RESUBMITTAL

STATE OF CALIFORNIA--OFFICE OF ADMINISTRATIVE LAW
**NOTICE PUBLICATION/REGULATIONS SUBMISSION** (See instructions on reverse)

For use by Secretary of State only
ENDORSED FILED
IN THE OFFICE OF
2013 AUG 19 PM 3:16
DEBRA BOWEN
SECRETARY OF STATE

STD. 400 (REV. 01-2013)

per agency request

| OAL FILE NUMBERS | NOTICE FILE NUMBER | REGULATORY ACTION NUMBER | EMERGENCY NUMBER |
|---|---|---|---|
| | Z-2012-0110-02 | 2013-0709-01SR | |

For use by Office of Administrative Law (OAL) only
2013 JUL -9 AM 8:12
OFFICE OF ADMINISTRATIVE LAW

NOTICE | REGULATIONS

AGENCY WITH RULEMAKING AUTHORITY: California Board of Forestry and Fire Protection
AGENCY FILE NUMBER (If any):

## A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

| 1. SUBJECT OF NOTICE | TITLE(S) | FIRST SECTION AFFECTED | 2. REQUESTED PUBLICATION DATE |
|---|---|---|---|
| | | | |

| 3. NOTICE TYPE | 4. AGENCY CONTACT PERSON | TELEPHONE NUMBER | FAX NUMBER (Optional) |
|---|---|---|---|
| ☐ Notice re Proposed Regulatory Action ☐ Other | | | |

| OAL USE ONLY | ACTION ON PROPOSED NOTICE | NOTICE REGISTER NUMBER | PUBLICATION DATE |
|---|---|---|---|
| | ☐ Approved as Submitted ☐ Approved as Modified ☐ Disapproved/ Withdrawn | 2012, 32 | 1-20-2012 |

## B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

| 1a. SUBJECT OF REGULATION(S) | 1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S) |
|---|---|
| "DEFENSIBLE SPACE, 2012" | 2012-0920-03 S, 2013-0122-02 SR |

2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)

| SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.) | |
|---|---|
| | ADOPT |
| | AMEND: ~~§ 1299.03(b)(2),~~ § 1299.03(b)(2)(A) — Om per agency request 8/16/13 |
| TITLE(S): 14 | REPEAL |

3. TYPE OF FILING

- ☐ Regular Rulemaking (Gov. Code §11346)
- ☒ Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)
- ☐ Emergency (Gov. Code, §11346.1(b))
- ☐ Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.
- ☐ Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)
- ☐ Emergency Readopt (Gov. Code, §11346.1(h))
- ☐ File & Print
- ☐ Other (Specify) _____
- ☐ Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
- ☐ Print Only

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)
May 22, 2013 to June 5, 2013

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)

- ☒ Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))
- ☐ Effective on filing with Secretary of State
- ☐ §100 Changes Without Regulatory Effect
- ☐ Effective other (Specify) _____

6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY

- ☐ Department of Finance (Form STD. 399) (SAM §6660)
- ☐ Fair Political Practices Commission
- ☐ State Fire Marshal
- ☐ Other (Specify)

| 7. CONTACT PERSON | TELEPHONE NUMBER | FAX NUMBER (Optional) | E-MAIL ADDRESS (Optional) |
|---|---|---|---|
| Eric Huff, Regulations Coordinator | 916-653-9633 | | eric.huff@fire.ca.gov |

8. **I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.**

SIGNATURE OF AGENCY HEAD OR DESIGNEE: [signature] — DATE: July 8, 2013

TYPED NAME AND TITLE OF SIGNATORY: Eric Huff, Regulations Coordinator

For use by Office of Administrative Law (OAL) only
ENDORSED APPROVED
AUG 19 2013
Office of Administrative Law

STATE OF CALIFORNIA

**NOTICE PUBLICATION/REGULATIONS SUBMISSION**

STD. 400 (REV. 01-2013) (REVERSE)

# INSTRUCTIONS FOR PUBLICATION OF NOTICE AND SUBMISSION OF REGULATIONS

Use the form STD. 400 for submitting notices for publication and regulations for Office of Administrative Law (OAL) review.

## ALL FILINGS

Enter the name of the agency with the rulemaking authority and agency's file number, if any.

## NOTICES

Complete Part A when submitting a notice to OAL for publication in the California Regulatory Notice Register. Submit two (2) copies of the STD. 400 with four (4) copies of the notice and, if a notice of proposed regulatory action, one copy each of the complete text of the regulations and the statement of reasons. Upon receipt of the notice, OAL will place a number in the box marked "Notice File Number." If the notice is approved, OAL will return the STD. 400 with a copy of the notice and will check "Approved as Submitted" or "Approved as Modified." If the notice is disapproved or withdrawn, that will also be indicated in the space marked "Action on Proposed Notice." Please submit a new form STD. 400 when resubmitting the notice.

## REGULATIONS

When submitting regulations to OAL for review, fill out STD. 400, Part B. Use the form that was previously submitted with the notice of proposed regulatory action which contains the "Notice File Number" assigned, or, if a new STD. 400 is used, please include the previously assigned number in the box marked "Notice File Number." In filling out Part B, be sure to complete the certification including the date signed, the title and typed name of the signatory. The following must be submitted when filing regulations: seven (7) copies of the regulations with a copy of the STD. 400 attached to the front of each (one copy must bear an original signature on the certification) and the complete rulemaking file with index and sworn statement. (See Gov. Code § 11347.3 for rulemaking file contents.)

## RESUBMITTAL OF DISAPPROVED OR WITHDRAWN REGULATIONS

When resubmitting previously disapproved or withdrawn regulations to OAL for review, use a new STD. 400 and fill out Part B, including the signed certification. Enter the OAL file number(s) of all previously disapproved or withdrawn filings in the box marked "All Previous Related OAL Regulatory Action Number(s)" (box 1b. of Part B). Submit seven (7) copies of the regulation to OAL with a copy of the STD. 400 attached to the front of each (one copy must bear an original signature on the certification). Be sure to include an index, sworn statement, and (if returned to the agency) the complete rulemaking file. (See Gov. Code §§ 11349.4 and 11347.3 for more specific requirements.)

## EMERGENCY REGULATIONS

Fill out only Part B, including the signed certification, and submit seven (7) copies of the regulations with a copy of the STD. 400 attached to the front of each (one copy must bear an original signature on the certification). (See Gov. Code §11346.1 for other requirements.)

## NOTICE FOLLOWING EMERGENCY ACTION

When submitting a notice of proposed regulatory action after an emergency filing, use a new STD. 400 and complete Part A and insert the OAL file number(s) for the original emergency filing(s) in the box marked "All Previous Related OAL Regulatory Action Number(s)" (box 1b. of Part B). OAL will return the STD. 400 with the notice upon approval or disapproval. If the notice is disapproved, please fill out a new form when resubmitting for publication.

## CERTIFICATE OF COMPLIANCE

When filing the certificate of compliance for emergency regulations, fill out Part B, including the signed certification, on the form that was previously submitted with the notice. If a new STD. 400 is used, fill in Part B including the signed certification, and enter the previously assigned notice file number in the box marked "Notice File Number" at the top of the form. The materials indicated in these instructions for "REGULATIONS" must also be submitted.

## EMERGENCY REGULATIONS - READOPTION

When submitting previously approved emergency regulations for readoption, use a new STD. 400 and fill out Part B, including the signed certification, and insert the OAL file number(s) related to the original emergency filing in the box marked "All Previous Related OAL Regulatory Action Number (s)" (box 1b. of Part B).

## CHANGES WITHOUT REGULATORY EFFECT

When submitting changes without regulatory effect pursuant to California Code of Regulations, Title 1, section 100, complete Part B, including marking the appropriate box in both B.3. and B.5.

## ABBREVIATIONS

Cal. Code Regs. - California Code of Regulations
Gov. Code - Government Code
SAM - State Administrative Manual

For questions regarding this form or the procedure for filing notices or submitting regulations to OAL for review, please contact the Office of Administrative Law Reference Attorney at (916) 323-6815.

**DEFENSIBLE SPACE, 2012**

**14 CCR, Division 1.5, Chapter 7 Fire Protection, Subchapter 3., Article 3. Fire Hazard Reduction Around Buildings and Structures**

**Section § 1299.03. Requirements.**

*[through and including subdivision (b)(2) - unchanged]*

**(A)** ~~[reserved]~~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.).

*[subdivision (b)(2)(B) through and including Authority and Reference Citations - unchanged]*

# General Guidelines for Creating Defensible Space

**State Board of Forestry and Fire Protection (BOF)**
**California Department of Forestry and Fire Protection**

**Adopted by BOF on February 8, 2006**
**Pending Filing with Office of Administrative Law**



# Contents

## A. Purpose of Guidelines

*Effective defensible space*

Recent changes to Public Resources Code (PRC) 4291 expand the defensible space clearance requirement maintained around buildings and structures from 30 feet to a distance of 100 feet. These guidelines are intended to provide property owners with examples of fuel modification measures that can be used to create an area around buildings or structures to create defensible space. A defensible space perimeter around buildings and structures provide firefighters a working environment that allows them to protect buildings and structures from encroaching wildfires as well as minimizing the chance that a structure fire will escape to the surrounding wildland. These guidelines apply to any person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material, and located within a State Responsibility Area.

The vegetation surrounding a building or structure is fuel for a fire. Even the building or structure itself is considered fuel. Research and experience have shown that fuel reduction around a building or structure increases the probability of it surviving a wildfire. Good defensible space allows firefighters to protect and save buildings or structures safely without facing unacceptable risk to their lives. Fuel reduction through vegetation management is the key to creating good defensible space.

Terrain, climate conditions and vegetation interact to affect fire behavior and fuel reduction standards. The diversity of California's geography also influences fire behavior and fuel reduction standards as well. While fuel reduction standards will vary throughout the State, there are some common practices that guide fuel modification treatments to ensure creation of adequate defensible space:

- Properties with greater fire hazards will require more clearing. Clearing requirements will be greater for those lands with steeper terrain, larger and denser fuels, fuels that are highly volatile, and in locations subject to frequent fires.

- Creation of defensible space through vegetation management usually means reducing the amount of fuel around the building or structure, providing separation between fuels, and or reshaping retained fuels by trimming. Defensible space can be created removing dead vegetation, separating fuels, and pruning lower limbs.

- In all cases, fuel reduction means arranging the tree, shrubs and other fuels sources in a way that makes it difficult for fire to transfer from one fuel source to another. It does not mean cutting down all trees and shrubs, or creating a bare ring of earth across the property.

- A homeowner's clearing responsibility is limited to 100 feet away from his or her building or structure or to the property line, which ever is less, and limited to their land. While individual property owners are not required to clear beyond 100 feet, groups of property owners are encouraged to extend clearances beyond the 100 foot requirement in order to create community-wide defensible spaces.

- Homeowners who do fuel reduction activities that remove or dispose of vegetation are required to comply with all federal, state or local environmental protection laws and obtain permits when necessary. Environmental protection laws include, but are not limited to, threatened and endangered species, water quality, air quality, and cultural/archeological resources. For example, trees removed for fuel reduction that are used for commercial purposes require permits from the

California Department of Forestry and Fire Protection. Also, many counties and towns require tree removal permits when cutting trees over a specified size. Contact your local resource or planning agency officials to ensure compliance.

The methods used to manage fuel can be important in the safe creation of defensible space. Care should be taken with the use of equipment when creating your defensible space zone. Internal combustion engines must have an approved spark arresters and metal cutting blades (lawn mowers or weed trimmers) should be used with caution to prevent starting fires during periods of high fire danger. A metal blade striking a rock can create a spark and start a fire, a common cause of fires during summertime.

Vegetation removal can also cause soil disturbance, soil erosion, regrowth of new vegetation, and introduce non-native invasive plants. Always keep soil disturbance to a minimum, especially on steep slopes. Erosion control techniques such as minimizing use of heavy equipment, avoiding stream or gully crossings, using mobile equipment during dry conditions, and covering exposed disturbed soil areas will help reduce soil erosion and plant regrowth.

Areas near water (riparian areas), such as streams or ponds, are a particular concern for protection of water quality. To help protect water quality in riparian areas, avoid removing vegetation associated with water, avoid using heavy equipment, and do not clear vegetation to bare mineral soil.

**B. Definitions**

Defensible space: The area within the perimeter of a parcel where basic wildfire protection practices are implemented, providing the key point of defense from an approaching wildfire or escaping structure fire. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, street names and building identification, and fuel modification measures.

Aerial fuels: All live and dead vegetation in the forest canopy or above surface fuels, including tree branches, twigs and cones, snags, moss, and high brush. Examples include trees and large bushes.

Building or structure: Any structure used for support or shelter of any use or occupancy.

Flammable and combustible vegetation: Fuel as defined in these guidelines.

Fuel Vegetative material, live or dead, which is combustible during normal summer weather. For the purposes of these guidelines, it does not include fences, decks, woodpiles, trash, etc.

Homeowner: Any person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining any mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material, and located within a State Responsibility Area.

Ladder Fuels: Fuels that can carry a fire vertically between or within a fuel type.

Reduced Fuel Zone: The area that extends out from 30 to 100 feet away from the building or structure (or to the property line, whichever is nearer to the building or structure).

Surface fuels: Loose surface litter on the soil surface, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches that have not yet decayed enough to lose their identity; also grasses, forbs, low and medium shrubs, tree seedlings, heavier branches and downed logs.

## C. Fuel Treatment Guidelines

The following fuel treatment guidelines comply with the requirements of 14 CCR 1299 and PRC 4291. **All persons using these guidelines to comply with CCR 1299 and PRC 4291 shall implement General Guidelines 1., 2., 3., and either 4a or 4b., as described below.**

**General Guidelines:**

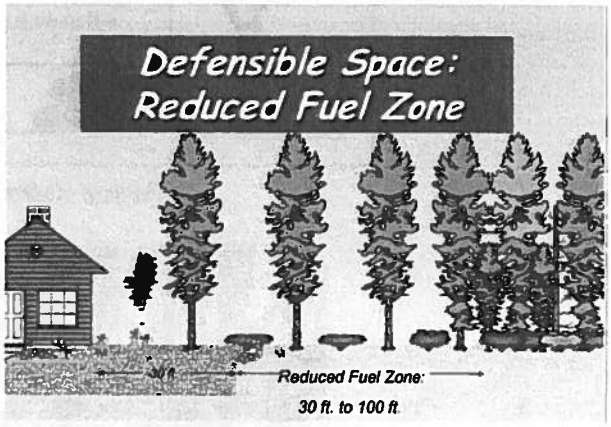
1. Maintain a firebreak by removing and clearing away all flammable vegetation and other combustible growth within 30 feet of each building or structure, with certain exceptions pursuant to PRC §4291(a). Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.

2. Dead and dying woody surface fuels and aerial fuels within the Reduced Fuel Zone shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches. This guideline is primarily intended to eliminate trees, bushes, shrubs and surface debris that are completely dead or with substantial amounts of dead branches or leaves/needles that would readily burn.

3. Down logs or stumps anywhere within 100 feet from the building or structure, when embedded in the soil, may be retained when isolated from other vegetation. Occasional (approximately one per acre) standing dead trees (snags) that are well-space from other vegetation and which will not fall on buildings or structures or on roadways/driveways may be retained.

4. Within the Reduced Fuel Zone, one of the following fuel treatments (4a. or 4b.) shall be implemented. Properties with greater fire hazards will require greater clearing treatments. Combinations of the methods may be acceptable under §1299(c) as long as the intent of these guidelines is met.

### 4a. Reduced Fuel Zone: Fuel Separation



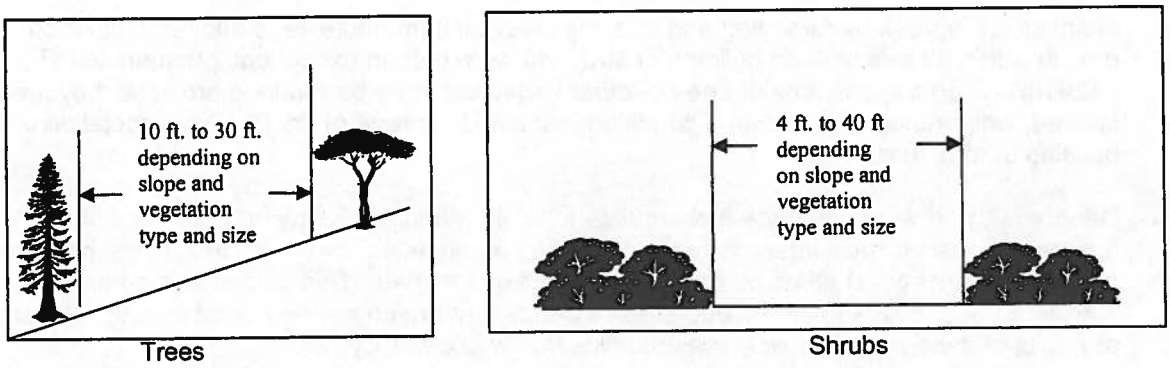

In conjunction with General Guidelines 1., 2., and 3., above, minimum clearance between fuels surrounding each building or structure will range from 4 feet to 40 feet in all directions, both horizontally and vertically.

Clearance distances between vegetation will depend on the slope, vegetation size, vegetation type (brush, grass, trees), and other fuel characteristics (fuel compaction, chemical content etc.). Properties with greater fire hazards will require greater separation between fuels. For example, properties on steep slopes having large sized vegetation will require greater spacing between individual trees and bushes (see Plant Spacing Guidelines and Case Examples below). Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant. For example, three individual manzanita plants growing together with a total foliage width of eight feet can be "grouped" and considered as one plant and spaced according to the Plant Spacing Guidelines in this document.

Grass generally should not exceed 4 inches in height. However, homeowners may keep grass and other forbs less than 18 inches in height above the ground when these grasses are isolated from other fuels or where necessary to stabilize the soil and prevent erosion.

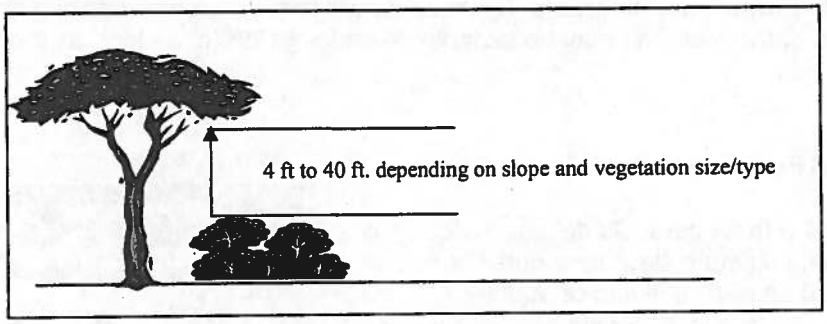
Clearance requirements include:

- Horizontal clearance between aerial fuels, such as the outside edge of the tree crowns or high brush. Horizontal clearance helps stop the spread of fire from one fuel to the next.




*Horizontal clearance between aerial fuels*

- Vertical clearance between lower limbs of aerial fuels and the nearest surface fuels and grass/weeds. Vertical clearance removes *ladder fuels* and helps prevent a fire from moving from the shorter fuels to the taller fuels.




*Vertical clearance between aerial fuels*

*Effective vertical and horizontal fuel separation*
*Photo Courtesy Plumas Fire Safe Council.*

| Plant Spacing Guidelines<br><br>Guidelines are designed to break the continuity of fuels and be used as a "rule of thumb" for achieving compliance with Regulation 14 CCR 1299. | | |
|---|---|---|
| **Trees** | **Minimum horizontal space from edge of one tree canopy to the edge of the next** | |
| | Slope | Spacing |
| | 0% to 20 % | 10 feet |
| | 20% to 40% | 20 feet |
| | Greater than 40% | 30 feet |
| **Shrubs** | **Minimum horizontal space between edges of shrub** | |
| | Slope | Spacing |
| | 0% to 20 % | 2 times the height of the shrub |
| | 20% to 40% | 4 times the height of the shrub |
| | Greater than 40% | 6 times the height of the shrub |
| **Vertical Space** | **Minimum vertical space between top of shrub and bottom of lower tree branches:** 3 times the height of the shrub | |

*Adapted from: Gilmer, M. 1994. California Wildfire LandscapingLandscaping*

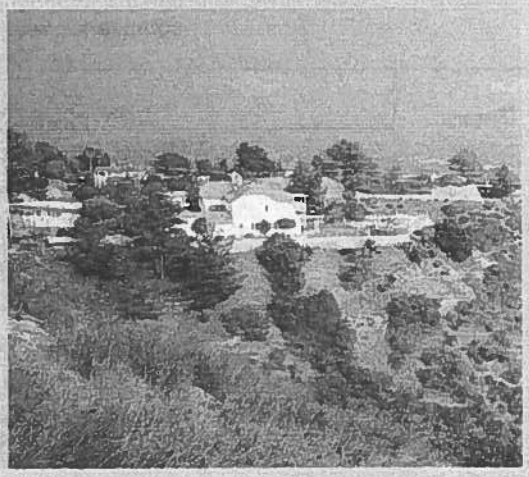
## Case Example of Fuel Separation: Sierra Nevada conifer forests

Conifer forests intermixed with rural housing present a hazardous fire situation. Dense vegetation, long fire seasons, and ample ignition sources related to human access and lightning, makes this home vulnerable to wildfires. This home is located on gentle slopes (less than 20%), and is surrounded by large mature tree overstory and intermixed small to medium size brush (three to four feet in height).

Application of the guideline under 4a. would result in horizontal spacing between large tree branches of 10 feet; removal of many of the smaller trees to create vertical space between large trees and smaller trees and horizontal spacing between brush of six to eight feet (calculated by using 2 times the height of brush).

## Case Example of Fuel Separation: Southern California chaparral

Mature, dense and continuous chaparral brush fields on steep slopes found in Southern California represents one of the most hazardous fuel situations in the United States. Chaparral grows in an unbroken sea of dense vegetation creating a fuel-rich path which spreads fire rapidly. Chaparral shrubs burn hot and produce tall flames. From the flames come burning embers which can ignite homes and plants. (Gilmer, 1994). All these factors results in a setting where aggressive defensible space clearing requirements are necessary.



Steep slopes (greater than 40%) and tall, old brush (greater than 7 feet tall), need significant modification. These settings require aggressive clearing to create defensible space, and would require maximum spacing. Application of the guidelines would result in 42 feet horizontal spacing (calculated as 6 times the height of the brush) between retained groups of chaparral.

## Case Example of Fuel Separation: Oak Woodlands

Oak woodlands, the combination of oak trees and other hardwood tree species with a continuous grass ground cover, are found on more than 10 million acres in California. Wildfire in this setting is very common, with fire behavior dominated by rapid spread through burning grass.

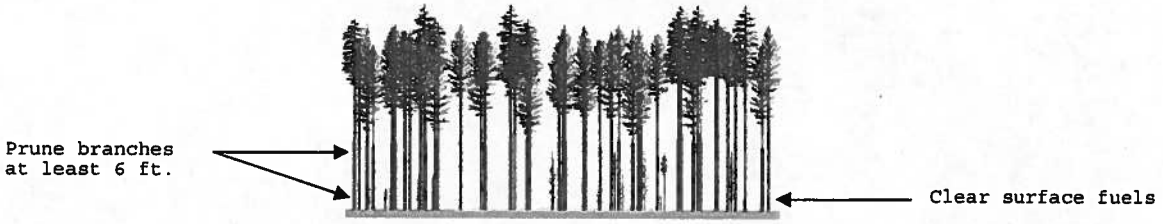
Given a setting of moderate slopes (between 20% and 40%), wide spacing between trees, and continuous dense grass, treatment of the grass is the primary fuel reduction concern. Property owners using these guidelines would cut grass to a maximum 4 inches in height, remove the clippings, and consider creating 20 feet spacing between trees.

## 4b. Reduced Fuel Zone: Defensible Space with Continuous Tree Canopy

To achieve defensible space while retaining a stand of larger trees with a continuous tree canopy apply the following treatments:

- Generally, remove all surface fuels greater than 4 inches in height. Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.

- Remove lower limbs of trees ("prune") to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees). Properties with greater fire hazards, such as steeper slopes or more severe fire danger, will require pruning heights in the upper end of this range.




*Defensible Space retaining continuous trees*

*Photo Courtesy Plumas Fire Safe Council*

*Defensible space with continuous tree canopy by clearing understory and pruning*

*Authority cited: Section 4102, 4291, 4125-4128.5, Public Resource Code. Reference: 4291, Public Resource Code; 14 CCR 1299 (d).*