

A: FIRE PREVENTION

The provision of adequate fire protection is directly affected by residential, commercial and industrial growth, all of which proceeds rapidly in Orange County.

The Orange County Fire Authority has developed a Pre-Fire Management unit that is better defining the roles of “wildland fire prevention” and incorporates the “Four E’s” of fire prevention (**E**ngineering, **E**ducation, **E**nforcement and **E**valuation) in each of its programs and activities.

Fire Prevention’s priority goal is to reduce injuries, loss of life and loss of property in Orange County. In analyzing our community risk, we identified wildland fire as our number one risk. Fire Prevention is focused on alleviating the dangers from wildland fires in or near the interface with urban development (Wildland Urban Interface or WUI); through:

- **E**ngineering fuel modification zones (firebreak, fuel break, or greenbelt)
- **E**ducating residents on the importance of maintaining “hardened” homes
- **E**nforcement of defensible space requirements
- **E**valuation of the activities targeting the reduction of risk to structures located in the WUI

The first of the “Four E’s” of fire prevention (**E**ngineering) will provide:

- Map hazardous fire zone areas
- Coordinate with Planning and Development
- Incorporate Chapter 7-A building requirements
- Enhance the fuel modification program
- Identify the need for revisions and or additions to local amendments
- Collaborate with regulatory agencies to improve regulations resulting in maximum effectiveness with minimum environmental impact.

The OCFA is actively involved in enforcing codes and ordinances to ensure that a reasonable degree of fire safety exists in facilities and occupancies to minimize the threat to life and property. This activity is ongoing and conducted daily. Comprehensive pre-emergency planning, fire protection engineering, and training programs are currently in place and are designed to ensure the Authority's ability to meet future service demands.

The OCFA uses Title 24, Title 19, PRC 4290 and PRC 4291 to identify potential hazards and losses due to wildfire and develop mitigation measures that will aid in making residential and commercial structures more defensible. A large percentage of Orange County has adopted regulations that are more stringent than the California Regulations.

Firefighters in remote and rural areas are faced by limited water supply and lack of hydrant taps. Rural areas are characteristically outfitted with small diameter pipe water systems, inadequate for providing sustained firefighting flows.

Some of the most difficult fire protection problems in the Wildland - Urban Interface area are:

- Multiple story, wood frame, high-density developments.
- Large contiguous built up areas with combustible roof covering materials.
- Response time of emergency equipment.
- Street structure – truck trails, non-surfaced, private, curvilinear, dead-ends and street widths.
- Inadequate and unreliable water supply with poor hydrant distribution.

Inadequate code enforcement and code revisions, which lag behind fire prevention knowledge.

The OCFA “Ready, Set, Go!” program is active in participating in a wildfire education and outreach program. The program is based on the idea that during a major wildfire, there may not be enough firefighting resources to protect every home. Fire protection in Wildland Urban Interface areas may rely more heavily on the landowner’s personal initiative to take measures to protect his or her own life and property. “Ready, Set, Go!” encourages residents to take personal responsibility for preparing their property and family to become part of a solution to the problem of increasing fire losses during wildfires. Special emphasis is focused on ember intrusion and the actions the homeowner can take to lower their risk such as: retrofitting homes with ignition resistive features, creating defensible space around structures either by trimming or planting with ignition resistive plants. Additional information regarding preparation of family emergency plans, contact phone numbers, kits and evacuation plans are discussed. Visits for home consultations or community presentations are available all year long. All information is available in both electronic and hard copies.

Additional actions being taken to contribute to the education and safety of the communities include:

- Development and testing of marketing plan, education and outreach materials to obtain intended behavioral change results
- Continual relationship building with local partners and agencies to target and distribute information
- Encourage community participation with stakeholder groups and support Fire Safe Council formation
- Mapping and risk ranking of communities affected by Wildland Urban Interface
- Development of an interactive, GIS based, computer model that provides risk information to the public

