Treviso II

Wildland Fire Safe Plan

Prepared for:

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Prepared by:

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August 12, 2011

Treviso II

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Brad Ballenger	Date
Fire Marshal	
El Dorado Hills Fire Department	
	8/22/11
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Fire Prevention	
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Forestry and Fire Protection	

Prepared by:

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RPF 898

Date

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I. PURPOSE AND SCOPE

Communities are increasingly concerned about wildfire safety. Drought years coupled with flammable vegetation and annual periods of severe fire weather insure the potential for periodic wildfires.

The purpose of this plan is to assess the wildfire hazards and risks of the Treviso II subdivision, to identify measures to reduce these hazards and risks and protect the native vegetation. There are light fuel hazards and gentle topography associated with this proposed project both on and adjacent to the project.

The possibility of large fires occurring when the subdivision is complete will be greatly reduced. However, small wildfires in the open space areas and on the lots may occur due to the increase in public uses.

Incorporation of the fire hazard reduction measures into the design and maintenance of the future parcels will reduce the size and intensity of wildfires and help prevent catastrophic fire losses. State and County regulations provide the basic guidelines and requirements for fire safe mitigation measures and defensible space around dwellings. This plan builds on these basic rules and provides additional fire hazard reduction measures customized to the topography and vegetation of the development with special emphases on the interface of homes and wildland fuels.

The scope of the Treviso II Wildland Fire Safe Plan recognizes the extraordinary natural features of the area and designs wildfire safety measures which are meant to compliment and become part of the community design. The Plan contains measures for providing and maintaining defensible space around future homes and open space areas. Plan implementation measures must be maintained in order to assure adequate wildfire protection.

Homeowners who live in and adjacent to the wildfire environment must take primary responsibility along with the fire services for ensuring their homes have sufficient low ignitability and surrounding fuel reduction treatment. The fire services should become a community partner providing homeowners with technical assistance as well as fire response. For this to succeed it must be shared and implemented equally by homeowners and the fire services.

II. FIRE PLAN LIMITATIONS

The Wildland Fire Safe Plan for the Treviso II subdivision does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the mitigation measures will greatly reduce the exposure of homes to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowner's attention to aid in home wildfire safety.

III. TREVISO II WILDLAND FIRE SAFE PLAN

1. PROJECT DESCRIPTION

The Treviso II subdivision is located at the end of Via Treviso off of Crestline Circle in the El Dorado Hills area. From El Dorado Hills Boulevard go west on Wilson Boulevard to Montridge Way, then go north to Crestline Circle. Via Treviso running through the subdivision is proposed to be 24' wide. It is currently a dead end roadway. Via Barlogio will be built to connect Via Treviso with Tucher Way in Folsom. Via Barlogio intersects with Via Treviso at the start of Treviso II. Treviso II is to be a gated development. The new roadway intersection will serve as a turn-around in front of the gates. All roads will be constructed to El Dorado County Department of Transportation (DOT) standards or as approved on the tentative map. All new lots shall be served by El Dorado Irrigation District (EID) for domestic water supply, fire sprinklers and fire hydrants. This project consisting of 6.98 acres is planning to split parcel APN: 120-700-07 into 19 residential lots and 1 residential estate lot. Each lot will be a minimum of 5,296 square feet in size. The residential estate (Lot 20) lot will be approximately 1.4 acres. Residential fire sprinklers shall be required by the California Residential Building Code unless otherwise amended. Fire hydrant location shall be determined after consultation with the Fire Department and meeting the standard established. The proposed fire hydrant location is about 390' from the Lot 20 building site. An existing fire hydrant is 370' from the site. Lot 20 has a steep driveway grade and also about 150' to the proposed building site. The steep driveway and distance is a hindrance for fire department access in case of a residential fire.

Lot 20 is subject to all current Fire Safe Regulations, Fire Department and County regulations/ordinances. Lot A is approximately 2.27 acres and is open space. It buffers this development from adjacent properties. The driveway access to Lot 20 shall be incorporated into the fuel hazard reduction zone. It will be required to have a fuel hazard reduction zone adjacent to the backyard fences of Treviso II. Annual maintenance is essential for keeping fire safe conditions viable. A Community Service District (CSD), Lighting and Landscaping District (LLD) or Zone of Benefit/Home Owners Association shall be established and be responsible for the maintenance of this zone.

The El Dorado Hills Fire Protection Department provides all fire and emergency medical services to this project. The California Department of Forestry and Fire Protection (CAL FIRE) has wildland fire responsibility in this state responsibility area (SRA).

2. PROJECT VEGETATION (FUELS)

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels- annual grasses, buckeye and downed limbs (Brush)
- (b) overstory- scattered live oaks, blue oaks.

The property has terrain with steeper slopes. Slopes are west facing and up to 25%. There are steeper slopes in the open space for short distances. The road bisects the slope providing a break in the slope. Fire hazard reduction of the fuels will be extremely important around the housing sites and surrounding areas. Much of the tree canopy is open grown oaks with some clumps. These trees typically have limbs and canopy reaching the ground creating ladder fuels. Ladder fuels will need to be eliminated. Limbing of trees is important to reduce their susceptibility from a ground fire. Tree spacing is a critical component to attaining the required fire safe clearances. A separation of the brush fuels and trees are essential for creating the defensible space around the residence. Specific guidelines for fuel hazard reduction are addressed in the mitigation measures. CDF guidelines for the 100 foot clearance requirements are attached which applies to Lot 20.

3. PROBLEM STATEMENTS

A. The brush fuels on the slopes will ignite and have a rapid rate of spread.

Fire in the grass fuels on the slopes is the most serious wildfire problem for this project.

B. Risk of fire starts will increase with development.

The greatest risk from fire ignition will be along roads and on open space lots as human use on these areas increases.

C. Provisions must be made to maintain all fuel treatments.

The wildfire protection values of fuel reduction are rapidly lost if not maintained. Continued review of potential ladder fuels to maintain a fire safe environment is very important. Annual maintenance by June 1 of each year is necessary.

Typical home design and siting often does not recognize adequate wildfire mitigation measures.

A review of many wildfires has conclusively shown that most home losses occur when: (1) there is inadequate clearing of flammable vegetation around a house, (2) roofs are not fire resistant, (3) homes are sited in hazardous locations, (4) firebrand ignition points and heat traps are not adequately protected and (5) there is a lack of water for suppression.

4. GOALS

- A. Modify the continuity of high hazard vegetation fuels.
- B. Reduce the size and intensity of wildfires.
- C. Ensure defensible space is provided around all structures.
- D. Design fuel treatments to minimize tree removal.
- E. Ensure fuel treatment measures are maintained.
- F. Identify fire safe structural features.
- G. Help homeowners protect their homes from wildfire.

5. WILDFIRE MITIGATION MEASURES

Wildfire mitigation measures are designed to accomplish the Goals by providing and maintaining defensible space and treating high hazard fuel areas. Fire hazard severity is reduced through these mitigation measures. The Wildland Fire Safe Plan places emphasis on defensible space around structures.

The residential construction materials, fire hydrant location and fuel treatments will be extremely important in the development of these new lots. Residential lots will have a 10' setback from the rear property line and only a 5' setback on the sides. Open space fuel treatment zones shall be at least 30' from all rear property lines of this development.

All residences shall be required to have NFPA 13D fire sprinkler systems unless the law is amended.

This subdivision is in a Moderate Fire Hazard Severity Zone. Wildland-Urban Interface Fire Areas Building Standards will be required in new construction. These standards address roofing, venting, eave enclosure, windows, exterior doors, siding, and decking.

Clearance along the road and around structures is very important and necessary. Fire Safe specifications state that all trees in the fuel treatment zones shall be thinned so the crowns are not touching. Clumps or islands of oak canopy may be kept if isolated. Branches on remaining trees shall be pruned up 10 feet as measured on the uphill side of the tree. Brush shall be removed. Grasses shall be kept mowed to a 4 inch stubble annually by June 1. Any tree crown canopy over the driveways shall be pruned at least 15 feet up from the driveway surface.

The fuel treatment zone in the open space areas shall continue along the perimeter and be at least 30 feet wide or to the property line. This zone is in addition to the clearances required by state law. The State required Fire Safe clearances (PRC 4291) shall be implemented around all structures on Lot 20 (See CDF Guideline). Clearances may be required at the time of construction.

More restrictive standards may be applied by approving El Dorado County Authorities. Approval of this plan does not by itself guarantee approval of this project. All provisions in this plan are subject to change and additional review until the project is filed and accepted by El Dorado County, Development Services.

Mitigation Measures:

- Driveways shall be 12 feet wide. Driveways shall comply with the DOT weight standards.
 - a. Responsibility-homeowner
- All private driveway gates shall be inset on the driveway at least 30 feet from the road.
 Gate opening shall be 2 feet wider than the driveway unless exceptions are granted by the local Fire Department.
 - a. Responsibility-homeowner
- All homes shall have Class A listed roof covering.
 - a. Responsibility-homeowner
- Decks that are cantilevered over the natural slope shall be enclosed unless fire resistant.
 - a. Responsibility-homeowner (See Appendix C for guidelines)
- The houses shall be constructed with exterior wall sheathing that shall be rated noncombustible.
 - a. Responsibility-developer
- Windows and glass doors on the sides of the structure shall have tempered glass and fire resistant frames.
 - a. Responsibility-builder
- Rafter tails shall be enclosed with noncombustible material on the sides of the structure.
 - a. Responsibility-builder
- Gutters and downspouts shall be noncombustible.
 - a. Responsibility-builder
- Attic and floor vents shall be covered with ¼ inch, or less, noncombustible mesh and horizontal to the ground.

- a. Responsibility-builder
- All lots shall have a 10 foot setback from the rear property line for buildings and accessory buildings and a 30 foot setback from the center of the road or as determined by Development Services. Five foot setbacks on the sides from the lot line has been agreed to.
 - a. Responsibility-builder
- Lot 20 shall be landscaped using the guidelines in Firescaping Standards Zones I and II. (See Appendix A)
 - a. Responsibility-homeowner
- A turn-around shall be within 50-150' of the residence on Lot 20.
 - a. Responsibility- builder/homeowner

6. OTHER FIRE SAFE REQUIREMENTS

- A. New roadway turn-around shall be constructed after consulting with El Dorado Hills Fire Department and DOT for specifications. It shall be posted "No Parking" except for the 2 parking spaces adjacent to Lot 10.
- B. If applicable, each new builder or property owner prior to construction shall be required to contact El Dorado County Planning Services/Building Department to have the residential fire sprinklers plans approved. All fire sprinkler systems shall be designed and installed by a licensed contractor.
- C. All road improvements shall be built to DOT standards or as approved with the Tentative Map.
- D. 30' fuel treatment zone along Lot 20's access/driveway shall be installed and annually maintained by June 1 to the Fire Safe specifications. Sidewalks and landscaping is acceptable in this zone.
- E. A Notice of Restriction shall be filed with the final parcel map which stipulates that a Wildland Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented.
- F. The project shall meet all the Public Resource Codes 4290 as amended (the 1991 SRA Fire Safe Regulations- Article 2 Access, Article 3 Signing, Article 4 Water, Article 5 Fuels), County and Fire Department ordinances.
- G. The home/property owners are responsible for any future fire safe or building code changes adopted by the State or local authority.
- H. Only wood, fire rated composite deck material or noncombustible decking shall be allowed.
- I. All fencing adjacent to open space shall be noncombustible.
- J. The developer shall establish a Community Service District (CSD), Lighting and Landscaping District (LLD) or Zone of Benefit/HOA responsible for maintaining the open space lot.
- K. All vacant lots shall be treated to the standard established by the Weed Abatement Resolution of the Fire District.

- L. The El Dorado Hills Fire Department shall review the Fire Safe Plan every 5 years to determine if additional Fire Safe measures need to be implemented.
- M. Residential estate Lot 20 shall maintain a fuel hazard reduction zone adjacent to residential lots 18 and 19 as conditioned in the Open Space Guidelines.

7. OPEN SPACE GUIDELINES

- A. Remove all dead trees within 100' of all property lines.
- B. Remove all dead limbs from live trees that are within 10' of the ground.
- C. Limb all trees within 30' of the inner property lines at least 10' above the ground as measured on the uphill side of the tree.
- D. Remove all dead limbs and trees laying on the ground within 100' of all property lines.
- E. Annually by June 1 cut or remove all grass and brush to a 4" stubble within 30' along the inner property lines adjacent to the residential lots and along streets.
- F. Mature or multi stemmed oaks can present a serious wildfire problem if untreated. Treat the oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 10 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.
- G. Permanent wet areas within the open space lots may be allowed to have a variety of vegetation provided the wet areas are isolated with a fuel hazard reduction zone.

V. Appendix

APPENDIX A

TREVISO II FIRESCAPING STANDARDS

Firescaping is an approach to landscaping to help protect homes from wildland fires. The goal is to follow these guidelines and create a landscape that will slow the advance of a wildfire and create a Defensible Space that provides the key point for firefighting agencies to defend the home. This approach has a landscape zone surrounding the home containing a balance of native and exotic plants that are fire and drought resistant, help control erosion, and are visually pleasing. Firescaping is designed not only to protect the home but to reduce damage to oaks and other plants.

Zone I

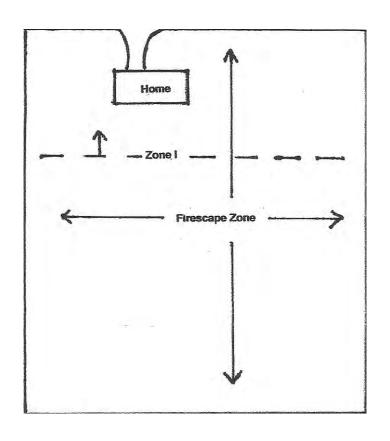
The zone extends to not less than 30 feet from the house **or to the property line whichever is less** in all directions and has a traditional look of irrigated shrubs, flowers gardens, trees and lawns. All dead trees, brush, concentrations of dead ground fuels (tree limbs, logs etc. exceeding 1inch in diameter) shall be removed. All native oak trees and brush species are pruned up to 10 feet above the ground as measured on the uphill side but no more than 1/3 of the live crown. The plants in this zone are generally less than 18 inches in height, must be slow to ignite from windblown sparks and flames. Such plants should produce only small amounts of litter and retain high levels of moisture in their foliage year around. Gray pines shall be excluded from this zone. Native and exotic trees are permitted inside the Zone, but foliage may not be within 10 feet of the roof or chimney. Grass and other herbaceous growth within this zone must be irrigated or if left to cure must be mowed to a 2 inch stubble, chemically treated or removed. Such treatment must be accomplished by June 1, annually. This zone has built in firebreaks created by driveways, sidewalks etc.

Zone II

This Zone adds 70 feet to Zone I and extends a minimum of 100 feet from the house in all directions, **or to the property line whichever is less,** and is a transition area to the outlying vegetation. The zone is a band of low growing succulent ground covers designed to reduce the intensity, flame length and rate of spread of an approaching wildfire. Irrigation may be necessary to maintain a quality appearance and retain the retardant ability of the plants. All dead trees, brush, concentration of dead ground fuels (tree limbs, logs etc.) exceeding 2 inches in diameter shall be removed. Annual grasses shall be mowed after they have cured to a 4 inch stubble by June 1, annually. Native trees and brush species may be preserved and pruned of limbs up to 8 feet above the ground as measured on the uphill side.

For All Zones With Oaks

Mature, multi stemmed Oaks can present a serious wildfire problem if untreated. Treat the Oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 10 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.



APPENDIX B

TREVISO II FUEL TREATMENT SPECIFICATIONS

For

OAK WOODLAND

Within The Designated Fuel Treatment Areas

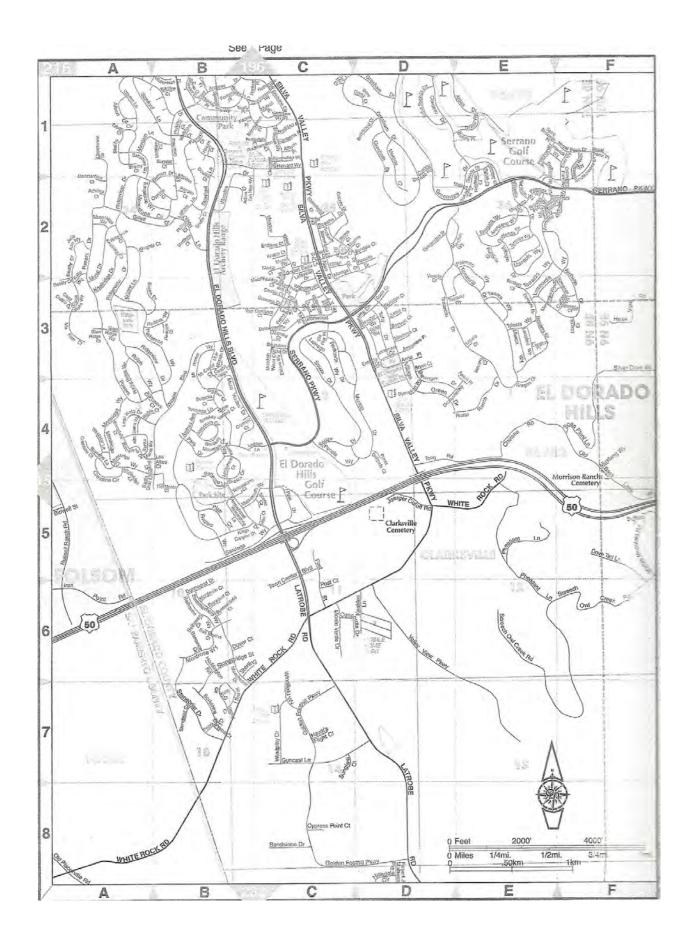
- 1. Leave all live trees where possible.
- 2. Remove all dead trees.
- 3. Remove all brush.
- 4. Prune all live trees of dead branches and green branches 10 feet from the ground as measured on the uphill side of the tree, except no more than 1/3 of the live crown is removed. All slash created by pruning must be disposed of by chipping or hauling off site.
- 5. Annually by June 1, reduce the grass or weeds to a 4 inch stubble in the open space by mowing, chemical treatment, disking or a combination of treatments.
- 6. Mature, multi stem Oak trees: remove all dead limbs and stems, cut off green stems at 10 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.
- 7. Gray pines within 30 feet of a house shall be removed. Any pines that are remaining shall be isolated with no brush understory within the dripline of the tree.

APPENDIX C

TREVISO II ENCLOSED DECK GUIDELINES

The purpose of enclosing the underside of decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

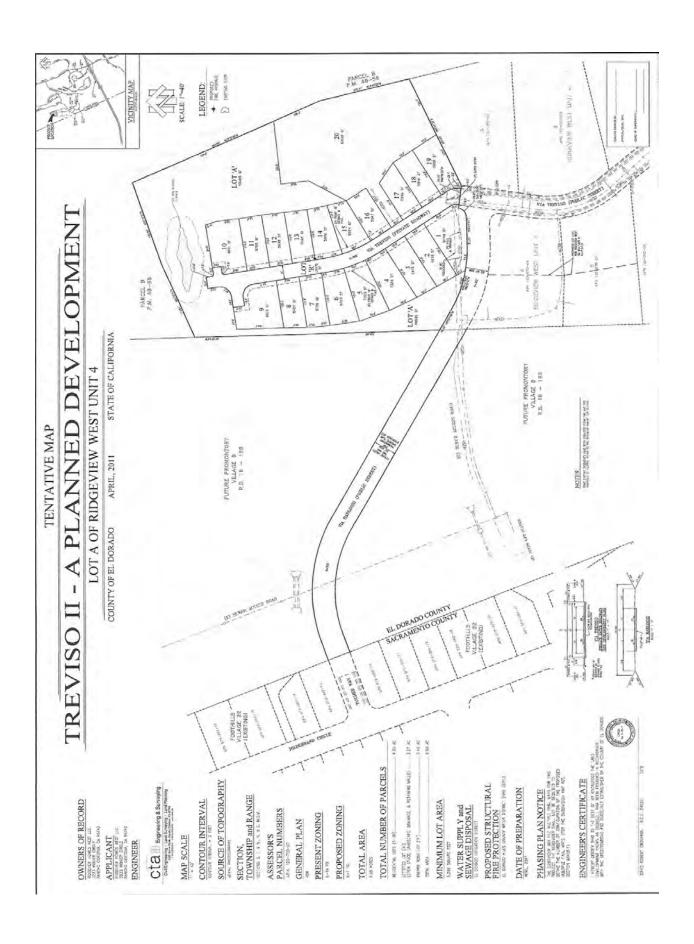
- 1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
- 2. Any deck shall not include combustible composite deck material.
- 3. This applies to decks one story or less above natural slopes.
- 4. Combustible material must not be stored under the deck.

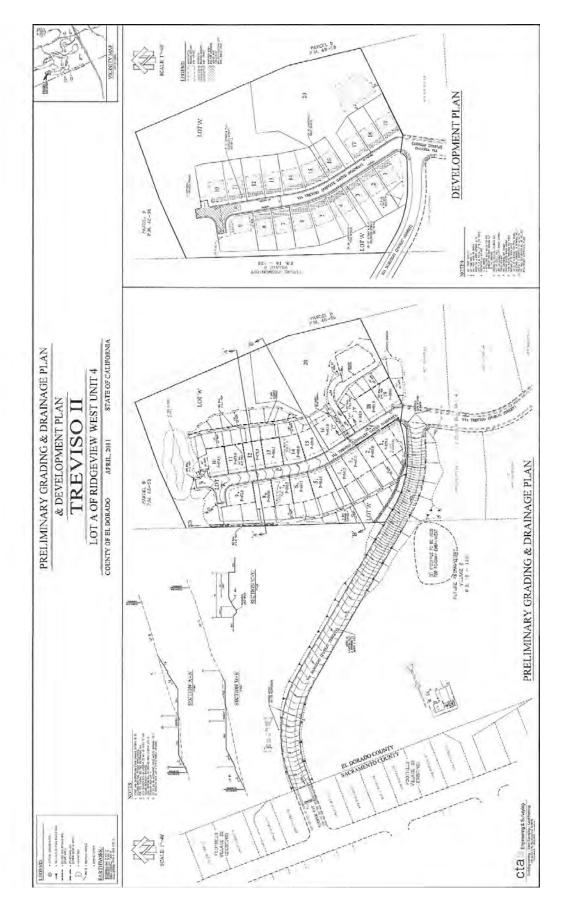




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Why 100 Feet?

Following these simple steps can dramatically increase the chance of your home surviving a wildfire!

A Defensible Space of 100 feet around your home is required by law.

The goal is to protect your home while providing a sale area for firefighters.

"Lean, Clean and Green Zo

 Clearing an area of 30 feet immediately surrounding your home is critical. This area requires the greatest reduction in flammable vegetation.

"Reduced Fuel Zone."

 The fuel reduction zone in the remaining 70 feet (or to property line) will depend on the steepness of your property and the vegetation.

Spacing between plants improves the chance of stopping a wildfire before it destroys your home. You have two options in this area:

- Oreate horizontal and vertical spacing between plants. The amount of space will depend on how steep the slope is and the size of the plants.
- 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."

When clearing vegetation, use care when operating equipment such as lawnmowers. One small spark may start a fire; a string trimmer is much safer.

Remove all build — up of needles and leaves from your roof and gutters. Keep tree limbs trimmed at least 10 feet from any chimneys and remove dead limbs that hang over your home or garage. The law also requires a screen over your chimney outlet of not more than ½ inch mesh.

These regulations affect most of the grass, brush, and timber-covered private lands in the State. Some lire department jurisdictions may have additional requirements. Some activities may require permits for tree removal. Also, some activities may require permits for tree removal. Also, some activities may require special procedures for, 1) threatened an endangered species, 2) avoiding erosion, and 3) protection of water quality. Check with local officials if in doubt. Current regulations allow an insurance company to require additional clearance. The area to be treeded does not extend beyond your property. The State Board of Forestry and Fire Protection has approved Guidelines to assist you in complying with the new law. Contact your local CDF office for more details.



April 2006



ection NOTICE OF FIRE HAZARD 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.

Оссира	ant:		Physical Addre	SS:		Phone #				
Оссира	ant N		Not Home:	Refused	For Question					
et Atter				Inspection:	Contact Ins Eaves	Decks or Porches	Location of Structure			
		struction Exterior on-Combustible Combustible/No		Window Panes gle Pane/Multi-Pane	Endosed/Unenclosed	Masonry/Composite/Wood				
Соп	rected	Defensible Space Zi	one (within 30	feet of all struc	tures or to prope	rty line):				
] 2	3	A. Remove all branches	within 10 feet of a	eny stovepipe or chir	nney outlet. PRC §42	91(a)(4)				
] 2	3	B. Remove leaves, nee	dles or other vege	tation on roofs, gutte	ers, decks, porches and	stairways etc. PRC §429	91(a)(6)			
2	3	C. Remove all dead or a	dying trees, branch	es, shrubs or other	plants adjacent to or o	verhanging buildings. PR	C §4291(a)(5)			
2	3	D. Prune lower branche	D. Prune lower branches of trees to a height of 6 to 15 feet (or 1/3 tree height for trees under 18 feet). PRC §4291(a)(1)							
1 2	3				egetation. PRC §4291	(a)(1)				
_ 2	3				bs. PRC §4291(a)(1)					
_		Reduced Fuel Zone (within 30 - 190 feet of all structures or to property line): G. Mow dead or dying grass to a maximum of 4 inches in height. Trimmings may remain on the ground. PRC §4291(a)(1)								
_ 2		G. Mow dead or dying g	rass to a maximum	n of 4 inches in heig	ht. Immings may rei	nam on the ground. PAC	94291(d)(1)			
_ 2	3			18 inches in height	may remain, but overn	anging and adjacent dees	must be pruned to a heig			
-		6 to 15 feet. PRC §4		Bosses Tree Ora	one Cinnana lana kan	N DDC 8/201/a\/1\				
1 2		Reduce fuels in accor	organice with the C	onunuous Tree Cand	opy Standard (see back)	C ENODICE (1)				
1 2	3	J. Reduce fuels in acco	ordance with the H	orizontal Spacing St	andard (see back). PR	s or to property line	1.			
7 0	2	V less as stumps emb	added in the sail s	ne (within 100 re	isolated from sinucture	s and other vegetation. PF	RC 84291(a)(1)			
7 2		K. Logs or stumps emb	dving brush and to	one and all dead or	dving tree branches w	ithin 15 feet of the ground.	PRC §4291(a)(1)			
-J 2		 Remove all dead or Other Requirement 		ccs, and an dead of	dying a co-cranence in					
7 2	2	M Class all flammable	vanetation trach a	nd other combustible	e materials 10 feet aro	und and above propane ta	anks. CFC §3807.3			
-	 M. Clear all flammable vegetation, trash and other combustible materials 10 feet around and above propane tanks. CFC §3807. N. Address numbers shall be displayed in contrasting colors (4" Min. Size) and readable from the street or access road. CFC §5 									
	3	O. Equip chimney or st	ovenine openings	with a metal screen	having openings between	een 3/8 inch and 1/2 inch.	CBC §2113.9.1			
		Recommendations								
		Clear 10 feet around	and 15 feet abov	e fuels (e.g. Woodpi	les, lumber, scrap etc.	. Move woodpiles as far a	as possible from structures			
Remove flammable materials stored under decks and similar overhangs of structures.										
		Clear vegetation 10	feet from sides an	d 15 feet above all o	lriveways and furnarou	nd areas.				
		No violations obse	rved.							
		Comments:								
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1. Ins				Date:		A re-inspection will occur				

Form LE-100 (2/11)

(White-Inspector, Canary-1st to Occupant, Pink-2st to Occupant, Gold-3st to Occupant)