

Kaila Way

Wildfire Fire Safe Plan

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Kaila Fire Safe Plan

Plan Approved by:



**Fred Russell, Division Chief
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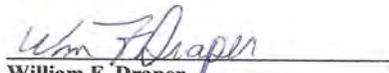
3-3-07
Date



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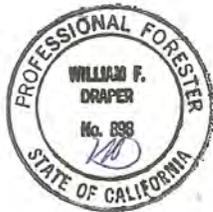
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I. PURPOSE AND SCOPE

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 Kaila Way development, to identify measures to reduce these hazards and risks and to protect the native vegetation. There are moderate fuel hazards and moderate topography associated with this proposed development both on and adjacent to the project.

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

Incorporation of the fire hazard reduction measures into the design and maintenance of the development 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 emphasis on the interface of homes and wildland fuels.

The scope of the Kaila Way Wildfire 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 along roads and around future homes. 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 Wildfire Fire Safe Plan for the Kaila Way development 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. THE KAILA WAY WILDFIRE FIRE SAFE PLAN

1. PROJECT DESCRIPTION

The Kaila Way development is located within the unincorporated community of El Dorado Hills on a generally east facing flat to moderate slope and lies in between Salmon Falls Road to the east and Lakehills Drive to its west. This project will divide 25.04 acres into 8 lots ranging in size from 3 acre to 3.5 acres. All lots are over 1 acre in size and must meet the full fire safe clearance requirements. Access is from Salmon Falls Road to Kaila Way. The second access road will be from Lakehills Drive to Wolf Creek Road. This will be brought up to a 24 foot wide road. Two new roads will be built to provide the access to the 8 lots. A cul-de-sac will come off of Kaila Way providing access to parcels 1, 2 and 8. Another new road will go from south along the property lines between parcels 2 and 8 providing access to parcels 3-7 and tying into Wolf Creek Road at the southwest corner of the project. The key topographic features are the flat to moderate slopes and the oak canopy shading much of the property.

Structural fire protection is provided by the El Dorado Hills Fire Department and wildland fire protection by the California Department of Forestry and Fire Protection (CDF). A fire hydrant system will serve the new area. Water is to be supplied by El Dorado Irrigation District.

2. PROJECT VEGETATION (FUELS)

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels- annual grasses and poison oak with scattered down trees and limbs (Brush)
- (b) overstory- scattered stands of Blue Oaks and Liveoak and individual Gray Pines

Light to moderate fuel loading is throughout the property. There are larger parcels on the east, north and west outside of this development. There are pockets of wildland along these borders of the project in the developed parcels. Downed trees and dense oak canopy mixed with the brush comprise the problem of fuel laddering. Ladder fuels are mainly oak limbs and poison oak. Oak canopy crown closure may require some thinning of the overstory trees. Gray Pines (digger pines) should be eliminated as they are a very hazardous tree.

Lakehills Court borders parcel 1 on the north end of this development and provides marginal access and buffer from wildfire threat. Folsom Lake lies to the northeast of this development.

3. PROBLEM STATEMENTS

A. The grass/brush fuels will ignite and have a rapid rate of spread.

Fire in the grass/brush fuels on the slopes of the development are 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, in the open space areas and on large lots as human use on these areas increase.

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

The wildfire protection values of fuel reduction are rapidly lost if not maintained. Annual maintenance by June 1 of each year is necessary.

D. 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 Wildfire Fire Safe Plan places emphasis on defensible space around structures.

Kaila Way

Eight lots are planned that are three plus acres in size. New roads will be built to a minimum of 24 feet of travel surface with a 10 foot wide fuel treatment zone along each side of the roadway. The fuel treatment zone shall be annually maintained. The roads and cul-de-sac shall conform to El Dorado Department of Transportation specifications. The roads are yet to be named.

One existing residence is on parcel 2. There is a new vineyard on this parcel as well as parcels 3 and 8.

Fuels are dense stands of oak and scattered open grasslands. Tree limbs, brush and pockets of poison oak are the major ladder fuels. Appendix B outlines the treatment of oaks.

More restrictive standards maybe applied by approving El Dorado County authorities.

Mitigation Measures:

- All lots shall be landscaped to Firescaping Standards Zones I and II (Appendix A).
 - a. Responsibility- homeowner within one year of occupancy
- Driveways over 150 feet shall provide for a turnout near the midpoint of the driveway. Vertical clearance for the entire length of the driveway will be 15 feet.
 - a. Responsibility- homeowner
- All homes shall have Class A listed roof and assembles and siding of fire resistant material.
 - a. Responsibility- homeowner
- Decks that are cantilevered over the natural slope shall be enclosed.
 - a. Responsibility- homeowner (See Appendix C for guidelines)
- All lots shall have a 30 foot setback for buildings and accessory buildings or to all property lines which ever is less and a 30 foot setback from the center of the road.
 - a. Responsibility- builder
- All residential driveways over 50 feet long and 20% slope shall have a Fire Sprinkler system designed and installed by a licensed engineer. El Dorado Hills Fire Department shall review and approve the sprinkler system design prior to installation.
 - a. Responsibility- builder

6. BUILDING SETBACKS ON ONE ACRE OR LARGER LOTS

State SRA Regulations (1276.01) requires a minimum of a 30 foot setback from all property lines or to the center of the road for lots 1 acre or larger.

7. OTHER FIRE SAFE REQUIREMENTS

- A. A Notice of Restriction shall be filed with the final subdivision map which stipulates that a Wildfire Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented.
- B. A copy of the Wildfire Fire Safe Plan shall be given to each new landowner within the development.
- C. Road improvements and fire hydrants shall be completed prior to the filing of the final map or completion of a "Bonding and Completion Plan".
- D. 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.

- E. A legal entity (HOA, CSD etc.) shall be created with authority for maintaining and enforcing all fuel treatment mitigation measures if homeowners fail to implement or maintain. Covenants, Conditions and Restrictions must be developed to ensure the enforcement of the structural and vegetation Fire Safe regulations.**
- F. The water hydrant system shall meet the California Fire Code specifications to water volume, pressure and spacing.**
- G. The homeowner/property owner is responsible for any future fire safe or building code changes adopted by the State or local authority.**
- H. All driveways must be a minimum of 12 feet wide with a minimum of 15 feet of vertical clearance over the driveway and a 10 foot wide fuel treatment zone on both sides.**
- I. All gates must be at least 2 feet wider than the driveway they gate. Gates must be set into the property a minimum of 30 feet from the edge of the roadway.**
- J. Fuel treatment along public roads and driveways shall have all fuels within 10 feet of the shoulder of the roadway treated annually by June 1 (See Appendix B).**
- K. Clearance requirements may be required by El Dorado County at the time of construction.**
- L. Wolf Creek Road shall be improved to the El Dorado County Road Standard 101C. The gate shall be removed at the entrance to Wolf Creek Road and Lakehills Drive.**
- M. All roads 24 feet wide or less shall be posted "No Parking".**
- N. Residential construction contractors may be required to submit a parking plan to El Dorado Hills Fire Department to insure off street parking during construction.**

E. Appendix

Appendix A

KAILA WAY

Firescaping Standards

Firescaping is an approach to landscaping to help protect homes from wildland fires. The goal is to create a landscape that will slow the advance of a wildfire and create a Defensible Space that provides the key point for fire fighting 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 all structures or to the property line 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 1 inch in diameter) are removed. All native oak trees and brush species are pruned up to 6-8 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 wind blown sparks and flames. Such plants produce only small amounts of litter and retain high levels of moisture in their foliage year around. Native and exotic trees are permitted inside the Zone, but foliage may not be within 10 feet of the roof or chimney. Gray pines shall be excluded from this area. 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.

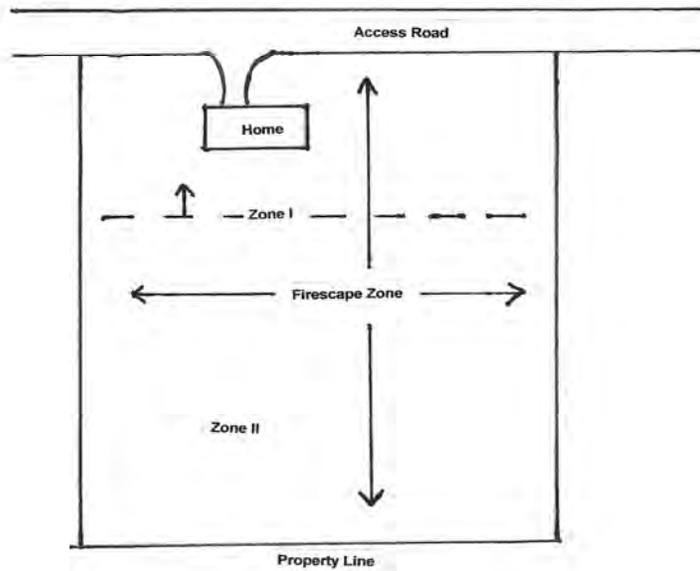
Zone II

This Zone adds to Zone I and extends 70 feet or to the property line from all structures in all directions and is a transition area to the outlying vegetation. The zone is a band of low growing succulent and 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 are removed. Annual grasses are mowed after they have cured to a 2 inch stubble by June 1, annually. Native trees and brush species are preserved and pruned of limbs up to 8 feet above the ground as measured on the uphill side.

For All Zones With Live Oaks

Mature, multi stemmed Live Oaks can present a serious wildfire problem if untreated. Treat the Live Oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 8 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.

**APPENDIX A-1
FIRESCAPING ZONES
EXHIBIT**



Typical Lot in Oak Woodland
(schematic, no scale)

APPENDIX B

KAILA WAY FUEL TREATMENT SPECIFICATIONS For OAK WOODLAND VEGETATION

Within The Designated Fuel Treatment Areas

1. Leave all live trees.
2. Remove all dead trees.
3. Remove all brush ladder fuels.
4. Prune all live trees of dead branches and green branches 8 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 2 inch stubble by mowing, chemical treatment, disking or a combination of treatments.
6. With mature, multi stem Live Oak trees, remove all dead limbs and stems, cut off green stems at 8 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.
7. Mistletoe needs to be pruned from oaks. Trees with over 50% mistletoe in the crown should be removed/replaced.
8. Gray pines, if left, must be isolated with nothing growing within their dripline.

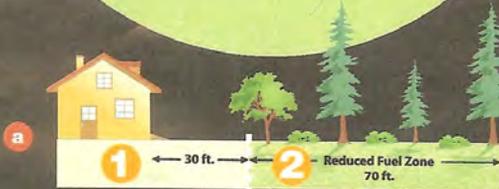
APPENDIX C

KAILA WAY ENCLOSED DECK GUIDELINES

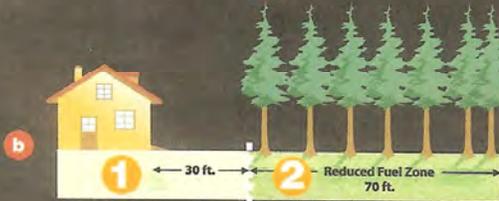
The purpose of enclosing decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
2. Applies to decks one story or less above natural slopes.
3. Combustible material must not be stored under the deck.

100' DEFENSIBLE SPACE Make Your Home FIRE SAFE



or



Contact your local CDF office, fire department,
or Fire Safe Council for tips and assistance.
www.fire.ca.gov

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.¹ The goal is to protect your home while providing a safe area for firefighters.

1 "Lean, Clean and Green Zone"

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

2 "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:

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

1. These regulations affect most of the grass, brush, and timber-covered private lands in the State. Some fire department jurisdictions may have additional requirements. Some activities may require permits for tree removal. Also, some activities may require special procedures for, 1) threatened and 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 treated 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

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