DEFENSIBLE SPACE

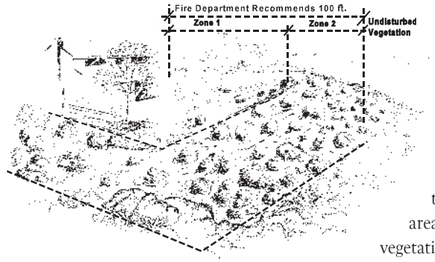
Zoned fire-resistant landscaping helps protect your home from wildfire.

Before Brush Management

ZONE 1 - DEFENSIBLE SPACE

From the structure out a minimum of 30 feet is your defensible space zone

This area is the level area (no steeper than 1 foot of elevation change for each 4 feet of horizontal distance) around your home or business. Plants in this zone should be irrigated, ornamental species. This vegetation should be well-watered and cleared of dead material. In this zone, no more than 10 percent of the native non-irrigated vegetation should be retained. Trees should be pruned away from structures and chimneys in this zone. Wood decks, fences, and other flammable structures and materials should be removed. No irrigation from this area should flow into Zone 2 to avoid encouraging plant growth in Zone 2. Year-round maintenance should be done in this area.



After Pruning and Thinning

ZONE 2 - REDUCED FUEL ZONE

A minimum of 30-100 feet from structures is your reduced fire zone.

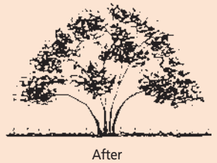
This area is the first defense for fire safety. In this zone, you should selectively thin and prune native or naturalized vegetation to preserve the natural appearance of the area while reducing the amount of burnable vegetation. In this zone, 50 percent of the native, non-irrigated vegetation should be cut to a height of 3 inches (thinned) following a mosaic pattern as shown here. No evacuation, removal, or disturbance of existing plant root system should occur to prevent future erosion. The remaining plant material should be pruned as described and shown below. to remove 50 percent of the flammable fuel. All debris and trimmings should be removed from the site or converted to mulch by a chipping machine and evenly spread out to a maximum 6-inch depth. No irrigation should be placed or used in this area to reduce plant growth, and thus the amount of burnable vegetation. Regular inspection and periodic maintenance should be done in this zone.

BRUSH PRUNING (ZONE 2)

When doing thinning and pruning use the following guidelines:

1. Remove dead or dying material, trim back lower large branches, and thin crowded plants so that 50 percent of material in the retained plants is removed.
2. Plants which are not to be saved, should be cut off at six inches above the ground.
3. The lowest branches of trees and large shrubs should be three times higher than the height of the vegetation below the plant, or six feet, whichever is higher.
4. Minimize walking and maintenance activities on steep slopes since this promotes erosion and causes soil to become compacted and increases the amount of runoff.

Before



After

FIRE-RESISTIVE PLANTS

For a list of approved fire-smart plants & trees for your area, call the El Cerrito/Kensington Fire Department for landscape standards (510) 215-4450, visit www.el-cerrito.org or contact your local nursery.

El Cerrito Fire Department
10900 San Pablo Ave.
El Cerrito, CA 94530

Produced by the
El Cerrito Fire Dept.
Kensington F.P.D.
&
Contra Costa County F.P.D.

& with grateful acknowledgement of contributed materials from

Burn Institute

Designed and Produced by Print & Mail Services

DEFENSIBLE SPACE

This home was saved from destruction because of the homeowner's advanced preparation long before a fire started.

El Cerrito Fire Department and
Kensington Fire Protection District

The most important person in protecting a house from wildfire is not a firefighter, but the property owner. It is the action taken by the owner before the wildfire occurs (such as proper landscaping) that is most critical.

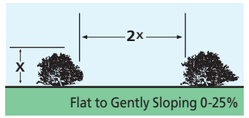
DEFENSIBLE SPACE

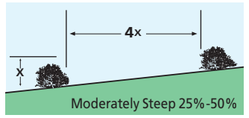
REDUCING THE "FUEL"

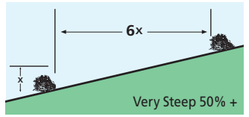
The first goal in creating a defensible space is to selectively thin plants, then prune to reduce fuel volume of the plants that remain.

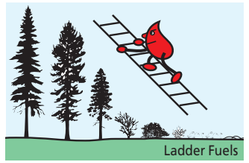
Sometimes wildland plants and even landscaping can occur as an uninterrupted layer of vegetation instead of patchy or widely spread individual plants. The more continuous and dense the vegetation, the greater the wildfire threat.

If this situation is present within your recommended defensible space area, you should "break-it-up" by providing for separation between plants or small groups of plants. Do this work in cooler, earlier hours, not in the heat of the day to prevent accidental ignitions. Remember, if it's too hot outside for you to be working, it's too hot to be using equipment for thinning brush.









LADDER FUELS

Vegetation is often present at varying heights, similar to rungs on a ladder. Under these conditions, flames from fuels burning at ground level can be carried to shrubs, which can ignite still higher fuels like tree branches. The ladder fuel problem can be corrected by providing a separation between the vegetation layers. Within the defensible space area, a vertical separation of three times the height of the lower fuel layer is recommended.

HOW SLOPES EFFECT FIRES

The diagram below provides an idea of how fire behaves on sloping ground.

A match held in the upright position does not burn down rapidly.

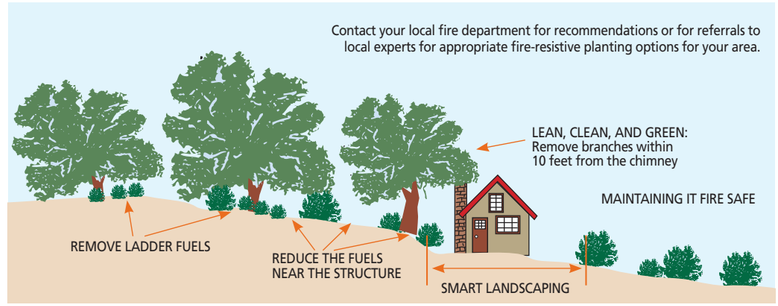
A match held at a horizontal angle increases the speed of the flame.
The match, shown left, represents vegetation burning on a flat to gently sloping area.

This match  represents a fire moving rapidly up a steep slope. In this case, as in all slopes, canyons act as chimneys and flames preheat vegetation and structures ahead of it, moving the fire along at an alarming rate.

Firefighters can control about 97% of all wildfires that start. 3% overwhelm even the best-equipped, well-staffed agencies. That's when your advanced preparation REALLY counts.

SMART LANDSCAPING

Landscaping with wildfire in mind–"firescaping"–involves plant selection based primarily on the plant's ability to reduce the wildfire threat. Minimize the use of evergreen shrubs and trees within 30 feet of a structure, because junipers, other conifers and broadleaf evergreens, such as eucalyptus, contain oils, resins and waxes that make these plants burn with great intensity. Use ornamental grasses and berries sparingly because they also can be highly flammable. Choose "fire smart" plants. These are plants with high moisture content. They are low growing. Their stems and leaves are not resinous, oily or waxy. Deciduous trees are generally more fire resistant than evergreens because they have a higher moisture content when in leaf, but a lower fuel volume when dormant. Contact El Cerrito/Kensington FD for recommendations or for referrals to local experts for appropriate fire-resistive planting options for your particular area.



MAINTAINING FIRE-SAFE LANDSCAPING

A fire-resistant plant can lose this quality altogether if not properly maintained and irrigated. Lack of long-term attention can result in fire-resistant plants loading up with dead twigs, leaves and branches, to grow into monstrous, yet sometimes unseen or concealed fuel volumes. Drip irrigation, plus periodic pruning and cleaning can maintain the fire-resistiveness as well as the appearance of landscaping.

- On steep slopes, thin flammable vegetation a safe distance (at least 100 feet) from structures.
- Canopies of large trees should not form a continuous planting mass.
- Within 30 feet, choose ornamental landscaping plants that are fire smart and non-invasive.
- Maintain all plants by removing dead branches, leaves and needles.

Continuous plant material on this slope can contribute to dangerous fire behavior, placing the home at the top at risk.

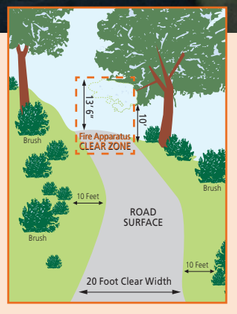
Lack of long term attention can result in fire-resistant plants loading up with dead twigs, leaves and branches

THINGS YOU CAN DO TO BETTER PROTECT YOUR FAMILY AND HOME FROM WILDFIRE

In a wildfire, firefighting forces are stretched to the limit. You can design or modify your home to resist wildfire–or it can be totally unprepared and indefensible. A defensible home has a far better chance of survival–whether or not firefighters can get to it in time! The manner in which a house is designed, location where it is built, materials used in its construction, and fire department access, all influence survivability during a wildfire. When coupled with an effective Defensible Space, these recommendations will make your home much easier for firefighters to defend and improve its chances of survival in a wildfire.

ACCESS

- Identify at least two roads out from your neighborhood.
- Maintain driveways to allow large emergency equipment to reach your home by clearing combustible vegetation at least 10 feet from roads and driveways.
- Cut back overhanging tree branches above roads. Fire Engines need a minimum 13' 6" vertical clearance.



- Make sure the address numbers on your home are reflective or contrasting with the background, and large enough to be clearly seen from the street. If needed, provide a second set of numbers.

Maintaining clear roadways ensures emergency equipment access, as well as, evacuation routes

CITY OF EL CERRITO

www.el-cerrito.org