# Auburn Lake Trails Property Owners Association Community Wildfire Protection Plan 

September 2013


## A Community Wildfire Protection Plan

Objectives of a Community Wildfire Protection Plan:

- Comprehensive Forest planning and prioritization
- Mechanism for federal agencies to give meaningful considerations to community priorities
- Open community debate regarding management options
- Provide maximum flexibility for communities to determine the substance and detail of their plans
- Merge the goals and objectives of the landowners with the needs and expectations of the community regarding fire risk reduction
- Coordinate fire protection strategies across property boundaries
- Coordinate the grant funding and federal program budgets to achieve the most effective results with limited funding

This document shall be known as the Auburn Lake Trails Community Wildfire Protection Plan.

1 - Signatories
The Signatories to this Community Wildfire Protection Plan are:

- Local Government: Ron Briggs, El Dorado County Board of Supervisors District 4
- Local FIRE Chief: Michael Hardy, El Dorado County Fire Protection District
- CAL FIRE Unit Chief: Kelly Keenan, Amador-EI Dorado-Sacramento Unit

These Officials were notified and have participated in the development of this plan.

The Auburn Lake Trails Community Wildfire Protection Plan:

- Was collaboratively developed. Interested parties and federal land management agencies managing land in the vicinity of Auburn Lake Trails and Cool, California have been consulted.
- Identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect Auburn Lake Trails and Cool, California..
- Recommends measures to reduce the ignitability of structures throughout the area addressed by the plan.

The following entities mutually agree with the contents of this Community Wildfire Protection Plan:
$\overline{\text { Ron Briggs, El Dorado County Board of Supervisors - District } 4}$

Michael Hardy, El Dorado County Fire Protection District


Kelly Re tan, Unit Chief, Amador-EI Dorado-Sacramento Unit California Department of Forestry and Fire Protection

2 - Federal Agencies Involved
The representatives of the federal agencies managing land in the vicinity of the communities are:

| Agency | Representative | Date of Participation |
| :--- | :---: | :---: |
| Forest Service | Pat Trimble, Dist Rgr <br> Brian Ebert, Fuels Off | August 2011 |
| Fish and Wildlife Service | Glenn Gibson, Fire <br> Program | August 2011 |

3a - State/Local Agencies Involved
The representatives of the state/local agencies that have jurisdictional responsibilities in the vicinity of the communities are:

| Agency | Representative | Date of Participation |
| :--- | :---: | :---: |
| California Department of | Kelly Keenan, Unit Chief | August 2011 |
| Forestry and Fire | Amador-El Dorado- |  |
| Protection (CAL FIRE) | Sacramento Unit |  |
| California Department of <br> Fish and Wildlife | Jason Holly (Supr) |  |
| Georgetown Divide <br> Resource Conservation <br> District | Mark Egbert, District | August 2011 |

The parties from our community that have shown interest in forest/fire management or may be interested in this CWPP are:

| Interested Parties | Date of Participation |
| :---: | :---: |
| El Dorado County Fire Safe Council | 2011 |
| Resource Advisory Committee | 2011 |
| Board of Supervisor member | 2013 |

## 4 - Community Base Maps

Attached are base maps of the community and adjacent landscapes of interest. Highlighted on the maps are:

- The inhabited areas at potential risk to wildland fire and include:
- Northern Boundaries of ALT properties that adjoin lands managed by the federal Bureau of Reclamation. See Map 4-2.

This portion of the Middle Fork of the American River watershed features steep terrain leading from the River up to the residential interface of the ALT community. The area is fractured by drainages, saddles, ridges, or side slopes which can cause erratic fire behavior or require additional fuel modification. The topography is covered with live and dead vegetation that is extremely dense and has a fire-prone spatial arrangement. All of these elements, under the right conditions, support a catastrophic fire that potentially would threaten the ALT properties.

The attached fire history map (see Map 4 - 3) shows that only one relatively large fire has occurred within this area since fire history has been recorded (1900-1905). That fire occurred in 1955 leaving the unburned area of ALT with over 105 years of accumulated vegetative growth. Other fires in proximity to the northern boundaries occurred in 1961. The north-eastern side of ALT's properties has recorded fires that burned in the 1900-1910 era.

- Developed Lots - Of the 1,104 buildable lots in ALT, there are 1,004 houses on lots varying in size from 0.24 to 16.7 acres in size. See Map 4-4. There is inadequate clearing of fuels around some houses due to slope, aspect or screening. Houses are sited in hazardous locations to get the best views. Firebrand and heat traps are not adequately protected or enclosed. There is inadequate water supply for fire suppression at these sites, requiring long hose lays. Access roads are inadequate for heavy fire vehicles.

On the positive side, some of the lots have horse pastures that create defensible space for structures in the grassy fuels and are
generally fire safe. Many lot owners in the heavier fuel areas have created defensible space around their homes and property.

- Vacant and Undeveloped Lots (See Map 4-4.) - ALT has established a program using volunteer/paid labor to create defensible space around vacant, foreclosed, and abandoned properties. Owners of all lots are subject to the fire safe requirements, annual inspections, and the California Public Resource Code (PRC) 4291 enforcement process.
- POA Owned Lots - There are 230 lots totaling 628.73 acres within ALT. Of the 230, 39 are identified as "common." Some of these are considered as unbuildable due primarily to poor water percolation in clay soils. See Map 4-5. Fuels mitigation work by ALT staff is used to manicure and treat these areas.
- Land Inholdings - There are 4 parcels of privately held land totalling 60 acres within the boundaries of ALT that could constitute a wildland threat to ALT due to fuel load and ignition source. It is important that ALT protects these property boundaries with defensible space. See Map 4-5.
- Areas containing critical human infrastructure, such as escape routes, municipal water supplies, power or communication structures, including:
- Planned and Existing Perimeter Shaded Fuel Break (PSFB) This fuel break, nearing completion, is located along the perimeter of the subdivision that borders the southern rim of the Middle Fork of the American River and the western rim of the American Canyon. See Map 4-6. CAL FIRE, with permission of property owners, have/will modify fuels on lots that border the fuel break. Fuels have/will be mitigated from the structures, outward to their rear property lines according to the fire clearance regulations. On the contiguous Bureau of Reclamation fands, the fuels will be treated for an approximate additional 150-300 feet, depending on topography, outward from the rear property lines. The purpose of the PSFB is to provide defensible space for firefighters to protect the houses.
- Southern and Western Boundaries Adjacent to State Highway 193 and 49 (See Map 4-7.)
These major transportation routes for the Georgetown Divide and upcountry communities generally borders ALT along its southern and western edges. Lighter fuels along the State Highways could easily ignite and will rapidly burn. Ladder fuels and contiguous crown fuels generally edge these meadow-like areas. This necessitates quick
suppression tactics to limit fire size and moderate the difficulties of control.
- Roadside Areas Within ALT

Roadside fuel treatments vary along a number of roads within the Trails. Radiant heat could be problematic for evacuation and suppression activities. See Map 4-8.

- Cul-De-Sacs and Driveways

There are many dead end and unimproved areas at the end of roads which will prevent or hamper evacuation and fire suppression vehicles. There are some long driveways that require " T " hammerhead turns or passing lanes. See Map 4-8.

- Water storage See Map 4-9.

There are water system storage tanks that are not maintained at adequate levels by the water company (GDPUD). In the event of a wildfire supplies would be exhausted quickly and pressures may be inadequate due to use of sprinklers by well meaning citizens.

- Georgetown Canal System

Constructed in late 1800's the canal is now an irrigation water source and is a potential ignition area due to maintenance and recreational activities. See Map 4-9.

- Existing Main Evacuation Routes

ALT's Wildfire Evacuation \& General Preparedness Plan was amended on April 17 2008. The Plan states that the main roads transecting the POA will serve as evacuation routes. They are:

- American River Trail beginning at State Highway 193 and Gate 1, ending at Sweetwater Trail
- Sweetwater Trail beginning at State Highway 193 and Gate 2, ending at Gate 3
- Power line corridors

These are generally located adjacent to all the paved roads within ALT.

- Areas of Community importance, including:
- Common Areas and POA Owned Lots - These areas and lots are detailed above and are scattered throughout the community. They range from $1 / 2$ to 50 acres in size, owned by the Property Owners Association, and designated as open space. See Map 4-8.
- Other Areas - Located throughout the community are other areas that receive intense use by members. See Map 4-8. They are:

1. Indian Bow Lake ("Rec Lake") - This is a fire safe zone due to the infrastructure and general lack of a vegetative canopy.
2. Soccer field and Golf Course - These areas are considered fire safe and may be used as a place to shelter people temporarily displaced.
3. Black Oak Campground - The camping sites and access road are not fire safe.
4. Barn Loft and Stable Areas - These areas are considered fire safe.
5. Lakeside Clubhouse, Golf Course Lake and Swimming Pool Areas - Due to infrastructure and a natural fire barrier these areas are considered fire safe and may be used as a place to stage fire suppression resources and/or shelter people who are temporarily displaced.
6. Recycle Area (Closed) - Historically, the area was in need of annual fuel reduction activities around the drop site. The area was closed due to the potential degradation of surface water and ambient air quality. The area will remain closed until a future decision is made and perhaps a use for the biomass is found.
7. Access Gates - ALT has three monitored road access gates that manage all vehicular traffic. The main gate, "Gate 1", is the only one staffed full time with trained personnel. The other two gates are remotely video monitored and activated by bar codes attached to vehicles and are equipped with a Knox lock for emergency vehicle access.

- Equestrian and Pedestrian Trails - There are 32 miles of equestrian and hiking trails within the boundaries or ALT and an additional 13.9 miles of trails on Bureau of Reclamation land in the canyons below the subdivision. See Map 4-10.

Trails within the community are managed and routinely maintained by the POA staff and volunteers. The State of California, Department of Parks and Recreation, manages the trails on Bureau lands. Currently, the State Parks' trails maintenance is random with volunteer and State personnel keeping trails open. People taking shortcuts or not staying on designated trails are constantly creating new trails. If a fire started on these canyon slopes, especially mid slope, initial attack efforts would be difficult and evade containment, thereby threatening ALT.

- Landscapes of historical, economic or cultural value include:
o Georgetown Canal System - Constructed in late 1800's for mining purposes the canal is now an irrigation water source and provides
"developed" access into forested landscape for pedestrians and equestrian riders. This human encroachment is a potential source of accidental/intentional fire ignitions from maintenance and recreational activities.

After considering the location of the inhabited areas, the critical human infrastructure, and the risk of wildfire, the community has identified on the map (see Map 4-WUI), a wildland-urban interface (WUI) zone around the community assets, which in general includes the area within 2 miles from the community. $\mathrm{Natural} / \mathrm{man}$-made barriers have been used to define the boundary of the community base map (e.g. highways, ridgelines, rivers, etc.).

5a - Community Risk Assessment
As designated on the base map, the following table lists the associated wildfire risk, as viewed by this community.

| Community, structure or <br> area at risk | Fuel <br> Hazard | Risk of <br> Wildfire <br> Occurrence | Structural <br> lgnitability | Firefighting <br>  <br> Local <br> Preparedness | Overall <br> Risk |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Northern Boundaries of ALT <br> properties that adjoin lands <br> managed by the Federal <br> Bureau of Reclamation. | High | High | High | High | High |
| Southern and Western <br> Boundaries Adjacent to <br> State Highways 193 and 49 | High | High | High | Medium | High |
| Roadside Areas Within ALT | Medium | High | Low | High | Medium |
| Cul-De-Sacs and Driveways | Medium | High | Low | High | Medium |
| Water storage | Medium | Medium | Medium | Medium | Medium |
| Equestrian and Pedestrian <br> Trails | High | High | Low | High | High |
| Common Areas | High | High | Low | Medium | High |
| Planned and Existing <br> Perimeter Shaded Fuel <br> Break (PSFB) | High | High | Low | Medium - High | High |
| Developed Lots |  | High | Medium | High | Medium |
| Vacant and Undeveloped <br> Lots | High | High | Low | Medium - High | High |
| POA Owned Lots | High | High | Low | Medium - High | High |
| Land Inholdings | High | High | High | Medium - High | High |
| Other Areas | Low- | Low - High | Low | Medium | Medium <br> Low |
| Heorgetown Canal System | High | High | Low | Low | Medium |

## 5b -Overall Community Priority

The priority rating reflects the overall risk and the community values.

| Community, structure or <br> area at risk | Overall Risk | Community <br> Value | Cultural <br> Value | Overall <br> Priority |
| :--- | :---: | :---: | :---: | :---: |
| Northern Boundaries of <br> ALT properties that adjoin <br> lands managed by the <br> federal Bureau of <br> Reclamation. | High | High | High | High |
| Southern and Western <br> Boundaries Adjacent to <br> State Highway 193 and 49 | High | High | High | High |
| Roadside Areas Within <br> ALT | Medium | High | High | High |
| Cul-De-Sacs and <br> Driveways | Medium | High | High | Low |
| Water storage | Medium | High | High | Medium |
| Equestrian and Pedestrian <br> Trails | High | High | Medium | High |
| Common Areas | High | High | Low | High |
| Planned and Existing <br> Perimeter Shaded Fuel <br> Break (PSFB) | High | High | High | High |
| Developed Lots | Medium | High | High | High |
| Vacant and Undeveloped <br> Lots | High | High | High | High |
| POA Owned Lots | High | High | High | High |
| Land Inholdings | High | High | High | High |
| Other Areas | High | High | High |  |
| Georgetown Canal <br> System | Medium | High | High | High |

Step 6a - Community Hazard Reduction Priorities
Based on the results of the community risk assessment, priority ratings have been selected for the communities and areas of community importance. The community recommendations for the type and method of treatment for the surrounding vegetation are listed in the following table.

| Community, structure or <br> area at risk | Type of Treatment | Method of Treatment | Overall |
| :--- | :---: | :---: | :---: |
| Priority |  |  |  |$|$


| Community, structure or <br> area at risk | Type of Treatment | Method of Treatment | Overall <br> Priority |
| :--- | :---: | :---: | :---: |
| Vacant and Undeveloped <br> Lots | fire, mechanical <br> (tractor, masticator, <br> chipper), hand labor, <br> chemical | pile burning, reducing <br> grasses and brush, <br> thinning from below, <br> pruning | High |
| POA Owned Lots | fire, mechanical <br> (tractor, masticator, <br> chipper), hand labor, <br> chemical | pile burning, reducing <br> grasses and brush, <br> thinning from below, <br> commercial thinning, <br> sanitation-salvage, etc. | High |
| Land Inholdings | fire, mechanical <br> (tractor, masticator, <br> chipper), hand labor, <br> chemical | pile burning, reducing <br> grasses and brush, <br> thinning from below, <br> commercial thinning, <br> sanitation-salvage, etc. | High |
| Other Areas | fire, chipper, hand <br> labor, chemical | pile burning, reducing <br> grasses and brush, <br> thinning from below, <br> pruning | Medium |
| Georgetown Canal System | fire, mechanical <br> (tractor, masticator, <br> chipper), hand labor | pile burning, prescribed <br> fire, reducing grasses <br> and brush, thinning from <br> below, commercial <br> thinning, sanitation- <br> salvage, etc. | High |

Individuals and the community reduce structural ignitability throughout the community by taking the following measures:

Owners of all lots are subject to the fire safe requirements, annual inspections, and CAL FIRE's Public Resource Code (PRC) Section 4291 enforcement process. See Appendix A for CAL FIRE's publication, General Guidelines for Creating Defensible Space. The agency's Notice of Fire Hazard Inspection (Form LE-100) is used for home inspections by CAL FIRE staff and is attached as Appendix B.

The California PRC Section 4291 reads as follows:
4291. (a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:
(1) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels.
(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.
(3) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under paragraph (1) if a fire expert, designated by the director, provides findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.
(4) Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe.
(5) Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.
(6) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

ALT has instituted an annual fire safe inspection program. This program uses volunteer and/or paid labor aimed at creating defensible space around vacant, foreclosed, and abandoned properties. Trained inspectors evaluate properties with the goal of $100 \%$ compliance with fire safe regulations and POA rules. The inspectors use two different evaluation forms for assessing compliance for lots with residences and ones that are vacant. These forms can be found in Appendix C . The back page of the each form contain the same information for the lot owner.

It is recommended that all new structures within the Subdivision be designed with Fire Safe materials such as Class "A" roofing, fire resistant siding, enclosed decks, and boxed eaves and vents. Driveways should conform to El Dorado County Specifications as to turn around, turn out, and signage.

ALT has programs to assist senior and disabled homeowners for fire safe compliance. Additionally, ALT's programs include chipping and a dooryard or green waste fee reduction at a waste transfer station in Placerville.

## 7 - Action Plan and Assessment Strategy

Federal and State agencies and private landowners surrounding the identified communities, structures or areas of concern were invited to submit projects that provide protection and reduce risk. The following table displays a list of projects submitted and the community recommendations.

| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Planned <br> Perimeter <br> Shaded Fuel <br> Break (PSFB) <br> See Map 4-11 | Hidden Gold Trail PSFB Extension Expand to include the north / south ridge between Wildcat Canyon and Buckeye Canyon on Bureau of Reclamation lands. 1. This fuel break extension shall be anchored to the PSFB at Hidden Gold Court and the Middle Fork American River section of the PSFB. <br> 2. The width shall be from 300 feet to 500 feet due to steep topography. <br> 3. Maintain the existing portion of the fire road (unpaved) within the fuel break. A handline cut to mineral soil of between 3 to 10 feet wide through the midline of the fuel break. The purpose of the handline is to provide suppression forces a fire line that can be quickly widened and fired as needed. <br> 4. Construct a helispot at one of the high points along the ridge. | ALT, Homeowners, Bureau of Reclamation | Grant Funding | 2020 | Yes |


| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Planned <br> Perimeter <br> Shaded Fuel <br> Break (PSFB) <br> See Map 4-11 | Brown's Bar PSFB Extension - <br> The top of Brown's Bar Canyon, just north of Deer Ravine Trail becomes narrow and is bisected into two side drainages. This landform configuration can produce erratic wind and fire effect. The PSFB must be constructed directly across the Canyon to prevent fire entering the top of the drainage (Note: approximately 61 acres completed by CAL FIRE handcrews in 20112012) | ALT, Homeowners, Bureau of Reclamation | Grant Funding | 2013 | Yes |
| Planned <br> Perimeter <br> Shaded Fuel <br> Break (PSFB) <br> See Map 4-11 | Big Chief Trail PSFB Widening - The PSFB must be widened to accommodate a staging area for fire suppression resources at the grassy flat north of Big Chief Trail. | ALT, Homeowners, Private Landowners outside ALT, Bureau of Reclamation | Grant Funding | 2020 | $\begin{gathered} \text { Yes } \\ \text { (Low Priority) } \end{gathered}$ |
| Planned <br> Perimeter <br> Shaded Fuel <br> Break (PSFB) <br> See Map 4-11 | Roses Bar Court PSFB Extension The PSFB was expanded to include the east / west ridge of Roses Bar Court and is anchored at the top of the American Canyon Drainage. Due to the steep terrain and fuel loading the design calls for a extension of the width to 300-500 feet. <br> The grassy flat open spaces could serve as anchor point or safety zone for firefighting efforts. | ALT, Homeowners, Bureau of Reclamation | Grant Funding | 2020 | Yes |


| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Existing <br> Perimeter Shaded Fuel Break (PSFB) <br> See Map 4-11 | Pointed Rock Trail PSFB Maintenance \& Expansion - This fuel break is located between ALT and Highway 49 and is strategically located to protect ALT from a fire starting near the confluence of the North and Middle forks of the American River and downstream to Folsom Lake. | ALT, Homeowners, Private Landowners outside ALT | Grant Funding | 2013 | Yes (High Priority) |
| Existing <br> Perimeter <br> Shaded Fuel <br> Break (PSFB) <br> See Map 4-11 | Federal Timber Management Plan A detailed Plan for the adjoining federal lands will be necessary for existing PSFB maintenance in the long run | ALT, <br> Homeowners, Bureau of Reclamation | Agency budget | 2020 | Yes |
| Southern and <br> Western <br> Boundaries <br> Adjacent to State <br> Highway 193 <br> and 49 | Fuel Reduction and Management Create and maintain a 100 foot fuel reduction zone around the boundaries of these areas. | ALT, Homeowners, Dept of Transportation | Landowner Budget \& Agency | Annually and 2020 | Yes |
| Land Inholdings, Common Areas and Water Storage | Fuel Reduction and Management Create and maintain a 100 foot fuel reduction zone around the boundaries of these areas. | ALT, Homeowners, Georgetown Divide Public Utilities Dept | Landowner Budget \& Agency | Annually | Yes |
| Developed, Vacant, Undeveloped, POA Lots | Continue Fire Safe Inspection \& Fuel Reduction ProgramsALT has instituted a program of $100 \%$ compliance with annual fire safe inspections by trained inspectors. <br> ALT has senior and disabled persons assistance programs for fuel reduction. ALT offers a wood waste curbside chipping service. | ALT, Homeowners | Landowner Budget \& Agency | Annually | Yes |


| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Roadsides Within ALT | Roadside Vegetation Management ALT roads: <br> 1. Treat vegetation along all road shoulders and ditches. <br> 2. Treat fuels to accepted standards within all right-ofways. <br> 3. Maintain a 15 foot vertical clearance above the pavement on all roads. <br> 4. Priorities for road treatments are: <br> (1) Shirt Tail Trail <br> (2) Double O Mine Trail <br> (3) Deer Ravine Trail <br> (4) Sweetwater Trail from American River Trail to Bottle Hill Court. <br> (5) Strap Miner Trail <br> (6) Big Nugget Trail <br> (7) Hidden Gold Trail <br> (8) Brushy Canyon <br> Trail | ALT, <br> Homeowners | Landowner Budget | Annually | Yes |
| Equestrian and Pedestrian Trails | Trails Maintenance manage a 20 foot swath that is pruned, weed-whacked \& sprayed | ALT, Homeowners | Combination | Annually | Yes |


| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Other Areas | Fuels Reduction \& Management 1. Indian Bow Lake ("Rec Lake") - <br> Reduce grass to 2 inch stubble, annually around the tennis courts, above the parking lot to the foot trail, fishing trail, picnic area, and the Dam face. Avoid the private property and the habitat areas. <br> 2. Soccer field and Golf Course - This area is considered fire safe, may be used as a place to shelter people temporarily displaced. Manage vegetation growth for 100 feet out from areas' boundaries. <br> 3. Black Oak <br> Campground - The area around loop road should be closed until fuel loads are reduced in and around the camping sites and the road is maintained as per other ALT roadsides. <br> 4. Barn Loft and Stable areas - These areas are considered fire safe, annual inspection of extinguishers and fire hoses is recommended. <br> 5. Recycle area - the area is closed until a future decision is made. | ALT, Homeowners | Landowner Budget | Annually | Yes |


| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cul-De-Sacs, Driveways and Access Gates | Road and Gate Improvements Where possible, construct a hammerhead " $T$ " at the end of dead end roads and driveways without a turnaround. <br> All ALT gates have been equipped with a "Knox" lock. | ALT | Combination | 2020 | Yes |
| Structural Ignitions (Wildfire Ignition Prevention) | Wildfire Ignition Prevention Plan Review of past fire occurrence causes. Initiate a juvenile fire starter program through the El Dorado County Fire Protection District. This program seeks to educate and prevent children at risk from becoming fire starters. <br> A prevention plan would, at minimum, address the following elements: <br> 1. Analysis of human caused fires for the last 10 years. <br> 2. Signage <br> 3. Closures <br> 4. Public information and education <br> 5. Administration and staffing needs. <br> 6. Enforcement <br> 7. Trail fuel treatment and clearance | ALT, El Dorado County Fire Protection District, CAL FIRE | Agency | 2013 | Yes |


| Community, structure or area at risk | Project | Agencyl Landowner | Funding Needs | Time Table | Community Recommendation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Evacuation Planning | Evacuation Plan Update - Main Roads leading to gates 1, 2 and 3 are signed as Evacuation routes. <br> Due to the location of major arterial highways and roads, consider the planning and education to shelter in place versus massive evacuation. The biggest problem in moving the public is where to move them. Many times it is safer to "stay put" than join a panic rush away. <br> Safe areas to be established, away from a fire area where people can wait for the fire to be suppressed. | ALT, CAL FIRE, EI Dorado County Fire Protection District and Sheriff's Office, CHP | Grant Funding | 2013 | Yes |
| Georgetown Canal System | Fuel Reduction and Management Vegetation treated to accepted standards along the canal ditch and access road shoulders. <br> Canal access roads to have 15 foot vertical clearance above the surface but done without significantly increasing water temperature. | GDPUD | Agency budget | Annually |  |

The community intends to assess the progress annually and invite Agencies and landowners to submit projects that provide community protection. Additional projects will be displayed in an update appendix to this plan.

Referenced Resource Materials for the ALT CWPP Update and are available at the California Fire Alliance website.

- Healthy Forest Restoration Act of 2003
- Preparing a Community Wildfire Protection Plan, A Handbook for Wildland-Urban Interface

Communities, (NACo, NASF, SAF, WGA) March 2004.

- Field Guidance by National Association of State Foresters, June 27, 2003
- Leaders Guide Supplement, International Association of Fire Chiefs
- Fire Planning and Mapping Tools


## Appendix A

# 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
Approved by Office of Administrative Law on May 8 ${ }^{\text {th }}, 2006$


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## A. Purpose of Guidelines

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 creatirig 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 communitywide 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 $\S 4291(\mathrm{a})$. Single specimens of trees or other vegetation may be retained provided they are wellspaced, 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 $\S 1299$ (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.

- 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> 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 |
| Minimum horizontal space between edges of shrub |  |  |
| Shrubs | 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 Landscaping

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

Conifer forests intermixed with rurallhousing 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

Mâture, 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).

## 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.

| Occupant: |  | Physical Address: |  |  |  | Phone \#: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Occupant Not Home: <br> $1^{\text {st }}$ Attempt: $\quad 1 \quad 1$ | Occupant Not Home: $2{ }^{\text {nd }}$ Attempt: 1 | 1 IRefused <br> Inspection: |  | $\begin{array}{l\|l\|} \hline & \text { For Quest } \\ 1 & \text { Contact In } \\ \hline \end{array}$ | or at: ( | $1$ | - |
| Roof Construction Combustible/Non-Combustible | Exterior Siding Combustible/Non-Combustible | Window Panes Single Pane/Multi-Pane |  | Eaves Enclosed/Unenclosed | $\begin{aligned} \text { Deo } \\ \text { Masonr } \end{aligned}$ | Porches positeNood | Location of Structure Flat Ground/Slope/Ridge Top |



Defensible Space Zone (within 30 feet of all structures or to property line):
A. Remove all branches within 10 feet of any stovepipe or chimney outlet. PRC $\S 4291$ (a)(4)
B. Remove leaves, needles or other vegetation on roofs, gutters, decks, porches and stairways etc. PRC §4291(a)(6)
C. Remove all dead or dying trees, branches, shrubs or other plants adjacent to or overhanging buildings. PRC $\S 4291(\mathrm{a})(5)$
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 $\S 4291$ (a)(1)
E. Remove all dead or dying grass, leaves, needles or other vegetation. PRC $\S 4291(\mathrm{a})(1)$
F. Remove or separate live flammable ground cover and shrubs. PRC $\S 4291$ (a)(1)

Reduced Fuel Zone (within 30-100 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)
H. Live flammable ground cover less than 18 inches in height may remain, but overhanging and adjacent trees must be pruned to a height oi 6 to 15 feet. PRC $\S 4291$ (a)(1)
I. Reduce fuels in accordance with the Continuous Tree Canopy Standard (see back). PRC §4291(a)(1)
J. Reduce fuels in accordance with the Horizontal Spacing Standard (see back). PRC §4291(a)(1)

Defensible and Reduced Fuel Zone (within 100 feet of all structures or to property line):
K. Logs or stumps embedded in the soil must be removed or isolated from structures and other vegetation. PRC §4291(a)(1)
L. Remove all dead or dying brush and trees, and all dead or dying tree branches within 15 feet of the ground. PRC $\S 4291$ (a)(1)

## Other Requirements:

M. Clear all flammable vegetation, trash and other combustible materials 10 feet around and above propane tanks. CFC $\S 3807.3$
N. Address numbers shall be displayed in contrasting colors ( $4^{\prime \prime}$ Min. Size) and readable from the street or access road. CFC $\S 505.1$
O. Equip chimney or stovepipe openings with a metal screen having openings between $3 / 8$ inch and $1 / 2$ inch. CBC $\S 2113.9 .1$

## Recommendations:

$\square$ Clear 10 feet around and 15 feet above fuels (e.g. Woodpiles, lumber, scrap etc.). Move woodpiles as far as possible from structures.
$\square$ Remove flammable materials stored under decks and similar overhangs of structures.
$\square$ Clear vegetation 10 feet from sides and 15 feet above all driveways and turnaround areas.

## $\square \quad$ No violations observed.

## Comments:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Additional Information on Back


To achieve defensible space while keeping a larger stand of trees with a continuous tree canopy, adhere to the guidelines below:

- Prune lower branches of trees to a height of 6 to 15 feet from the top of the vegetation below or $1 / 3$ to $1 / 2$ the tree height for trees under 30 feet, whichever is less.
- Remove all ground fuels greater than four inches in height. Single trees or other vegetation may be kept if they are well spaced, well pruned, well maintained, free of all dead material, and will not spread fire to other vegetation or structures.


## Horizontal Spacing Standard

- Beyond 30 feet from structures grass should not exceed four inches in height. In situations where these fuels are isolated from other fuels or where necessary to stabilize soil, grasses may reach a height of 18 inches.
- Clearance between shrubs should be 4 to 40 feet depending on the slope of the land and size and type of vegetation. Check the chart below for an estimation of clearance distance. Any questions regarding requirements for a specific property should be addressed to your local fire official.

| Minimum Horizontal Spacing Guidelines |  |  |
| ---: | :---: | :---: |
| Slope | Shrubs, Ground Covers \& Other <br> Ornamental Plants <br> Space required between clumps of ground cover, <br> plants, bushes, shrubs, seedlings or sapling trees, etc. | Trees <br> Space required between <br> tree canopies or groups of trees |
| Flat or gentle slope (0\% to 20\%) | 2 times the height of the plant | 10 feet |
| Moderate slope (20\% to 40\%) | 4 times the height of the plant | 20 feet |
| Steep slope (greater than 40\%) | 6 times the height of the plant | 30 feet |

PRC §4291. (a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forestcovered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:
(1) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, build- ing standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100 -foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels.
(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of igni- tion or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.
(3) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under paragraph (1) if a fire expert, designated by the director, provides findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.
(4) Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe.
(5) Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.
(6) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

PRC §4119. The department, or its duly authorized agent, shall enforce the state forest and fire laws. The department may inspect all properties, except the interior of dwellings, subject to the state forest and fire laws, for the purpose of ascertaining compliance with such laws.

For additional information on how to comply with defensible space clearance requirements, please visit: WWW.FIRE.CA.GOV

## Residential Lot Fire Safety Evaluation Form

Lot \#: $\qquad$ Address: $\qquad$

Area: $\qquad$ Owner's Name: $\qquad$
DEFENSIBLE SPACE ZONE 1 (within 30 feet of all structures or to property line):
A. Remove all branches within 10 feet of any stovepipe or chimney outlet.
B. Remove leaves, pine needles, or other vegetation from roofs, gutters, porches, stairways and under decks and similar overhangs of structures.
C. Remove all dead or dying branches to a height of 15 feet above the roof.
D. Where ladder fuels exist, prune lower branches of trees to a minimum height of 6 feet (or $1 / 3$ tree height for trees under 18 feet). Branches from single specimens of trees may be kept if they are well spaced, well pruned and create an overall condition that avoids the spread of fire to other vegetation or to structures (no vegetation under or adjacent to the tree).
E. Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs (examples would be:. Manzanita, Buck Brush, Juniper, Rosemary etc.).
F. Remove all combustible branch piles, dry slash, stumps, woody materials, waste piles, rubbish or litter of any kind.
G. Firewood is allowed in this zone only if covered with a fire resistant tarp.

REDUCED FUEL ZONE 2 (within 30 - 100 feet of all structures or to property line):
H. Live flammable ground cover less than 18 inches in height may remain. If it exists under trees, then all overhanging and adjacent trees must be pruned up a minimum of 6 feet (or $1 / 3$ tree height for trees under 18 feet) through the fire season to a distance of 100 feet from any structure, neighboring structure and 30 feet from any road.
I. Reduce fuels in accordance with the Continuous Tree Canopy Standard to a distance of 100 feet from any neighboring structures and to 30 feet from any road. (See back of form for description.)
J. Reduce fuels in accordance with Horizontal Spacing Standard to a distance of 100 feet from any neighboring structure and 30 feet from any road. (See back of form for description.)
K. All exposed wood piles must have a minimum of 10 feet of clearance, down to bare mineral soil, in all directions, unless covered with a fire resistant tarp.

DEFENSIBLE AND REDUCED FUEL ZONES 1 \& 2 (within 100 feet of all structures or to property line):
L. Mow grass or weeds to a maximum of 4 inches in height through the fire season to a distance of 100 feet from any structure or neighboring structure and to 30 feet from any road.
M. Logs or stumps embedded in the soil must be removed or isolated from structures and other vegetation.
N. Remove all dead or dying brush and trees, and all dead or dying branches within 6 feet of the ground.

OTHER REQUIREMENTS:
O. Clear all weeds, brush, trash, dead or dying branches and other combustible materials within 10 feet around and above propane tanks.
P. Address numbers displayed in contrasting colors ( 4 " min. size) will be posted street side, adjacent to the driveway entrance, and will be readable from the street or access road.
Q. Cover all chimney or stovepipe openings with a metal screen having openings no larger than $1 / 2$ inch.

COMMENTS: $\qquad$

Fire Risk Evaluator: $\qquad$ Date:
$\qquad$
vacant Lot rire satety 上vaiuation rorm

Lot \#: $\qquad$ Address: $\qquad$

Area: $\qquad$ Owner's Name: $\qquad$

DEFENSIBLE SPACE ZONE 1 (within 30 feet of all structures, including neighboring structures):
A. Remove all branches within 10 feet of any neighboring stovepipe or chimney outlet.
B. Where ladder fuels exist, prune lower branches of trees to a minimum height of 6 feet (or $1 / 3$ tree height for trees under 18 feet). Branches from single specimens of trees may be kept if they are well spaced, well pruned and create an overall condition that avoids the spread of fire to other vegetation or to structures (no vegetation underneath or adjacent to the tree).
C. Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs (examples would be:. Manzanita, Buck Brush, Juniper, Rosemary etc.).
D. Remove all combustible branch piles, dry slash, stumps, woody materials, waste piles, rubbish or litter of any kind.
E. Firewood is allowed in this zone only if covered with a fire resistant tarp.

REDUCED FUEL ZONE 2 (within 30-100 feet of all structures, including neighboring structures, or to property line, and 30 feet from any road):
F. Live flammable ground cover less than 18 inches in height may remain. If it exists under trees, all overhanging and adjacent trees must be pruned up a minimum of 6 feet (or $1 / 3$ tree height for trees under 18 feet) through the fire season.
G. Reduce fuels in accordance with the Continuous Tree Canopy Standard to a distance of 100 feet from any neighboring structures and to 30 feet from any road. (See back of form for description.)
H. Reduce fuels in accordance with Horizontal Spacing Standard to a distance of 100 feet from any neighboring structure and 30 feet from any road. (See back of form for description.)
I. All exposed wood piles must have a minimum of 10 feet of clearance, down to bare mineral soil, in all directions, unless covered with a fire resistant tarp.
DEFENSIBLE AND REDUCED FUEL ZONE (within 100 feet of all structures, including neighboring structures, or to property line, and 30 feet from any road):
J. Mow grass or weeds to a maximum of 4 inches in height through the fire season.
K. Logs or stumps embedded in the soil must be removed or isolated from structures and other vegetation.
L. Remove all dead or dying brush and trees, and all dead or dying branches within 6 feet of the ground.

## 都



## Continuous Tree Canopy Standard

To achieve defensible space while keeping a larger strand of trees with a continuous tree canopy, adhere to the guidelines below. Prune lower branches of trees to a height of 6 to 15 feet from the top of the vegetation below or $1 / 3$ to $1 / 2$ the tree height for trees under 18 feet, whichever is less.
Remove all ground fuels greater than four inches in height. Single specimens of trees or other vegetation may be kept if they are well spaced, well pruned and create an overall condition that avoids the spread of fire to other vegetation or to structures.

## Horizontal Spacing Standard

Ideally grass should not exceed four inches in height. In situations where these fuels are isolated from other fuels or where necessary to stabilize soil, grasses may reach a height of 18 inches.
Clearance between shrubs should be 4 to 40 feet depending on the slope of the land and size and type of vegetation. Check the chart below for an estimation of clearance. Any questions regarding requirements for specific property should be addressed to your local fire official.

|  | Minimum Ground Spacing Guidelines |  |
| :---: | :---: | :---: |
| Slope | Shrubs, Ground Covers \& Other <br> Omamental Plants <br> Space Required between clumps of ground <br> cover, plants, bushes, shrubs, seedlings or <br> sapling trees, etc. | Space required between tree canopies |
| Flat or gentle slope (0\% to 20\%) | 2 times the height of the plant |  |
| Moderate slope (20\% to 40\%) | 4 times the height of the plant | 10 feet |
| Steep slope (greater than 40\%) | 6 times the height of the plant | 20 feet |

PRC §4291(a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:
(1) Maintain defensible space no greater than 100 feet from each side of the structure, but not beyond the property line unless allowed by state law, local ordinance, or regulation and as provided in paragraph. (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100 -foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion.
(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that such a clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to redwe the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.
(3) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under paragraph (1) if a fire expert, designated by the director, provides findings that such a clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.
(4) Remove that portion of any tree that extends within 10 feet of the outlet of a chimney or stovepipe.
(5) Maintain any tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.
(6) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

CFC 505.1 New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. The approved minimum size dimensions of the numbers shall be as specified in Table 505.1.

CFC 3807.3 Clearance to combustibles. Weeds, grass, brush, trash and other combustible materials shall be kept a minimum of 10 feet ( 3048 mm ) from LP-gas tanks or containers.

Definition of codes: PRC4291 = California Public Resources Code $\quad$ CFC $=$ California Fire Code

