



# FIRESCAPING INTRODUCTION

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# COMING TO

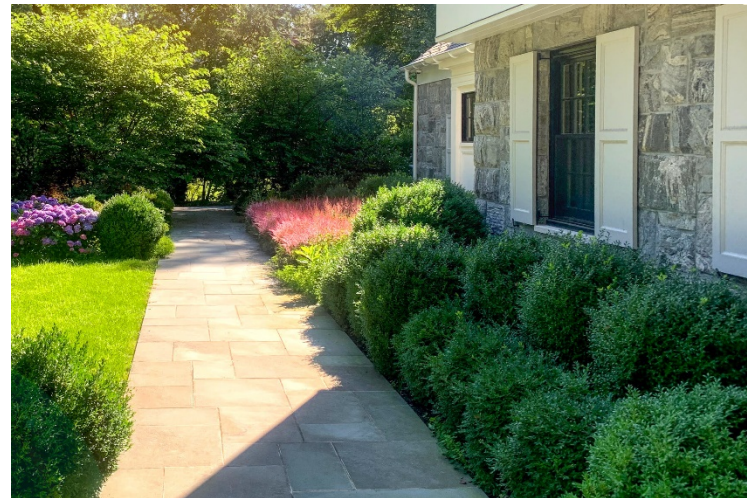
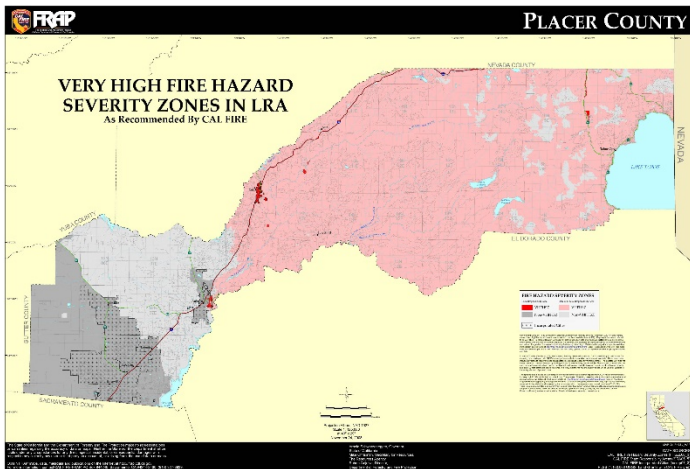
# Terms

**Firescaping**: *to arrange the features of a garden or other areas of land in a way that inhibits or interrupts the spread of fire.*

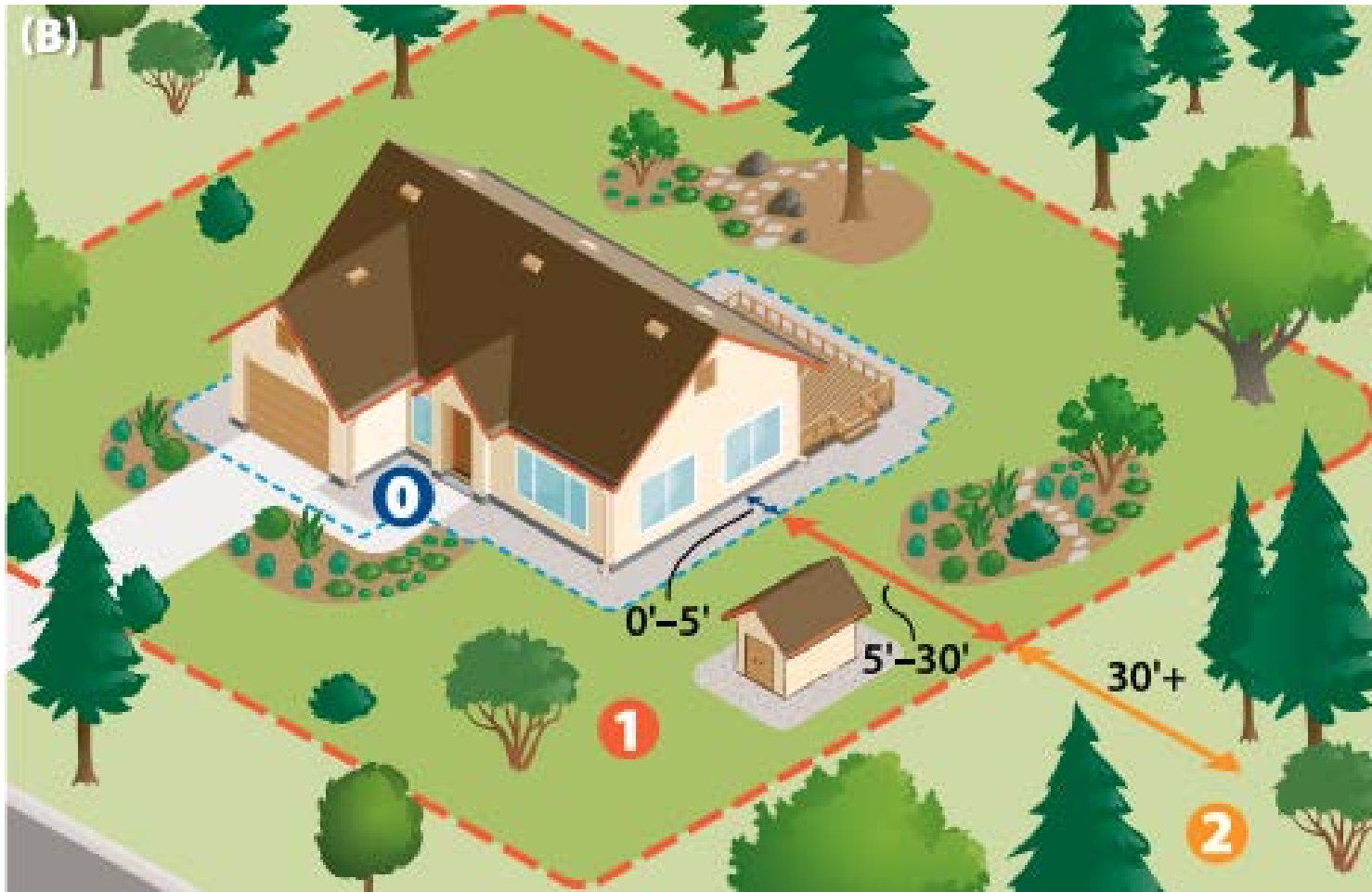


Fire Wise  
Fire Smart  
Fire Resilient  
Fire Proof  
Fire Resistant  
Fire Safe

Look how many terms explain the same basic idea??



*Why is Firescaping something that needs our immediate attention!!??*



What is “Defensible Space”?  
(Public Resources Code 4291)

From Cal Fire:

*Defensible space is the buffer you create between a building on your property and the grass, trees, shrubs, or any wildland area that surround it.*

*This space is needed to slow or stop the spread of wildfire and it helps protect your home from catching fire—either from embers, direct flame contact or radiant heat.*

*Proper defensible space also provides firefighters a safe area to work in, to defend your home.*

# What is “Defensible Space”? (Public Resources Code 4291)

## NOTICE OF DEFENSIBLE SPACE INSPECTION

A fire department representative has inspected your property for fire hazards.  
You are hereby notified to correct the violation(s) indicated below. Failure to correct these violations may result in a citation and fine.

Owner/Tenant:			Inspection Address:			
Inspection No.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	Inspector Name:	Contact Number:	No Violations Observed <input type="checkbox"/>

CHECKED BOXES INDICATE VIOLATIONS

### Zone 1 / Within 30 of all structures or to the property line (Refer to illustration below):

- A.** Remove all branches within 10 feet of any chimney or stovepipe outlet, pursuant to PRC § 4291(a)(4) and 14 CCR § 1299.03(a)(2).
- B.** Remove leaves, needles or other vegetation on roofs, gutters, decks, porches, stairways, etc. pursuant to PRC § 4291 (a)(6) and 14 CCR § 1299.03(a)(1).
- C.** Remove all dead and dying trees, branches and shrubs or other plants adjacent to or overhanging buildings, pursuant to PRC § 4291 (a)(5) and 14 CCR § 1299.03(a)(2).
- D.** Remove all dead and dying grass, plants, shrubs, trees, branches, leaves, weeds and needles, pursuant to 14 CCR § 1299.03(a)(1).
- E.** Remove or separate live flammable ground cover and shrubs, pursuant to PRC § 4291(a)(1) and BOF General Guidelines item 1.
- F.** Remove flammable vegetation and items that could catch fire which are adjacent to or below combustible decks, balconies, and stairs, pursuant to 14 CCR § 1299.03(a)(4).
- G.** Relocate exposed wood piles outside of Zone1 unless completely covered in a fire resistive material, pursuant to 14 CCR § 1299.03(a)(3).

### Zone 2 / Within 30-100 feet of all structures or to the property line (Refer to illustration below):

- H.** Cut annual grasses and forbs to a maximum of 4 inches in height, pursuant to 14 CCR § 1299.03(b)(2)(B).
- I.** Remove fuels in accordance with the Fuel Separation or Continuous Tree Canopy guidelines (see back), pursuant to BOF General Guidelines item 4.
- J.** All exposed woodpiles must have a minimum of ten feet (10 feet) clearance, down to bare mineral soil, in all directions, pursuant to 14 CCR § 1299.03(b)(2)(C).
- K.** Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.), pursuant to 14 CCR § 1299.03(b)(2)(A).

### Defensible and Reduced Fuel Zone / Within 100 feet of all structures or to the property line (Refer to illustration below):

- L.** Logs or stumps embedded in the soil must be removed or isolated from other vegetation, pursuant to BOF General Guidelines item 3.

### Other Requirements:

- M.** Outbuildings and Liquid Propane Gas (LPG) storage tanks shall have ten feet (10 ft.) of clearance to bare mineral soil and no flammable vegetation for an additional ten feet (10 ft.) around their exterior, pursuant to 14 CCR § 1299.03(c)(1).
- N.** Address numbers shall be displayed in contrasting colors (4" min. size) and readable from the street or access road, pursuant to 2013 CFC § 505.1.
- O.** Equip chimney or stovepipe openings with a metal screen having openings between 3/8 inch and 1/2 inch, pursuant to 2013 CBC § 2113.9.2.

## PLACER COUNTY ORDINANCE - 9.32.160 Duty to abate hazardous vegetation and combustible material.

It shall be the duty of every owner, occupant, and person in control of any improved or unimproved parcel of land or interest therein, which is located in the unincorporated territory of the county of Placer, to abate therefrom, and from all private roadways, all combustible material and hazardous vegetation constituting a fire hazard that may endanger or damage neighboring property.

*The requirements of this section will generally be satisfied if the following minimum requirements are met:*

*A. For improved parcels:*

- 1. Maintain one hundred (100) foot defensible space around all buildings/structures.
  - a. Annual grasses and weeds need to be maintained at four inches or less.*
  - b. Tree branches need to be limbed up six feet from the ground.*
  - c. Shrubs need to be maintained.*
  - d. Non-ornamental climbing vines must be removed from trees and structures.**
- 2. Maintain a ten (10) foot minimum clearance next to the roadside; more may be required.*
- 3. Remove all portions of trees within ten (10) feet of chimney and/or stovepipe outlets.*
- 4. Maintain trees adjacent to or overhanging a structure free of dead/dying wood.*
- 5. Maintain the roof of any structure free of leaves, needles, or other dead/dying wood.*

*AND MORE...*

### What is “Defensible Space”?

***(Hazardous Vegetation and Combustible Material Abatement)***

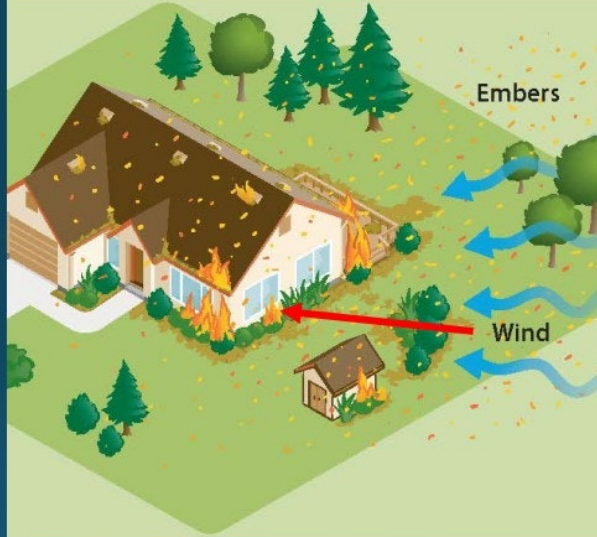
# Techniques to reduce exposures

## Direct flame contact



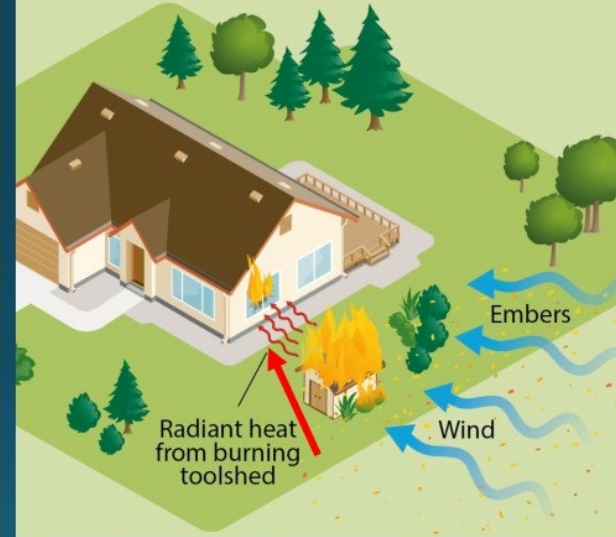
Defensible space implementation interrupts fire pathways and reduces the potential for direct flame contact

## Embers



Home hardening with defensible space can help mitigate ember exposure

## Radiant heat



Home hardening and fuel reduction can address potential radiant heat exposure

# Home Hardening and Defensible Space



# Ember Ignition Zone

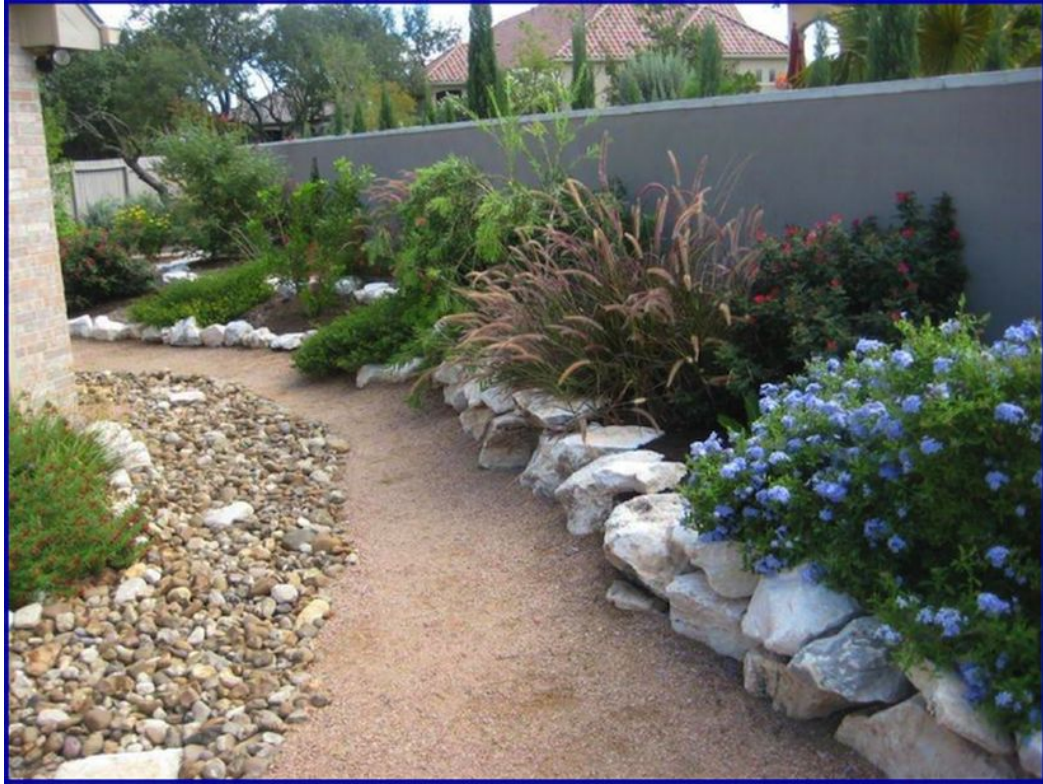
Zone 0:  
0-5' from home - the most important zone!!



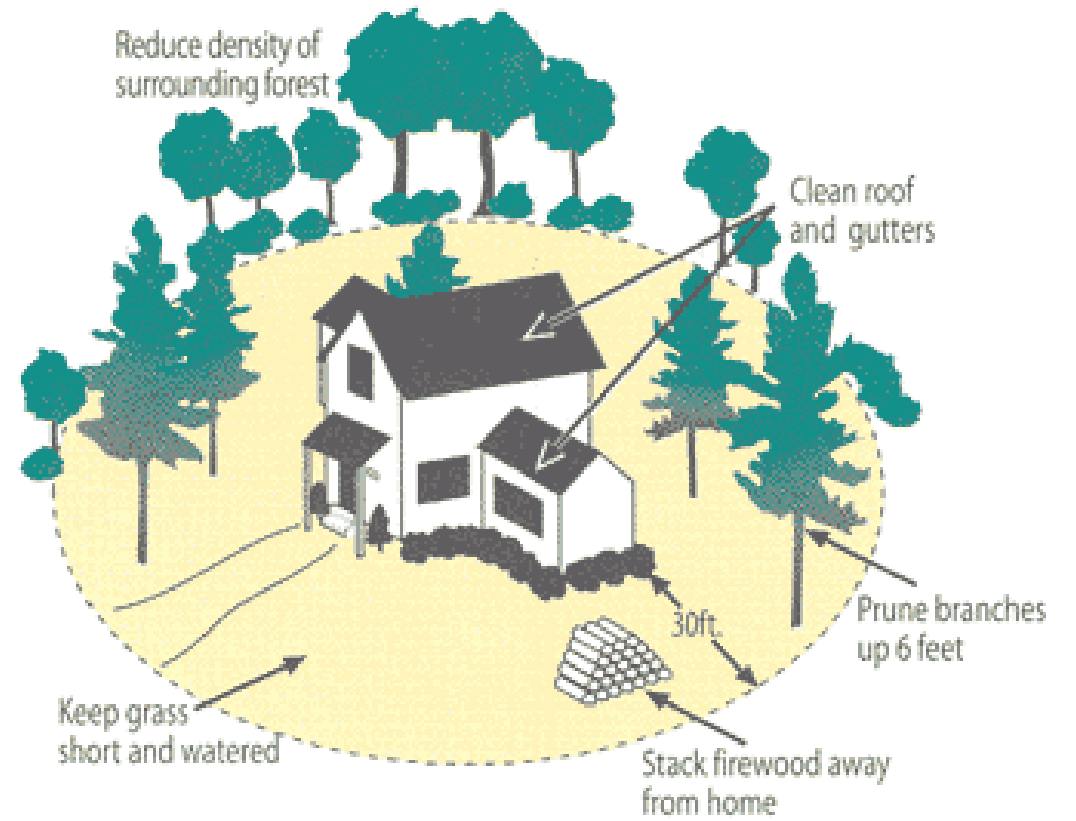


## Tubbs Fire – Santa Rosa

It's estimated that the majority of houses burn down from wind driven, ember cast related fires.



Not just vegetation – wood decks, outdoor furniture, propane tanks, wood piles, sheds, recycling bins, etc..



Zone 1 – 5’ to 30’ from home/structure:  
*The “lean, clean and green” zone*



Zone 1 – 5' to 30' – horizontal and vertical spacing between well-maintained plants



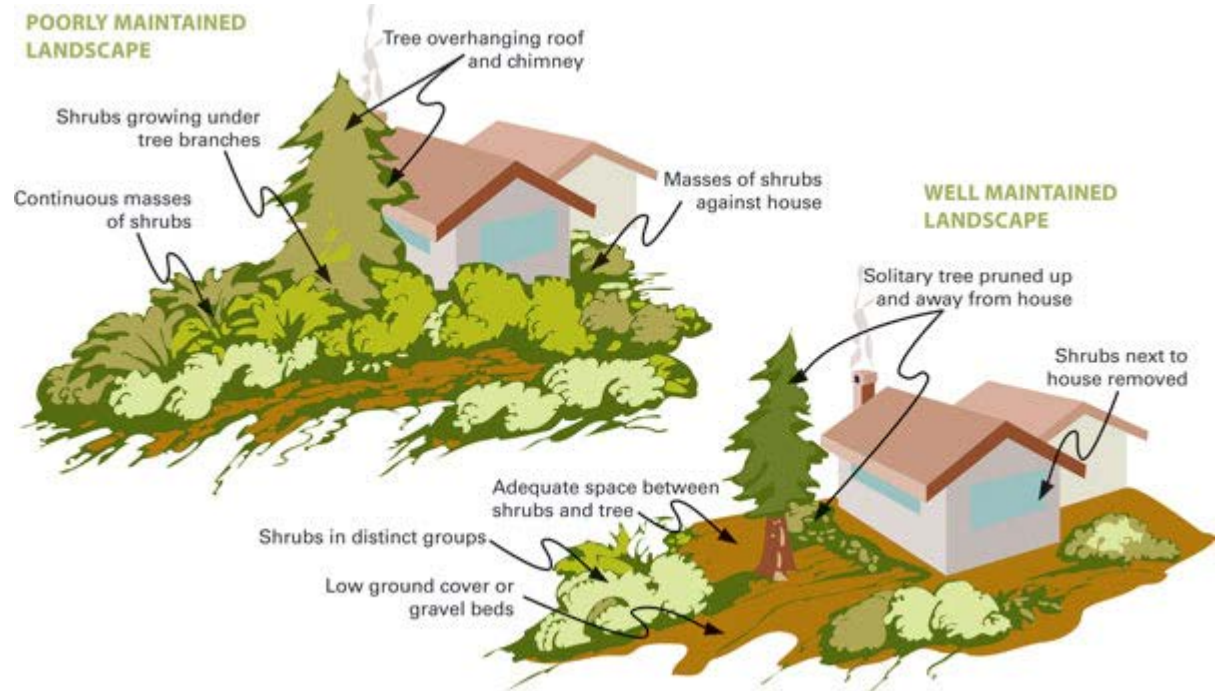
### VERTICAL SPACING

Large trees do not have to be cut and removed as long as all of the plants beneath them are removed. This eliminates a vertical “fire ladder.”



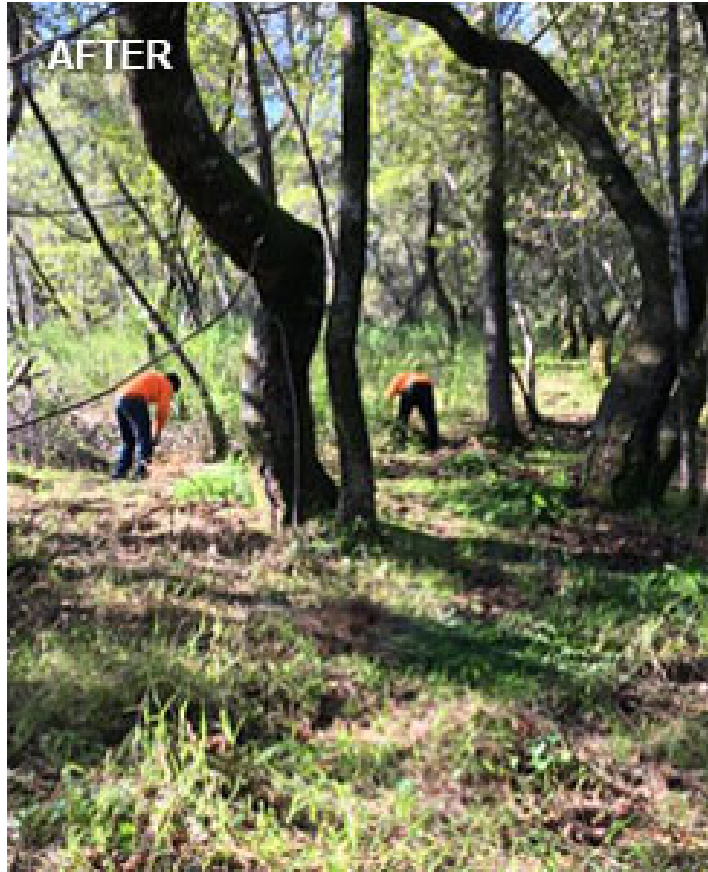
### HORIZONTAL SPACING

Create horizontal and vertical spacing between plants, the amount of spacing will depend on how steep the slope is and the size of the plants.





Zone 2:  
30' to 100' from your home/structure



# Reduced Fuel Zone

IMPORTANT!! This does not mean that all understory plants, shrubs, young trees should be completely removed!!

Zone 2:  
30' to 100' from your  
home/structure



Indiscriminate clearing of acreage leads to:

1. Invasive Plant establishment
2. Loss of wildlife habitat
3. Soil erosion
4. Ecological changes over time





What about having a pretty landscape??  
Are there “FireWise” Plants??









- What about mulch to help with drought?
- AVOID shredded material!!

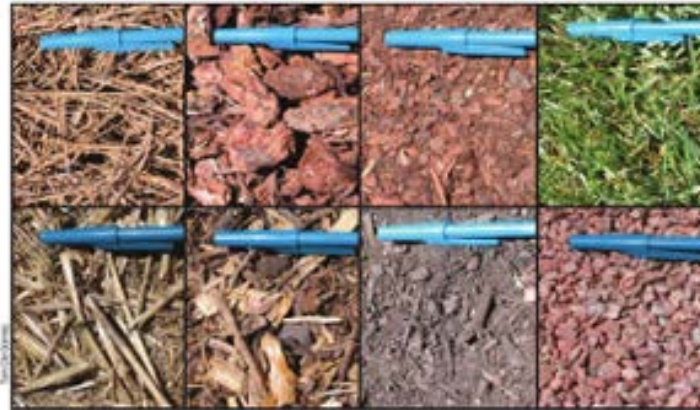


Figure 1. The eight mulches used from the upper left corner and clock wise: pine needles, bark nuggets, shredded bark, grass sod, decomposed granite (DG), garden compost, wood chips, and wheat straw.

### Introduction

A Firewise landscape in Arizona may include native and non-native plants as well as a variety of mulch materials. The goal of Firewise Landscaping is to prevent home ignitions by using plants and mulch to reduce the spread of fires near structures or other improvements (DeGomez et al. 2002). Appropriate plants for a particular area in Arizona vary due to the proximity to structures, the location within the landscape (such as elevation and slope), as well as temperature and moisture regimes (Denske 2002a).

Mulches are defined as any material used on the soil surface for a variety of reasons. The application of mulches to the landscape may improve the aesthetics, reduce soil moisture evaporation rates, improve the soil nutrient content over time, reduce weed competition, moderate soil temperatures, and provide cover for dust abatement

(Appleton and French 1995; Rose and Smith 1996). With a wide variety of mulches available on the market, specific mulches are selected for different aesthetic and economic reasons including "eye appeal, color, size, availability, maintenance, and price" (Steward et al. 2003). Those that have been most popular in Arizona are: organic materials such as bark, wood chips, grass clippings, or compost; inorganic materials such as decomposed granite, rocks, or gravel; and finally synthetic sheet mulches or ground cloth, which are typically topped with an organic or inorganic mulch to hold them in place, protect them from ripping, and to hide them from view.

The Healthy Forest Restoration Act of 2003 was the impetus for the development of Community Wildfire Protection Plans, which emphasizes fuel reduction to protect



• [www.readyforwildfire.org](http://www.readyforwildfire.org)



*Webinar on*  
**Fire-Wise, Water-Wise Landscaping**  
Recorded August 25, 2021

Watch the recording here



Watch a video of PCWA's webinar on Fire-Wise, Water-Wise Landscaping, hosted on



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**QUESTIONS?**