoid creating convoluted urban-wildland edges. Avoid “estate” style housing, with residences scattered within a matrix of highly flammable vegetation.

Provide defensible space around development by appropriate siting of adjacent land uses. Set residences well back from wildland areas and buffer them from fires by placing irrigated green spaces, recreational fields, stormwater treatment basins, arterial roads, parking lots, or other non-flammable uses between residential and wildland areas. Such configurations allow firefighters to safely set backfires without the backbreaking prep work. If carefully implemented, they also help protect endangered species and sensitive ecological communities from invasions by weeds, cats, nonnative ants and other adverse “edge effects” that enter wildlands from residential areas.

Use carefully reasoned, science-informed fuel reduction methods when and where necessary to minimize risks to human health and safety. Focus these efforts near the urban-wildland interface. Prescribed fire may in some cases reduce risks in conifer forests, but too frequent burning of chaparral or coastal sage scrub favors weedy conditions that may actually increase fire ignition frequencies.

Fuel reduction far from human development, in the interior of wildland areas, would waste suppression funds and do little or nothing to reduce human risk. Nature should control fuel levels and fire frequencies in wilderness areas when and where they pose

little risk to development. Even areas that recently burned and have very low fuel levels will burn during Santa Ana conditions.

Use fire resistant design and construction throughout the county, but most urgently near the wildland-urban interface. Place no flammable structures (including decks, outbuildings, fences), and plant no highly flammable vegetation (such as eucalyptus and pepper trees) where they may transmit wildland fires into residences. Recognize that interface properties form a part of their community's defensive fire line. Residents there have an absolute obligation to maintain strict fire-safe conditions on their property, because as soon as one structure ignites, it is likely to ignite others in the neighborhood. Structures burn much hotter and longer than wildland fuels, and they throw off more dangerous firebrands. Thus, most structure fires in residential areas are ignited not by burning wildland fuels, but by other burning structures.

Our native plant and animal communities will generally recover on their own following fire, which is a natural ecological process. Knee-jerk or shortsighted reactions, such as broadcast seeding of non-native seeds, can cause more harm to the environment than the fire itself, and ultimately more harm to human property and safety. Extensive research has demonstrated that seeding nonnative rye grasses in hopes of reducing erosion is at best a waste of money: most broadcast seed washes away before even germinating. At worst, broadcast seeding may actually increase erosion by hindering recovery of deeper-rooted native plants that are more effective at stabilizing soils. Finally, establishing a cover of nonnative annuals—sometimes referred to as “flash fuels”—can increase fire ignition rates relative to natural conditions.

San Diegans live in a remarkable landscape that evolved with fire, that needs fire, and that will burn again regardless of how many helicopters we buy. We cannot prevent wildland fires, and wildland fires are in fact necessary to maintaining this area's unique flora, fauna, and quality of life. We therefore need to design and build our communities, and maintain our precious open spaces, with renewed respect and understanding of these indisputable realities.

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