

**MASTER**  
**June 19, 2008**



**CAMERON PARK**

**COMMUNITY WILDFIRE**

**PROTECTION**

**PLAN**

**This Plan was prepared by the Cameron Park Fire Safe Council for the benefit and wildfire safety of the people of Cameron Park.**

**CAMERON PARK**

**COMMUNITY WILDFIRE PROTECTION PLAN**

Plan Prepared By

Cameron Park Fire Department  
in  
Cooperation with Cameron Park Fire Safe Council

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Mike Kaslin, Battalion Chief                      Date

Plan Reviewed  
By  
U. S. Department of Interior  
Bureau of Land Management

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Bill Haigh, Field Office Manager                      Date

CAL FIRE  
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El Dorado County Fire Safe Council

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Rich Englefield, Chairperson                      Date

Plan Approved  
By  
Cameron Park Community Services District

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Tammy Mefford, General Manager                      Date

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## **I. EXECUTIVE SUMMARY**

Cameron Park is an unincorporated community with 5500 parcels and 15000 residents. Cameron Park straddles Deer Creek forming a small valley containing a full service community. The steep topography, heavy fuel loading, history of wildfire ignitions combined with extensive and diverse use activities has many of the elements for a wildfire occurrence of catastrophic portions.

Cameron Park has been listed on the Federal Register as a Community at Risk.

Severe fire seasons in the western United States in the last few years have led to the enactment of the Healthy Forest Restoration Act (HFRA) of 2003, which can provide funds for fuel treatment for communities at risk adjacent to Forest Service and Bureau of Land Management lands. The HFRA provides communities with a tremendous opportunity to influence where and how federal agencies implement fuel reduction projects on federal and non federal lands. A Community Wildfire Protection Plan (CWPP) is the most effective way to take advantage of this opportunity. The Handbook "Preparing a Community Wildfire Protection Plan" was used as a guide in preparing the Cameron Park CWPP.

The Cameron Park Fire Safe Project was prepared by the Cameron park Fire Safe Council and addresses the hazards and risks within and adjacent to the community.

The greatest threat outside the community would be a fast moving wildfire in the brush fields adjacent the eastern boundary of Cameron Park. Within the community there are areas where homes are intermixed with dense vegetation (fuels).

Fuels were identified and classified into 4 National Fuel Models. Community hazard reductions were prioritized and displayed in 6 Elements: (1.) Structure Defensible Space (Residential & Commercial), (2.) Vacant Lots (Residential & Commercial), (3) Cameron Park East- Brush Field, (4.) Roadside Fuel Treatments (5.) Existing Fire Safe Plans and (6.) Wildland Rx Hazard and Risk Assessment. Fuel Treatment Guidelines were written for each fuel type that can be applied to the Fuel Reduction Elements. The Plan also addresses maintenance, new home fire safe features, periodic reviews and recommends a Wildfire Ignition Prevention and Evacuation Plans be prepared. A Wildland Urban

Interface (WUI)<sup>1</sup> boundary was established by the Cameron Park Fire Safe Council (CPFSC). The CPFSC was formed in 2002 and considerable work has been accomplished to make Cameron Park a fire safe community. In this area many residents have completed Defensible Space around their homes. Full implementation of the CWPP, over time, will continue to help make Cameron Park a Fire Safe Community. The CWPP was certified by CAL FIRE, reviewed by the Bureau of Land Management for the Cameron Park Unit of the Pine Hill Preserve (PHP) and adopted by the Cameron Park Community Services District (CSD).

## **II. INTRODUCTION**

Why are CWPP's important? They are important because the HFRA of 2003 (P. L. 108-148) directs the U.S. Forest Service and the Bureau of Land Management (BLM) to give priority to communities that have adopted a CWPP. This means a higher priority for federal funding assistance for BLM lands. CPCWPP is an opportunity to influence how and where the BLM implement fuel reduction projects on the PHP.

CAL FIRE encouraged Cameron Park to prepare a CWPP to become a collaborative member of the El Dorado-Amador Unit planning efforts. In 2005 CDF contracted to prepare the Cameron Park Fire Safe Project. This project included the development of a Wildfire Hazard and Risk Evaluation System that prioritized community fuel treatment areas and is an integral part of the CWPP.

The CWPP was prepared by the CPFSC and has been reviewed by CAL FIRE and becomes part of CAL FIRE Amador/El Dorado Unit Fire Plan. This CWPP is applicable only to lands within the CSD boundary. However lands and subdivisions within the WUI<sup>2</sup> boundary are eligible for at least 50% of all funds appropriated for projects under HFRA and must be used within the WUI as defined in the CWPP.

Future regional planning needs to understand adapt to and direct the changing landscape to promote wildfire safety in this urbanizing landscape.

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<sup>2</sup>The WUI is commonly described as the zone where structures meet and intermingle with undeveloped wildland or vegetative fuels. This WUI zone poses tremendous risks to life, property, and infrastructure and is the most dangerous situations firefighters face. This zone averages 1 ½ miles around the community to include adjacent landscapes of interest to enable the community to make recommendations regarding protection and risk reduction priorities.

### **III. ACKNOWLEDGEMENTS**

CAL FIRE and the El Dorado County Fire Safe Council (EDCFSC) commend the CSD for their foresight in the development of a CWPP for the Community of Cameron Park and vicinity.

Special recognition and thanks to the CPFSC; Battalion Chief Mike Kaslin and Rob Combs, Gene Murphy, Lori Tuthill, Audrey Paye, Graciela Hinshaw and Dave Kert for their time and talent in developing the CWPP on a “in house basis”. Special thanks for the cooperation to the PHP, CSD, Cal Fire and EDCFSC for their review input and support.

### **IV. PLAN LIMITATIONS**

The CPFSC, CSD, CAL FIRE, BLM and EDCFSC makes no guarantee, warranty, expressed or implied and assumes no liability that the CWPP for the community of Cameron Park may prevent wildfires from destroying natural resources or threatening homes and residents. However, full implementation and maintenance of the CWPP mitigation measures will greatly reduce the exposure of the community and adjacent homes to losses from wildfire.

It is also the homeowners/landowners prime responsibility to assume responsibility for protection of their property from wildfires.

### **V. PURPOSE AND SCOPE**

The purpose of this CWPP for the community of Cameron Park and vicinity is to bring this urban area in conformance with the HFRA that was enacted in 2003. In order for Cameron Park to take full advantage of the new opportunities in HFRA they should meet the following requirements for a CWPP, (1) Collaboration, (2) Prioritized Fuel Reduction, (3) Treatment of Structural Ignitability, (4) Maintenance of Fuel Treatments and (5) be applicable with resource plans of the BLM and PHP. (Resource Plans for the BLM and PHP are the Folsom Field Office Sierra Draft Resource Management Plan and the Draft Pine Hill Preserve Management Plan.) The HFRA also requires that three

entities must approve the CWPP and that a WUI boundary be established. These requirements are met with this CWPP Plan and the Plan will be an integral part of the El Dorado County Wildfire Protection Plan.

## **VI. BACKGROUND – THE WILDFIRE THREAT IN CAMERON PARK**

CP has a Mediterranean type climate which features hot, dry summers and cool moist winters. The June – October dry season produces ideal conditions for wildfires. Annual plants die and perennial plants lose moisture and become highly flammable. Fires burning towards the end of the dry season are intense, resist suppression efforts and threaten lives, property and resources. Drought conditions intensify the wildfire danger. Two additional climatic conditions aggravate this already serious wildfire problem. Periodically, almost every year, the Pacific High Pressure System moves eastward over California and brings very hot, dry weather with low humidity. This “Heat Wave” can occur at any time during the dry season and wildfires can start easily and are difficult to extinguish. The other extreme weather condition, thankfully less frequent, usually occurs in the fall and sometimes in early winter, when north or east strong, dry winds subside from the Great Basin High (Fohen Winds). Under these conditions, a wildfire can quickly escape and create great damage before the winds stop blowing. The Oakland Hills Fire of 1991 burned under these conditions and destroyed 3810 homes in Oakland.

Each year, hundreds of homes are destroyed or damaged by wild land fires. Cameron Park is no exception from wildfire losses. In El Dorado County in 1985 the Eight Mile fire destroyed 14 homes and in 1992 the Cleveland Fire destroyed over 40 homes and claimed the lives of two air tanker pilots. In 2007 the Angora Fire destroyed over 250 homes. People who live in, or plan to move into, an area where homes are intermixed with brush, grass, woodlands or forests should be aware that in the event of a wildfire their homes and lives may be at risk. Nobody may remember the last wildfire in any given area in the Park, but history and tree ring analyses tell us that sooner or later, wildfires will occur. Few who have lived through a wildfire maintain their pre-fire attitudes. Those who have not been through a fire cannot imagine such an experience and are more or less convinced that it will not happen to them. Unfortunately, the control of

wildfires is not an exact science. A wildfire responds to the weather, topography, and fuels in its environment. Under extreme burning conditions, the behavior of a wildfire can be so powerful and unpredictable that fire protection agencies can only wait until conditions moderate before suppression actions can be taken.

To best understand the history of wild land fire in the Sierra foothills, it is necessary to look at resettlement fire regimes. The Sierra Nevada Ecosystem Project, Volume 1, Assessment Summaries, 1996, Wild land Resource Report No. 36 – UC Davis, page 62, “Management Strategies” states the following:

**“Ecological Functions of Fire.** Fire is a natural evolutionary force that has influenced Sierran ecosystems for millennia, influencing biodiversity, plant reproduction, vegetation development, insect outbreak and disease cycles, wildlife habitat relationships, soil functions and nutrient cycling, gene flow, selection, and, ultimately, sustainability.”

“Climatic variation plays an important role in influencing the patterns and severity; fires have been most extensive in periods of dry years.”

“In most lower-elevation oak woodland and conifer forest types of the Sierra Nevada, presettlement fires were frequent, collectively covered large areas, burned for months at a time, and, although primarily low to moderate in intensity, exhibited complex patterns of severity.”

“Fire suppression in concert with changing land-use practices has dramatically changed the fire regimes of the Sierra Nevada and thereby altered ecological structures and functions in Sierran plant communities.”

**“ASSESSMENT:** Fire represents both one of the greatest threats and one of the strongest allies in efforts to protect and sustain human and natural resources in the Sierra Nevada. Residents and visitors alike are well aware of the threats posed by summer wildfires. A growing density of homes and other structures coupled with



the increased amount and continuity of fuels resulting from twentieth-century fire suppression have heightened concern about threats to life and property, as well as the health and long-term sustainability of forests, watersheds, and other natural resources. Yet fire has been an integral part of the Sierra Nevada of millennia, influencing the characteristics of ecosystems and landscapes. Today, state, federal, and local agencies put enormous resources into efforts to reduce fire occurrence while at the same time advocating the need to use fire to promote healthy ecosystems. The challenge we face is how to restore some aspects of a more natural fire regime while at the same time minimizing the threat wildfire poses to human and natural resources and values.”

The Forty-Niners and cattlemen carried the early perception that the nation’s forests and wild lands were obstacles to agriculture and settlement in California. For more than half a century following the Gold Rush, settlers, miners, stockman and others used the Sierra foothills rather harshly. Often land was abused through indiscriminate burning. Fires were deliberately set for a variety of purposes often raging out of control. The prevailing attitude regarding wildfires, however, was to save lives and protect property and let the wild lands take care of themselves. Wildfires continued in the Sierra foothills of El Dorado County and elsewhere in the state until damages exceeded tolerable limits. This led to the establishment of the State Board of Forestry in 1885, following the establishment of the precursor of the California Department of Forestry and Fire Protection and establishment of the Federal Timber Reserves (now the National Forests) and the U. S. Forest Service in 1905.

## **VII. CAMERON PARK COMMUNITY WILDFIRE PROTECTION PLAN**

### **A. Community Description**

CP is an unincorporated foothill community on the western slopes of the Sierra Nevada mountain range in El Dorado County. CP formally established as a CSD in 1961. The community initially consisted of several hundred residents living around a golf course and a small commuter airport along the Highway 50 corridor. In the 40 plus years since the CSD has become a full facility community

with approximately 5000 single family homes and 1000 apartment dwelling units, commercial buildings, retail centers, Library, 3 schools, medical facilities and 7 Parks have been developed in a nine square mile area. Approximately 80% of this development is in the wildland –urban interface (where buildings and combustible vegetation are collocated).

There is residential development throughout the CSD including the valley floor, ridge tops and slopes leading up to the ridges. Many of the homes were built in the 1970's and 1980's before higher county standards were adopted for roads and roofing material. Homes with wood siding, and decks and shake roofs, are commonly nestled into heavy fuels on steep slopes. Some narrow, winding and dead end roads only complicate fire suppression and evacuation emergencies.

The expansion of CP urbanization, which has the potential to increase at even greater rate in the years ahead, promises to have an increasingly significant wildfire influence on adjacent vacant lands especially the PHP which was established in 2001 to protect habitat for rare plants in western El Dorado County. Wildfire protection is provided by CAL FIRE and structural fire protection by the CP Fire Department (under contract with CAL FIRE).



“Homes at Risk”

## B. Vegetation and Topography

CP was an area predominately consisting of mature stands of brush, dense oak stands and large areas of grass. However many of these stands have been fragmented by development. Manzanita and chamise are the most common brush species, growing in thick stands greater than 10 feet in height with a high percentage of dead material. Oak species are primarily Blue Oak (*Quercus kelloggi*), Valley Oak (*Quercus lobata*), and Live oak (*Quercus wislizeni*). Some of the lower elevations of the community have large areas of annual grass. A high percentage of the homes have been landscaped with exotic plants such as Monterey Pine, juniper and other highly flammable plants with little regard for Defensible Space. Within the WUI boundary and immediately adjacent to homes in CP is the Cameron Park Unit of the PHP of which 392 acres is owned by the BLM and 63 acres by El Dorado County. The PHP has a combination of mature chaparral and patches of woodlands and grasslands. The PHP is managed by the BLM for the protection of eight rare native plants in western El Dorado County. “Fire Ecology and Fuels Management At The Pine Hill Preserve” brochure is in the binder pocket and outlines the Preserves goals etc.

The main topographic feature in this area is Deer Creek which dissects CP from north to south. The creek with ridges on either side form a small valley where the majority of the homes are located

## C. Fire Behavior

Some ecosystems have become overgrown and decadent leaving them hazardous to homes in and adjacent to these ecosystems. Condition Classes are a function of the degree of departure from historical fire regimes resulting in alterations of key ecosystem components such as composition, structure age, stand age, and canopy closure. One or more of the following activities may have caused this departure: fire exclusion, timber harvesting, grazing and insect and disease or other past management practices. Condition Classes were determined by the California

Department of Forestry and Fire Protection and are displayed on a map in Appendix G.

The fuels in the CP area are Grass savannas, (Fuel Model 1), Blue Oak/Grass (Full Model 2), Interior Live Oak/ with grass and brush (Fuel Models 4 and 6) and Chaparral (Fuel Model 4). Intermixed are small patches of Native Pine and Ponderosa Pine.

#### Grass Savannas, Fuel Model 1



Grass savannas (Fuel Model 1) are comprised of very porous and continuous herbaceous grass fuels, generally below knee level and fuel loads are about 1 ton per acre. Less than one-third of the area has other vegetation like shrubs and trees. Surface fires will move rapidly with flame lengths up to 11 feet when cured.

#### Blue Oak Savannah/Woodland, Fuel Model 2



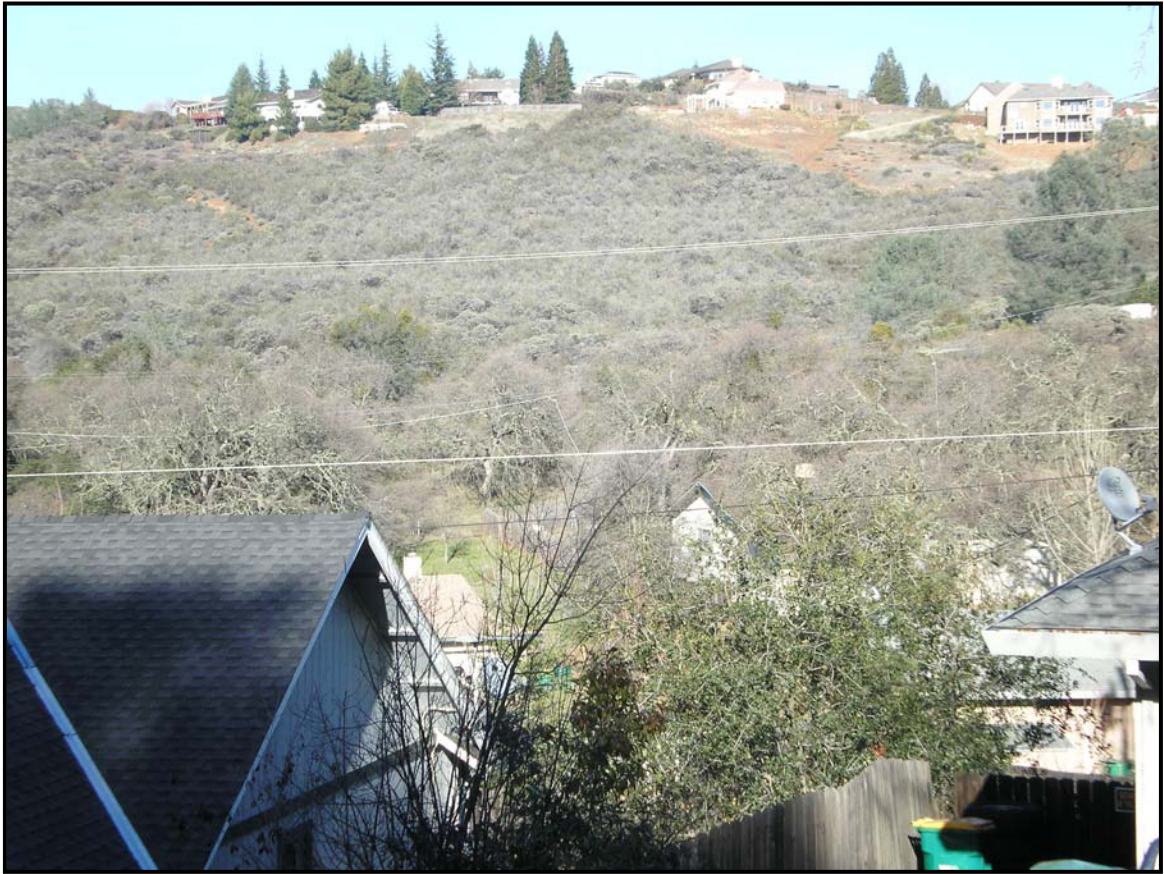
Blue Oak Savannah/Woodland (Fuel Model 2) is comprised of oak and gray pine overstory (20% to 40% canopy closure), grass ground cover 1 to 2 feet tall with scattered Poison Oak and mixed brush. The Blue oak woodlands also have intermixed Interior Live Oak and California Buckeye. A moderate fuel ladder is established however fire spread is mainly in the grass but more intense than Fuel Model 1, but rate of spread is reduced

Interior Live Oak Woodland, Combination of Fuel Models 4 and 6



Interior Live Oak Woodland with grass and brush (combination of Fuel Models 4 and 6) are comprised primarily of mixed oak, Live Oak, Blue Oak, Valley Oak, with some scattered Native Pine and Ponderosa Pine. However live oak dominates the overstory .The understory is Poison Oak, mixed brush, oak and Native Pine seedlings and saplings. Ground cover is grass with liter (tree limbs, and logs). Canopy closure is 80% to 100%. Fuel loading is 6 to 13 tons per acre. A significant fuel ladder is present in this fuel type.

Chaparral, Fuel Model 4



Chaparral (Fuel Model 4) consists of Chemise and manzanita brush with a high ratio of dead to live fuel. Fuel loads average 18 to 20 tons per acre. The largest brush field is located on the west facing slopes adjacent commercial and residential lots on CP's eastern boundary from Highway 50 to Mira Loma Drive. Fire is able to carry from surface fuels through convection into the crowns with relative ease. Ladder fuels are fuels that provide vertical continuity between the ground fuels and a tree canopy. Ladder fuels are present as shrubs and tree

saplings and poles. Single or multiple tree torching can occur whenever surface fire intensity generates flame lengths that can carry into the crowns, The following displays rate of spread for the fuel models found in the CP area<sup>3</sup>.

<b><u>Fuel Model</u></b>	<b><u>Fuel Bed Depth</u></b>	<b><u>Fuel Load (tons/acre)</u></b>	<b><u>Rate of Spread</u></b>		
			<b><u>Wind 2 mph</u></b>	<b><u>Wind 6mph</u></b>	<b><u>Wind 12mph</u></b>
1	1'	.75	22ft/min	170ft/min	445ft/min
2	1' +	5	11ft/min	59ft/min	200ft/min
4	6'	15-80	27ft/min	110ft/min	285ft/min
6	4'	8	0	41ft/min	101ft/min

<b><u>Fuel Model</u></b>	<b><u>Flame Length (ft)</u></b>
1. Grass	4 - 11
2. Blue Oak/Grass	6 - 10
6. Interior Live Oak	19 -20
4. Chaparral	5 - 19

#### D. Risk and Hazard Assessment

##### 1. Risks

Wildfire risks (fire causes) for CP are ranked as follows:

##### a. Ignitions along Highway 50 and Green Valley Road.

Fire starts adjacent the these roads can be from vehicles, cigarettes, arsonists and traffic collisions, and have the potential to spread quickly into CP.

##### b. Ignitions around homes.

Fire starts within the urban complex of homes can be person caused i.e. use of lawn mowers, weed whackers, and children

<sup>3</sup> Literature Cited – R. D. Harrell, William Teie, 2001, *Will Your Home Survive? A Winner or Loser? A guide to help you improve your odds against Wildland Fire!* Produced and published by Deer Valley Press, Rescue CA 95672, Library of Congress Catalog Number 2001118900



playing with matches. Fires are usually small but can quickly threaten a home.

c. Ignitions in the brush field along the eastern boundary of CP.

Fire starting in this area can be caused by activities on residential and commercial parcels that abut the brush and visitor use in the PHP.

Due to the heavy fuel loading and steep topography wildfires can become large quickly and threaten multiple homes that surround this brush field.

d. Ignitions in the vacant lands south of CP (Marble Valley, Deer Creek and the Consumnes River Canyon).

Fire starts in this area can be from vehicles and recreation users and can become large very fast threatening Cameron Estates and Cambridge Oaks.

e. Ignitions in the grass fuels at the Highway 50 Bass Lake Interchange and along the Bass Lake Road.

Fire starts in this area from vehicles will have a rapid rate of spread and can threaten homes within the WUI boundary.

f. Ignitions in the small, interior brush fields intermix with homes.

Fire starts from human activities in these brush fields can become intense and threaten adjacent homes very quickly.

## 2. Hazards (Fuel Complexes)

The hazardous fuel complex for the CP area was classified into 4 groups: Extreme, High, Low and Moderate by Wildland Rx Risk and Hazard Assessment. These ratings were used to classify lots for priority treatment for Defensible Space (DS). See Cameron Park Wildfire Assessment Map dated 2-18-06 in Appendix G. Also displayed in Appendix G is map of Fire Hazard Severity Zones.

## 3. Fire History

Wildfires in the CP area are displayed on “AEU Ignitions 1994 – 2004” CD and Fire history Map in Appendix G. (CD is in binder pocket.)

Assessment of the above Risks, Hazards, and Fire History is the foundation for The Prioritized Fuel Reduction Elements for the CPCWPP.

#### E. Problem Statements

**1. The mid slope topography and heavy fuel loading of chaparral fuels along CP’s eastern boundary has all the elements for a catastrophic wildfire to threaten CP under severe burning conditions.**

**2. The light fuels along the Highway 50 corridor and the CSD western boundary and the brush fuels on the north side of Highway 50 (Palmer Fire 2007) has a history of numerous ignitions with a rapid rate of spread that can threaten CP.**

Fire history has demonstrated that grass and other light fuels are a threat to other vegetation as well as people. There is a strong tendency for the public and even some firefighters to discount the serious nature of wildfire in the grasslands of California. For instance, a grass stand of 1 ton per acre has approximately 8000 BTU’s per acre. A study conducted on 100 fires where 31 fire fighters lost their lives revealed many of these burned in light fuels such as grass. Fire in the open grass and under oak stands is a serious wildfire situation in CP.

**3. Roadside fuel treatments are inadequate for a number of roads within CP.**

Radiant heat from burning roadside fuels can jeopardize evacuation and suppression efforts.

**4. Wildland fire ignitions will increase as interface populations and uses grow.**

New homes are being built at an increasing rate.

**5. Homeowners often do not understand or realize their responsibility for recognizing adequate wildfire mitigation and mitigating measures.**

A review of many wildfires has conclusively shown that the most home losses occur when: (1) there is inadequate clearing of flammable vegetation around the house; (2) roofs are not fire resistant; (3) homes are in hazardous locations; (4) firebrand ignition points and heat traps are not adequately protected and (5) access roads are unsafe for fire suppression forces due to roadside excess fuels.

**6. Provisions must be made to maintain all fuel treatments.**

The wildfire protection values of fuel modification are rapidly lost if not maintained.

**7. CP has numerous drainages, saddles, ridges, and steep side slopes which can cause erratic fire behavior. Also the north to south location of the golf course and airport with limited east to west access slows Fire Department response times.**

**8. Evacuation and Preparedness Plans have not been prepared for CP.**

F. Plan Goals

1. Reduce the number and size of wildfires
2. Ensure CP is a Fire Safe Community
3. Ensure Defensible Space is provided around structures
4. Ensure fuel treatment measures are maintained.
5. Promote land management practices that will maintain a healthy stand of native vegetation, consider wildlife habitat and protect the soil, water and visual resources.
6. Cooperate with the PHP in the preparation of the Management and Fuels Treatment Plans for the PHP.

7. Ensure an Evacuation Plan, Wildfire Prevention Plan and a Action Plan is prepared.

#### G. Fuel Reduction Elements

Fuel treatments to help protect CP are displayed in 6 Elements:

- (1.) Defensible Space - Residential & Commercial
- (2.) Vacant Lots – Residential & Commercial
- (3.) Cameron Park East Brush Field
- (4.) Roadsides
- (5.) Existing Fire Safe Plans
- (6.) Wildland Rx Hazard and Risk Assessment.

These Elements constitute the Fuel Reduction Measures for the CWPP.

##### 1. Defensible Space

###### a. Occupied Residential Lots

In January 2006 the CAL FIRE and State Board of Forestry and Fire Protection (BOF) adopted new “General Guidelines to Implement Performance Based Defensible Space Regulations” under PRC 4291 and with regulation 14 CCR 1299. These Defensible Space Guidelines (DSG) expanded the defensible space clearance requirements from 30 feet of a structure to 100 feet or the property line. The new 100’ requirements are law. Also, 4291 “allows insurance companies to require home/building owners to maintain firebreaks greater than 100 feet.” The Brochure “Why 100 Feet” is in the Binder Pocket.

Management and enforcement of the Defensible Space requirements within the CPCSD is with the CSD and CAL FIRE.

The DSG’s are applicable to all lots with structures within the CSD boundary (see Fuel treatment Map in appendix G) and treatment shall be as follows:

- (1.) All lots that are classified as Extreme, (lots colored Red,) shall have the highest priority to be brought into compliance with**

**4291, and fuels shall be treated for the entire lot to the DSG's. (There are a few large lots that should be assessed individually to determine the extent of DSG application.)**

**(2.) All lots that are colored orange should have the fuels treated all the way to the lot line(s), to the DSG, that are common with the Golf Course, Parks, Deer Creek, Perimeter Fuel Reduction Zones and vacant parcels with brush fuels.**

**(3.) All lots that are not colored:**

**a. that are less than one acre in size, shall have the fuels treated to the DSG's for 100 feet from all structures or to the property lines.**

**b. lots over one acre should have the fuels treated for 200 feet outward from all structures or to the property line to the DSG's.**

**2. Vacant Residential and Commercial Lots**

**(a.) Vacant Residential (Colored Green on Fuels Map)**

**Residential lots less than 1 acre in size should have the fuels treated to the Fuel Treatment Guidelines in Appendix A for 100% of the lot.**

**Residential lots over 1 acre in size should have the fuels treated to the Fuel Treatment Guidelines displayed in Appendix A for 30 to 100 feet inward on all property lines that border on occupied lots.**

**(b.) Vacant Commercial**

Vacant commercial parcels are displayed on the "UN-IMPROVED RESIDENTIAL COMMERCIAL AND INDUSTRIAL LANDS, Map in Appendix G. There are approximately 30 vacant commercial and industrial parcels scattered throughout CP.

**(1) A Fire Safe Plan should be considered, depending on fuel loading and adjacent parcels when proposed for**

**development.**

**(2) Vacant commercial parcels, with heavy fuel loading, adjacent to occupied residential lots should have the fuel treated to guidelines displayed in Appendix A for 30 to 100 feet inward from the commercial lot lines that are common with occupied residential lots.**

### 3. East Cameron Park- Brush Field

From Palmer Drive north along residential and commercial lots to Mira Loma Drive and eastward to the CSD boundary is a large brush field of approximately 600 acres. See aerial photo in Appendix G. The chaparral species are mature with a high ratio of dead to green branches with an overstory of scattered Gray Pine. And intermixed with the brush species are suppressed oaks and Gray Pines.

The topography is moderate with a southwest exposure. Two intermediate draws bisect the southern portion of the brush field and above the draws are two broad ridges.

This is a classic wildland urban interface where homes and businesses surround and abut 90% of the brush field. This combination of flashy fuels, heavy fuel loading, southwest exposure, broken topography has all the factors for a catastrophic wildfire.

Ownership within the 600 acre brush field is primarily by the BLM and El Dorado County - The Cameron Park Unit of the PHP with 392 and 63 acres respectively. There are also two vacant commercially zoned parcels that are adjacent to the PHP southern boundary and one along the PHP western boundary . See Fuel treatment Map in Appendix G.

#### a. Pine Hill Preserve – Cameron Park Unit

The PHP was established to protect rare and native plants in chaparral areas in western El Dorado County. The PHP is 4042 acres and separated into five Units. The Cameron Park Unit is 455 acres and abuts residential areas along its western, eastern and northern boundaries.

The PHP is managed by the Folsom Field Office (FFO) of the BLM in concert with 8 other entities. The PHP is included in the American River Assessment Area which is a subunit of the Sierra Planning Area. The PHP is also a Special Management and Fire Management Unit and a proposed Area of Critical Environmental Concern. The PHP has developed a draft Management Plan <sup>4</sup> and will develop Fuel Treatments for the different units to determine the safest and most effective way to protect surrounding communities from wildfire while ensuring that the habitat and the rare and native plants will be protected.

The BLM has constructed a Perimeter Fuel Reduction Zone (PFRZ) approximately 60 to 100 feet wide abutting rear residential lot lines in CP and the Northview Subdivision. This work was suspended by BLM in 2005 due to smoke complaints from one resident. Maintenance along this fuel brake has been minimal.

The Cameron Park Fire Safe Council recommends the PHP managing agencies in development of the CP Unit of the PHP Fuel Treatment plans consider the following:

- 1.) Complete the PFRZ around the entire CP Unit of the PHP boundary with widths of 100 feet at the toe of the slope and 200 feet at the top of the slope.
- 2.) Two fuel breaks be constructed on the ridges as displayed on the fuels map in Appendix G (FB-1 & FB-2, A & B). The fuel breaks should be 200 to 300 feet wide with the fuel permanently

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<sup>4</sup> Copy of the draft Pine Preserve Management Plan on CD in binder pocket

modified and a fire line to mineral earth for rapid firing and anchored with the PFRZ's.

3.) A prescribed fire plan be developed that prescribes burning of the untreated fuels between the PFRZ's and the Fuelbreaks.

*Do not use Fuel Treatment Guidelines in Appendix A. Special guidelines to be developed by the BLM that reduces fuel loading and protects the rare and native plants and habitat.*

b. Commercial Parcels

1.) When the parcels are proposed for development a Fire Safe Plan be required that considers wildfire protection of the PHP and the commercial structures.

2.) In the interim the private land owners:

(a) be encouraged to construct a PFRZ on their western and southern lot lines to help protect the PHP, commercial structures and homes along Valerie Dr, Sudbury Rd, and the Northview subdivision.

(b) be encouraged to complete the Fuelbreak 1 from the PHP boundary to Sabana Drive.

(See Fuel Treatment Map in Appendix G)



Pine Hill Preserve Brush Fuels

#### 4. Roadside Fuel Treatments

Past fire history indicates a high percentage of wildfire ignitions occur along roads. Common causes are: vehicle exhaust sparks, cigarettes, and traffic collisions.



Keeping road ditches and shoulders clear of vegetation is not only good road maintenance but can prevent wildfires from cigarettes, vehicles, power lines etc. Fuel reduction on cut banks and fill slopes will slow the spread of fire to adjacent properties increasing the probability of early containment. Fuel types and road prisms will vary greatly, however the drawings in Appendix C will fit most situations.

Use Drawings to guide treatments. Note ditches and shoulders are cleared of all vegetation. However cut banks and fill slopes ground vegetation is reduced but not removed due to soil erosion concerns.

- a. All lot owners within the CPCSD should treat fuels from their lot line to the road surface or curbs to the standards as displayed in the drawings.**
- b. A roadside fuel reduction zone should be constructed in the brush fuels, to the guidelines displayed in Appendix A – 4, on the cut bank side of Rancho Tierra Ct. This fuel reduction zone should be 30 to 100 feet wide.**

#### 5. Existing Fire Safe Plans

The following subdivisions within the WUI have approved Fire Safe Plans. These plans are an integral part of the CPCWPP. Copies of plans are in the Appendix D.

<u>Plan Name</u>	<u>Approval Date</u>
1. Marble Valley	December 1996
2. Eastwood Park Unit 5	February 1999
3. Cameron Ridge Estates	March 1999
4. Cameron Glen Estates	Feb 2001
Phases 2,3,4,5	
5. Cambridge Oaks Unit 3	June 2001

6. Hollow Oak	September 2001
7. Bell Ranch	October 2005.
8. Bell Woods	?

6. Wildland Rx – Hazard and Risk Assessment

In 2005 the California Department of Forestry and Fire Protection awarded a contract to Wildland Rx for the development of a Wildfire Hazard and Risk System for CP. All lots within the CPCSD and Cameron Estates were evaluated and classified into the following categories; Extreme, High, Low and Moderate and are displayed on a “Wildfire Hazard Assessment” Map (copy of map in CPFSC office). Property, fuels, hazards, compliance information etc. is also displayed, for each lot, and can be viewed on line.

This Assessment is an integral part of the Fuel Reduction module of this CWPP.

H. Fuel Reduction Prioritization Matrix.

<b>Fuel Reduction Elements</b>	<b>Priority for Implementation</b>	<b>Remarks</b>
<b><u>Defensible Space Occupied Lots</u></b>		
Red Lots	1	
Orange Lots	2	
Uncolored Lots	3	
<b><u>Vacant Lots</u></b>		
Green Lots	7	
Commercial Lots	8	
<b><u>East Cameron Park Brush Field</u></b>		
PFRZ around PHP	4	Priorities set by BLM
Fuelbreaks on PHP	5	“
Prescribed Fire Plan for PHP	6	“
PERZ on Private Parcels	9	
Fuelbreaks on Private Parcels	13	
Fire Safe Plan for Private Parcels	10	
<b><u>Roadside Fuel Treatments</u></b>		
Residential Lot Owners	11	
Rancho Tierra Ct	12	

I. Structural Ignitability

It is recommended that all new structures constructed within the CSD boundary have the following Fire Safe construction features to help reduce the ignitability of homes.

1. Class A roofing (Class A treated wooden shakes are not recommended)
2. Decks that are cantilevered out over the natural slope should be enclosed or under structure treated with fire resistant material.
3. Structures that are adjacent to brush fields and on lots classified as

Extreme should have eaves “boxed” and should have ignition resistant siding such as stucco, brick, etc.

#### J. WUI Boundary

The Healthy Forest Restoration Act (HFRA) offers a Community at Risk (CAR) the opportunity to establish a localized definition and boundary for the wildland –urban interface. (WUI) A community with a CWPP may establish a WUI boundary to within 1-1/2 miles of the community when mitigating circumstances exist, such as steep slopes and geographic features that aid in creating a fire break. In communities without a CWPP, the HFRA limits the WUI boundary to within ½ mile of the CSD boundary. At least 50% of the funds appropriated for projects must be used within the WUI boundary. Both the National Fire Plan and the Ten-Year Comprehensive Strategy for Reducing Wildland Fire Risks to communities and the environment, place a priority on working collaboratively with communities in the WUI boundary to reduce their risk from large scale wildfire. See Fuel Treatment Map in Appendix F for WUI boundary.

#### K. Maintenance

Maintenance of all fuel treatment elements must be scheduled periodically or the fuel modification values will quickly be lost.

#### L. Collaboration

See Appendix C and binder pockets for documentation of involvement of federal and state agencies, interested parties, CP property owners, and CPFSC community events promoting wildfire safety.

#### M. Monitoring Plan

Every 5 years the CP Fire Department, CPFSC, PHP and CAL FIRE should conduct a comprehensive review of fuel treatments accomplished, maintenance, changes in vegetation and update the CWPP and make changes as needed.

The HFRA also contains provisions requiring that the BLM monitor the results of a representative sample of authorized hazardous fuel reduction projects and maintenance and submit a report every 5 years that includes an evaluation of the project towards goals and recommendations for project modification.

#### N. Other Plan Recommendations

1. All new subdivisions, lot splits within the WUI boundary should have a Fire Safe Plan prepared.
2. A Wildfire Ignition Prevention Plan should be prepared that addresses the following:
  - a. Using historical data and local knowledge, determine the common causes and relative frequency of wildfires in and adjacent to CP.
  - b. Red Flag program.
  - c. Identifies high hazard areas for closure on extreme fire hazard days
3. A wildfire evacuation Plan should be prepared for CP
4. CPFSC explores, with the EDCFSC, means to implement Biomass utilization.
5. The PHP includes in their Wildfire Prevention Plan procedures to close the PHP Cameron Park Unit on Red Flag days.
6. CP become a Firewise Community/USA.
7. CPFSC prepare an Action Plan to implement the CWPP recommendations

### **VIII Appendices**

#### **A. Fuel Reduction Guidelines by Fuel Type**

B. Battalion 5 – Fire Safe Project

C. Roadside Fuel Treatment Drawings

D. Collaboration Documentation

E. Approved Fire Safe Plans

1. Marble Valley Fire Safe Plan
2. Eastwood Park Fire Safe Plan
3. Cameron Park Estates Fire Safe Plan
4. Cameron Glen Estates Fire Safe Plan
5. Cambridge Oaks Fire Safe Plan
6. Hollow Oak Fire Safe Plan
7. Bell Ranch Fire Safe Plan
8. Bell Woods Fire Safe Plan

F. Glossary

G. Maps

1. Aerial Digital Photo
2. Fuel Treatment Map with WUI boundary
3. Fire History
4. Condition Classes
5. Commercial Parcels
6. Wildfire Hazards Assessment (Map in CPFSC Office)
8. Binder Pockets
  1. DSG Brochure “Why 100 Feet”.
  2. Fire Ecology & Fuels Management at the Pine Hill Preserve - Brochure.
  3. Pine Hill Preserve Draft Management Plan - CD
  4. AEU Ignitions - CD

## **Appendix A-1**

### **FUEL TREATMENT GUIDELINES**

**For**  
**Grass Savannas with Scattered Brush and Trees**



(Slopes above Country Club Drive and Bass Lake Road)

1. Reduce grass to a 4 inch stubble by June 1 annually. On large lots and parcels reduce grass around perimeter only.
2. Leave all live trees
3. Remove all dead trees
  - a. In open space areas 2 snags per acre may be left for wildlife, if not within 100 feet of a structure or road.
4. Prune all trees of live and dead branches for 8 to 10 feet above ground but not more than 1/3 of tree crown.
  - a. Multi stem Live Oak trees: remove all dead stems, cut off green stems at 8 to 10 feet above the ground that arch over and are growing downward towards the ground.
5. Remove all brush.
6. Every 3 years remove all dead and down tree limbs that are over 2 inches in diameter.

**Appendix A -2**

**FUEL TREATMENT GUIDELINES**

**FOR**  
**Blue Oak Grass with Ground Cover of Annual Grasses and Scattered Brush**



1. Leave all live trees.
  - a. Prune all trees of live and dead branches for 8 to 10 feet above ground (ladder fuels) but not more than 1/3 of the tree crown.
  - b. For multi stem Live Oak trees: remove all dead stems, cut off green stems at 8 to 10 feet above the ground that arch over and are growing downward towards the ground.
2. Remove all dead trees.
  - a. Two snags per acre may be left for wildlife purposes if not within 100 feet of structure or road.
3. Remove all brush.
4. Remove all down limbs and logs that are over 2 inches in diameter but less than 6 inches in diameter. Over 6 inches in diameter may be left if separated by 10 feet.
5. Slash created by above fuel treatments must be disposed of by burning, chipping, hauling off site or a combination of disposal methods.
6. Annual grasses; reduce to a 2 inch stubble annual by June 1 on designated areas.

**Appendix A -3**

**FUEL TREATMENT GUIDELINES**



**For**  
**Overstory - Live Oak, with Scattered Blue, Black Oak, Native and Ponderosa Pine**  
**Understory – Brush, Saplings**  
**Ground Cover - Grass and Litter**



1. Remove all dead trees.
  - a. Two snags per acre may be left for wildlife if separated by 100 feet, not within 100 feet of structure or road.
2. Leave all overstory oaks
3. Leave all conifers over 30 inches dbh.
4. Multi stem Live Oaks: remove all dead stems, cut off green stems at 10 feet above the ground that are growing downward towards the ground.
5. Prune all Blue, Black and Valley oaks trees of dead and live branches for 8 to 10 feet above the ground, but not more than 1/3 of the crown.
6. Remove all brush.
7. Remove all seedlings and saplings that are underneath overstory trees. In open areas provide a separation of approximately 20 feet between saplings and seedlings.
8. Remove all down limbs and logs that are over 2 inches in diameter but less than 6 inches in diameter. Over 6 inches may be left if separated by 10 feet.
9. Reduce grass to 4 inch stubble in specified areas.
10. Slash created by above actions must be disposed of by burning, chipping, hauling off site or a combination of disposal methods.

**Appendix A – 4**

**FUEL TREATMENTS GUIDELINES**

**For**  
**Chaparral with Scattered Trees**  
**(Woodleigh Lane)**



1. Masticate approximately 2/3 of all brush.
  - a. Specimen plants and small islands of brush may be left for wildlife and the visual resource if there is 25 foot separation between islands and specimen plants.
  - b. After mastication of the brush fuels a 6 to 12 inch compressed woody material should be left for erosion control and suppression of brush seedlings and sprouts.
2. Leave all overstory trees.
3. Release suppressed trees where possible. There are usually live trees that are suppressed by the brush and may be released with careful removal of the brush plants.
  - a. Prune all leave trees for 8 to 10 feet above the ground, but not more than 1/3 of the tree crown.

“Note”- These guidelines may need modification for treatments in the PHP due to the need to comply with the protection to the rare plants and their habitat.