

PUTTING PUBLIC SAFETY FIRST: FIRE DANGER IN THE WILDLAND/URBAN INTERFACE

Throughout Southern California, there are areas where homes and wildlands intermix. This is commonly referred to as the “Wildland/Urban Interface.”[1] California has long recognized the benefit of the Wildland in the Interface. Wildland parks and open space are protected from development and provide valuable recreational opportunities for city-dwellers. However, as California’s population grows – and the number of homes in the Interface increases - there has been a dramatic increase in loss of life and property damage from wildfires. Wildfires also threaten watershed, cripple infrastructure, promote erosion and landslides, temporarily displace residents, and damage local economies by impacting recreation and tourism opportunities.

To mitigate risk and keep people out of harm’s way, it is essential that planners and decision makers consider wildfire danger from many angles.[2] One of those aspects demands our immediate and focused attention on the following questions:

How can we protect the Urban from the Wildland? How can we make land use and planning decisions which enhance public access opportunities in the Interface Wildland and – at the same time – minimize the risk to surrounding residential communities?

It is Essential that the Issue Be Addressed NOW

California is suffering a drought and fires have devastated communities throughout the State. The California Department of Forestry and Fire Protection (CDF) has acknowledged 1,264 Interface communities “at Risk” -- 92 of those communities are in Los Angeles County.[3]

Planning activities are currently underway in many of these Interface communities and for Los Angeles County as a whole. These plans will ultimately define the permissible use of the Wildland -- i.e., lands which are designated parkland and open space, and which are adjacent to or nearby a myriad of other uses (residential, commercial, institutional (schools, hospitals, etc.)).[4] One aspect of these planning discussions has sparked bigger questions about the Urban/Wildland relationship because some plans currently on the table include “trail camps.” A “trail camp” is a small campsite, located to the side of a trail. These camps are generally designed in chains, to accommodate overnight users on extended trips. Proposals for these camps are generally accompanied by “no campfire” and “no smoking” rules. However, because of the remote location of these camps, the rules will be virtually impossible to enforce.

Given the combination of Southern California’s topography, weather patterns and vegetation impacted by the ongoing drought, climate change that increases the risk of wildfire, and a State budget that limits our ability to protect and defend ourselves from wildfires, allowing camping and other high-risk activities in the WUI creates an unreasonable risk for our residents and our communities. We hope that the situation will change someday – and that there will be no need to limit any recreational use of the Wildland. Right now, however, the risks are too extreme to ignore.

Some Compelling Facts About Fire

People Cause Fires. The majority of fires within California, and specifically within Los Angeles County, are caused by humans – on average ten times more than by natural causes. During the last 20 years in California, 142 fires were started by campfires alone; those fires burned more than 360,000 acres and cost more than \$140 million to suppress.[5]

Southern California Is One Of The Most Hazardous Fire-Prone Areas In The Country. Southern California's Mediterranean climate is typified by mild wet winters, in which vegetation grows freely, and warm dry summers, when vegetation turns to fuel and the Santa Ana winds begin to blow. Fires driven by Santa Anas have been known to burn as much as 74,000 acres in a day.[6] "Chaparral" – a semi-arid, shrub – is California's most extensive, native plant community.[7] There are more than 550,000 acres of chaparral in Los Angeles County alone. Chaparral has a very high "fuel load," which makes it the most extensive wildland fire threat in the County.[8] In the steeply sloped coastal and inland canyons, fires create upslope drafts, which increase the potential for extreme fire behavior and rapid spread.[9] Steep terrain also creates extremely hazardous conditions for fire-fighting personnel and limits the use of heavy equipment, such as bulldozers, to create fire lines.

Much of Los Angeles is a Very High Fire Hazard Severity Zone. "Fire Hazard" is a way to measure physical fire behavior so that people can predict the damage a fire is likely to cause.[10] Los Angeles County includes two very large regions designated as Very High Fire Hazard Severity Zones: one region includes the Santa Monica Mountains and covers nearly all of the unincorporated Third Supervisorial District; the other region includes the Santa Susana and San Gabriel Mountains and covers approximately two-thirds of the Fifth Supervisorial District.[11] The City of Los Angeles has identified most of its hilly and mountainous regions - 38 communities in all - as Very High Fire Hazard Severity Zones.[12]

Drought and Warming Intensify the Fire Risk. In June of 2008, following two straight years of below-average rainfall, very low snowmelt runoff and the largest court-ordered water transfer restrictions in state history, Governor Arnold Schwarzenegger proclaimed a statewide drought. The Governor acknowledged that the drought has created extreme fire danger due to dry conditions.[13] Recent studies predict that based upon weather conditions for future climate scenarios (including the intensification of warming), the frequency of wildfires will increase in the Western U.S. – perhaps as much as 35 percent by mid-century and 55 percent by the end of the century.[14]

The Numbers are Staggering. Fifteen of the twenty largest wildfires in California history have occurred since 1985; nearly 1.2 million acres burned during the record-setting 2008 fire season.[15] CDF provides fire management for "state responsibility areas." In 2000, CDF reported 5,177 fires which destroyed 130 structures and caused damage in excess of \$29,800,000. [16] In 2007, the number of fires was down (3,610), but there were 3,079 structures destroyed, and damage in excess of \$ 254,000,000. [17] The statewide numbers for 2008 are not yet in. However, in 2008, Los Angeles saw a dramatic increase in the number of fires, e.g., Sayre Fire (burned 500+ structures and 17 sq. miles including the Oak Ridge Mobilehome Park in Sylmar); Freeway Complex Fire (\$14.8M+ in damages); fires in Corona, Yorba Linda,

Anaheim Hills (unincorporated Los Angeles and San Bernardino Counties); and a fire which destroyed the Sun Terrace Mobile Home Park in Lakeview Terrace.[18]

The CDF's fire protection expenditures grew from \$475 million in 1996-97 to \$869 million in 2006-07 – an 83% increase.[19] The 2008-09 budget for CDF is \$1.6 billion.[20] However, the increased risk of wildfires cannot be managed by fire suppression strategies alone.[21] The “most effective way to limit damage and loss due to wildfire is to prevent all but the most blatant ignitions due to arson or other unforeseeable circumstances.”[22]

A Four Point Plan for Providing SAFE Access to Wildlands in Los Angeles County

Access to the Wildland Areas in Los Angeles County will always involve risk to nearby communities and to wildland visitors, because people cause fires. However, there are ways in which Los Angeles County officials can – and must – manage access and use of Wildland Areas in Los Angeles County so as to decrease the risk.

We recommend the following **four specific measures**:

Point 1: Strict Enforcement of State and Local Fire Codes (No Modifications, No Waivers).

Most people who die in wildland fires do so while evacuating. Evacuation operations require large commitments of firefighters who could be better utilized on the fire, and impairs traffic, affecting the response of firefighters.[23] For both public and private development, a 20-foot wide access road is mandatory.[24] Fire officials have the discretion to modify this requirement, if certain legally-required findings are made.[25] However, in light of current conditions (statewide drought, lack of funds for fire suppression, increasing frequency and severity of wildfires), no modifications should be granted for properties in Very High Fire Hazard Severity Zones. Instead, in these Zones, fire officials should exercise their discretion to require roads in excess of 20 feet and/or secondary access roads where needed to prevent vehicle congestion due to the condition of terrain, climatic conditions, or other factors that could limit fire apparatus access or impede evacuation.[26]

Point 2: No High Risk or Intensive Public Uses Should be Allowed in Very High Fire Hazard Severity Zones.

A flat prohibition should be imposed on high risk or intensive public uses in these Zones.[27] Those activities include unsupervised camping and large group “gatherings” which can put both the visitors and adjoining neighbors at risk.

Point 3: Require Conditional Use Permits for Non-Residential Uses in Very High Fire Hazard Severity Zones.

No new non-residential use (public or private) should be permitted in these Zones without a Conditional Use Permit with notice given to all property owners within 1000 feet and to all public agencies with jurisdictions within two miles.

Point 4: Public Safety First Should Be a Basic Policy.

Every local agency should direct their land use planners, in conjunction with state and local fire officials, to formulate a set of Wildland Area access and use policies based on the principle that public safety is the first priority, and must take precedence over public access or natural resource protection. Appropriate amendments to each agency's general plan, coastal plan, zoning ordinances and other regulations should be drafted and adopted.

Endnotes

- [1] California Department of Forestry and Fire Protection, The Wildland Urban Interface (WUI): Assessing wildfire related risks to people, property and infrastructure in California. <http://frap.cdf.ca.gov/projects/wui/index.asp>
- [2] Rocky Mountain Land Institute, January 30, 2009. "Sustainable Community Development Code, Beta Version 1.2." <http://law.du.edu/documents/rmlui/sustainable-development/Wildfires-in-the-Urban-Interface%201-30-09.pdf>
- [3] Acton, Agoura, Agoura Hills, Auga Dulce, Altadena, Arcadia, Azusa, Beverly Hills, Big Rock Springs, Bradbury, Burbank, Calabasas, Castaic, Claremont, Cornell, Covina, Del Sur, Del Valle, Desert View Highlands, Diamond Bar, Duarte, El Nido, Elizabeth Lake, Fernwood, Glendale, Glendora, Glenview, Gorman, Green Valley, Hacienda Heights, Hidden Hills, Juniper Hills, Kagel Canyon, La Canada-Flintridge, La Crescenta-Montrose, La Brea Heights, La Verne, Lake Hughes, Lake Los Angeles, Lancaster, Lang, Leona Valley, Little Rock, Llano, Longview, Los Angeles, Malibu, Malibu Bowl, Malibu Vista, Mint Canyon, Monrovia, Monte Nido, Neenach, Oban, Olive View, Palmdale, Palmdale East, Palos Verdes, Pasadena, Pear Blossom, Pico, Point Dume, Pomona Quartz Hill, Rancho Palos Verdes, Ravenna, Rolling Hills, Rollins Hills Estates, Rowland Heights, San Dimas, San Fernando, Santa Clarita, Saugus-Bouquet Canyon, Seminole Hot Springs, Sierra Madre, Sleepy Valley, South Pasadena, Stevenson Ranch, Sun Village, Sylvia Park, Three Points, Topanga, Topanga Park, Val Verde, Valyermo, View Park-Windsor Hills, Vincent, Walnut, West Covina, Westlake Village, Whittier, Wilsona Gardens. California Department of Forestry and Fire Protection, The Wildland Urban Interface (WUI): Assessing wildfire related risks to people, property and infrastructure in California. <http://frap.cdf.ca.gov/projects/wui/index.asp>
- [4] Los Angeles County is in the process of updating its General Plan, which applies County-wide. The County is also creating a Local Coastal Plan for the Santa Monica Mountains, and is creating and/or updating Community and/or Area Plans for Florence Firestone, Hacienda Heights, Santa Clarita Valley, and Antelope Valley. The Santa Monica Mountains Conservancy has submitted a Local Coastal Plan Amendment for the Malibu area, and has an existing Master Plan for the Rim of the Valley Corridor, which completely encircles the San Fernando Valley and La Crescenta Valleys. The U.S. Department of the Interior, National Park Service, has plans in place for its holdings, from the Santa Monica Mountains National Recreation Area on the west, to the Angeles National Forest on the east. The National Parks Second Century Commission is presently gathering information and perspectives, outlining a vision for the role of national parks in society, the role of the National Park Service as stewards of the national parks, and an action plan for achieving that vision. The Commission report is expected in the Fall of 2009. The California Department of Parks and Recreation has General Plans in place for each of their parks, which stretch across the County, and is in the process of creating and updating plans for numerous parks. See http://www.parks.ca.gov/?page_id=21312.
- [5] California Department of Forestry and Fire Protection, 2008. "Fire Perimeters." Vector Digital Data. 6/2008. <http://frap.cdf.ca.gov/data/frapgisdata/select.asp?theme=5>.
- [6] Sugihara, N.G., J.W. Van Wagtenonk, K.E. Shaffer, J. Fites-Kaufman, and A.E. Thode. 2006. *Fire in California's Ecosystems*. University of California Press.
- [7] The California Chaparral Institute; <http://www.californiachaparral.com/awheresthechaparral.html>.
- [8] California Department of Forestry and Fire Protection, 2005a, "Fuels: Surface Fuels" Raster Digital Data. 2005. <http://frap.cdf.ca.gov/data/frapgisdata/select.asp?theme=5>; Anderson, H.E. 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. National Wildfire Coordinating Group. General Technical Report INT-122, April; The California Chaparral Institute; <http://www.californiachaparral.com/awheresthechaparral.html>.
- [9] Char, C.R. and L.R. Chatten, 1977. *Principles of Forest Fire Management*. Publisher unknown (manual); Clayton, B., Day and J. McFadden. 1985. *Wildfire Fire Fighting*. Publisher unknown (manual).
- [10] CDF, Fire Hazard Severity Zone Re-Mapping Project, <http://frap.fire.ca.gov/projects/hazard/fhz.html>
- [11] CDF, Fire Hazard Severity Zone Re-Mapping Project, http://www.fire.ca.gov/fire_prevention/fhsz_maps/fhsz_maps_losangeles.php.
- [12] In the City of Los Angeles, the Very High Fire Hazard Severity Zone comprises most of the hilly and mountainous regions of the City, and includes portions of the following communities: Baldwin Hills, Bel Air Estates, Beverly Glen, Brentwood, Castellammare, Chatsworth, Eagle Rock, East Los Angeles, Echo Park, El Sereno, Encino, Glassel Park, Granada Hills, Hollywood, Lake View Terrace, Los Angeles, Los Feliz, Montecito Heights, Monterey Hills, Mount Olympus, Mount Washington, Pacific Palisades, Pacoima, Palisades Highlands, Porter Ranch, San Pedro, Shadow Hills, Sherman Oaks, Silver Lake, Studio City, Sunland, Sun Valley, Sylmar,

Tarzana, Tujunga, West Hills, Westwood, Woodland Hills. Los Angeles Fire Department. Brush Clearance Unit; <http://lafd.org/brush/zone.htm>.

[13] Press Release, Office of the Governor, 6/04/2008, <http://gov.ca.gov/press-release/9796>.

[14] Climate Action Team Report to Governor Schwarzenegger and the Legislature (California Environmental Protection Agency 2006). National research demonstrates that, in the western states, the number of wildfires between 1987 and 2003 was four times the number between 1970 and 1986; the total area burned increased more than six and a half times. (A.L. Westerling, et al., "Warming and Earlier Spring Increase Western U.S. Forest Wildfire Activity," *Science* 313, 940 (2006), published online 6 July 2006 (10.1126/science.1128834). From 1995 to 1999, wildland fires burned an average of 4.1 million acres each year. From 2000 to 2004, the fires burned an average of 6.1 million acres per year, an increase of almost 50 percent. During the same periods, the costs incurred by federal firefighting entities to suppress wildland fires more than doubled, from an average of \$500 million annually to about \$1.3 billion annually. (U.S. Government Accountability Office, *Wildland Fire Suppression: Better Guidance Needed to Clarify Sharing of Costs between Federal and Nonfederal Entities* (hereafter "USGAO Report"), July 2006, pp. 3-4.) Forest Service and university researchers estimate that about 44 million homes in the lower 48 states are located in the wildland-urban interface.

[15] Associated Press, Report: Climate Change to Fuel Wildfires in West, August 15, 2008.

[16] CDF. http://www.fire.ca.gov/communications/downloads/fact_sheets/2000summary.

[17] CDF. http://www.fire.ca.gov/communications/downloads/fact_sheets/2007Summary

[18] "Fire that ravaged Sylmar mobile home park fully contained." *Los Angeles Times*, 11/21/08. <http://articles.latimes.com/2008/nov/21/local/me-fires21>

[19] California Legislative Analyst's Office, "California Department of Forestry and Fire Protection: State's Wildland Firefighting Costs Continue to Escalate," presented to the Senate Budget Subcommittee No. 2 on Resources, Environmental Protection and Energy, March 26, 2007.

[20] Governor Schwarzenegger is Committed to Meeting the Challenges of a Year-Round Fire Season. November 18, 2008. <http://www.calfires.com>.

[21] National Wildlife Federation, "Increased Risk of Catastrophic Wildfires: Global Warming's Wake-Up Call for the Western United States," August 14, 2008.

[22] County of Los Angeles Fire Department, Pre-Fire Management Plan, June 2004, p. 9.

[23] Hunt, J., "Listen to Experts Concerning Fire Protection," *Santa Barbara News-Press*, December 21, 2008. Mr. Hunt is a former county fire department captain and a wildland/urban interface fire protection consultant for the past 29 years.

[24] Title 24, Cal. Code Regs. § 503.2; § 503.2.1; Title 19, Cal. Code Regs., § 3.05(a); Los Angeles County Fire Code, §§ 502.1, 503.2.1, 503.4.

[25] Title 24, Cal. Code Regs., sec. 503.2.1; Los Angeles County Fire Code, sec. 503.2.1. Both Codes include a provision which allows for "modifications" of the requirements in individual cases. However, modifications can be granted only if the fire official finds that a "special individual reason" makes strict compliance "impractical," and that the modification is in compliance with the intent and purpose of [the] code and . . . does not lessen health, life and fire safety requirements." (24 Cal. Code Regs, App. A, sec. 104.8.)

[26] Title 24, Cal. Code Regs., § 503.2.2; Los Angeles Fire Code, § 503.1.2..

[27] There is legislation pending (SB 505, Kehoe) that would require public agencies to consider, as part of their planning processes, whether *any form of new development* should be permitted in these zones. There is also legislation pending (AB 666, Jones/Nava), which would require secondary access as a condition of approval of a tentative map or parcel map for a subdivision located in a state responsibility area of a very high fire hazard severity zone. There is no logical reason to limit the requirement to residential subdivisions.