

## **8. FUEL MANAGEMENT FOR HOMEOWNERS**

If homeowners practice a firewise style of living, homes and trees can survive a wildfire. The key to this is fuel reduction. If flammability can be managed, firefighters may have a chance to protect the homes and wildland. This is the key concept of defensible space and why California enacted **PRC 4291**. There are three methods that can assist homeowners in making their property more fire safe. They are Fuel Reduction, Total Fuel Removal, or Type Conversion.

### **8.1 Fuel Reduction**

Fuel reduction, the partial removal of plants, can be accomplished in two ways. One is the removing of highly flammable species and saving the more fire resistive ones, which are then cleaned of dead material, thinned and pruned to reduce fuel volume. The alternative is removing a portion of all the plants to accomplish fuel reduction. Since there is less vegetation to burn, critical factors (i.e., flame length, fire intensity, and rate of fire spread) are reduced.

### **8.2 Fuel Removal**

The requirement of fuel removal must be balanced with the need to prevent soil erosion, which is a threat every rainy season, especially on steep or erosive soils.

### **8.3 Type Conversion**

This is actually a combination of methods: removing highly flammable plants and then replacing them with lower growing, less flammable species. The lower the height of the plant, the lower the height of the flame when it burns. This strategy is useful in areas adjacent to homes or in fuel breaks in communities.

Foresters refer to plants that are low growing and woody as low fuel volume plants. These plants are an excellent substitute for hazardous vegetation. Homeowners should position low fuel volume plants adjacent to the structures where the potential wildfire problem is most critical.

The type of vegetation and topography of an area determine the degree of needed management. Homeowners living next to highly flammable fuels often remove and replace them with lush green lawns and low fuel volume plants. Specimen trees or shrubs may be kept as long as this vegetation would not readily transmit a fire from native growth to structures. Periodic maintenance on these trees and shrubs provides adequate fire safety.

Each region of the country has different climates and soils that dictate vegetation management strategies. You will need to qualify choices for your area. Some landscape professionals as well as state and federal agencies have plant lists for specific regions or locales. The fire service should monitor these recommendations and suggest more resistive plants whenever necessary. A well thought-out plant list is important. Homeowners and developers may turn to the fire service for professional advice. The University of California Forest Products Laboratory has a listing of fire resistive vegetation available on their website, <http://www.prefire.ucfpl.ucop.edu/>.