

Cripple Creek Mountain Estates Community Wildfire Protection Plan

May 2021



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I. COMMUNITY PROFILE

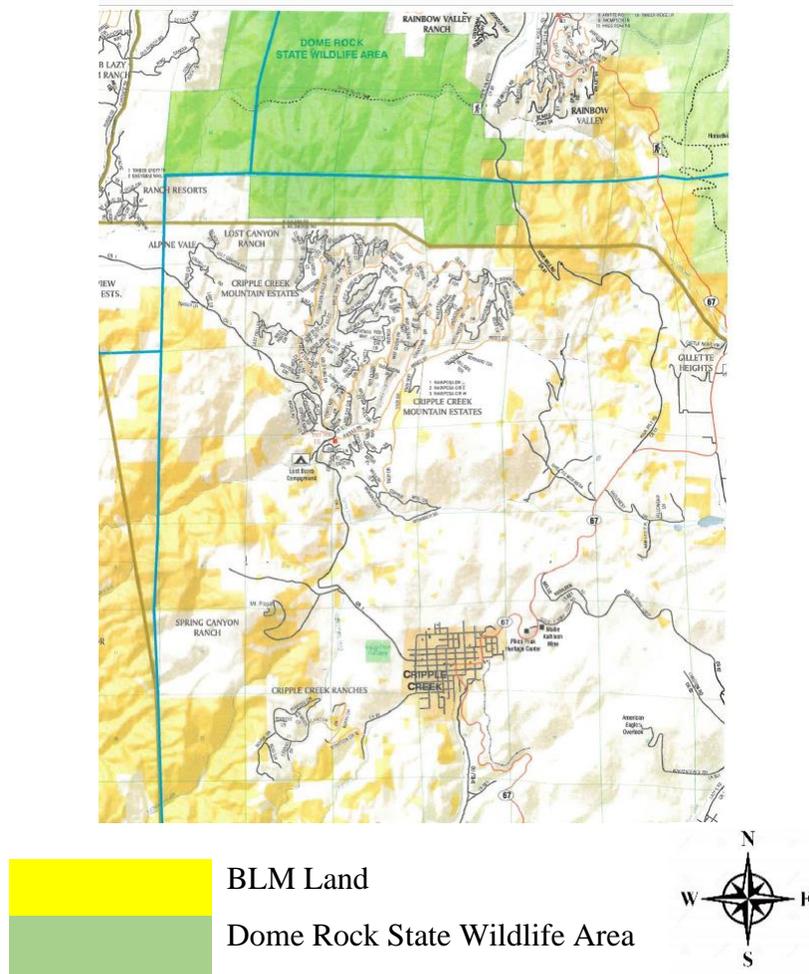
CWPP Wildfire Mitigation Team

The Cripple Creek Mountain Estates CWPP Wildfire Mitigation Team (WMT) has collaborated and consulted with Four Mile Fire Protection District, Teller County government officials, Colorado State Forest Service, Coalition for Upper South Platte (CUSP), Cripple Creek Mountain Estates POA, and other interested parties to develop the Cripple Creek Mountain Estates Community Wildfire Protection Plan (CCME CWPP). The CCME CWPP was created using the guidelines of *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities* (2004) and the *Community Guide to Preparing and Implementing a Community Wildfire Protection Plan* (2008).

Location and General Description

The Cripple Creek Mountain Estates community is located in Teller County approximately four miles north/northwest of Cripple Creek, CO and 15 miles south/southeast of Florissant, CO on Teller County Road 1. CCME is bordered by Dome Rock State Wildlife Area on the north; small subdivisions, privately owned land, and pockets of BLM land on the east, south, and west; and sections of land owned by Colorado State Land Board on the east.

Map 1: Location of CCME



The CCME community encompasses an area of approximately five square miles or 3,000 acres and was developed primarily for permanent residences, seasonal use cabins and second homes. As of 2020, there was a total of 1,512 lots of which 350 had structures on them and 1,162 were vacant. Lots vary in size from .5 to 10 acres, with an average lot size of 1.84 acres. Approximately 235 acres are designated as common area owned by the CCME Property Owners Association. Within the CCME boundaries are also small pockets of BLM land and private land not associated with CCME.

Property owners belong to the Cripple Creek Mountain Estates Property Owners Association; 17% of the landowners live in CCME; 48% are non-resident Colorado owners; 35% are non-resident, out-of-state owners.

Roads are maintained by Teller County and there are four points of egress in and out of the subdivision on to Teller County Road 1—Angeles Drive, Portland, and Gold King Drive on the east side of Teller CR1 and Andes Road on the west side of Teller CR1.

Mountain Mutual Water Company (MMWC) is the water supply and distribution entity exclusively for the Cripple Creek Mountain Estates property owners. The Mountain Mutual Water Company system consists of a water source, a transmission system, and a distribution system to which members lots are connected. Unlike most municipal type water systems, each member connected to the system furnishes the requisite water storage and pressure maintenance each household needs for common domestic uses.

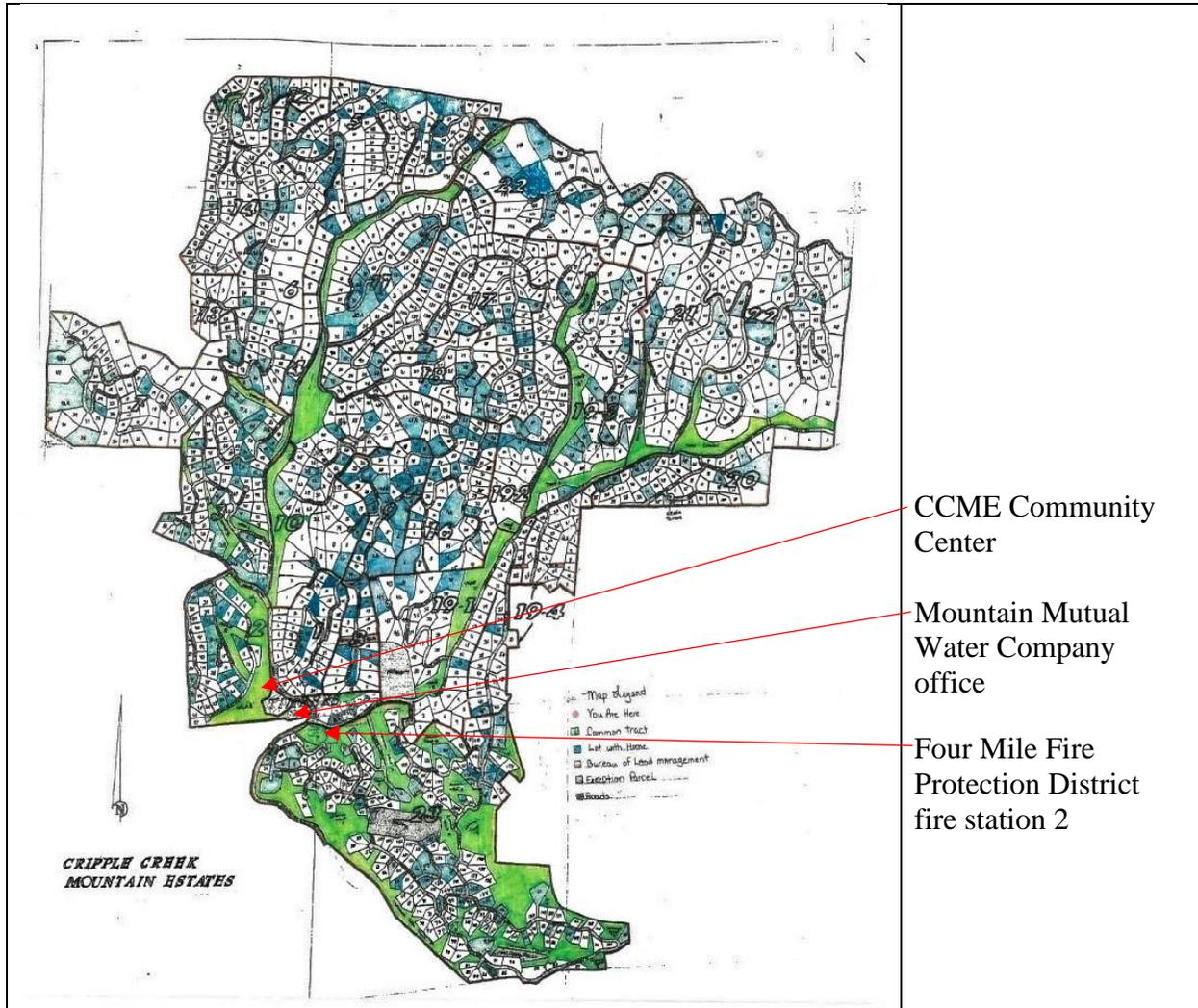
MMWC's waterworks includes two wells in the Gillette Flats area (a main well installed in the early 1980s and upgraded in 2019), a 250,000 gallon storage tank on the southeast side of Rhyolite Mountain, five other water tanks located in the CCME subdivision that hold between 20,000 and 100,000 gallons each, and over 65 miles of transmission lines and mains.

Every member with a home connects to the water system at a tap point along the distribution system (usually in the road near the property). The tap then continues to the property via a metering device before it continues on to the member's cistern.

II. COMMUNITY MAPS

Community Base Map

Map 2 shows CCME platted lots plus key facilities of the CCME Community Center, Four Mile Fire Protection District fire station#2, and Mountain Mutual Water Company.

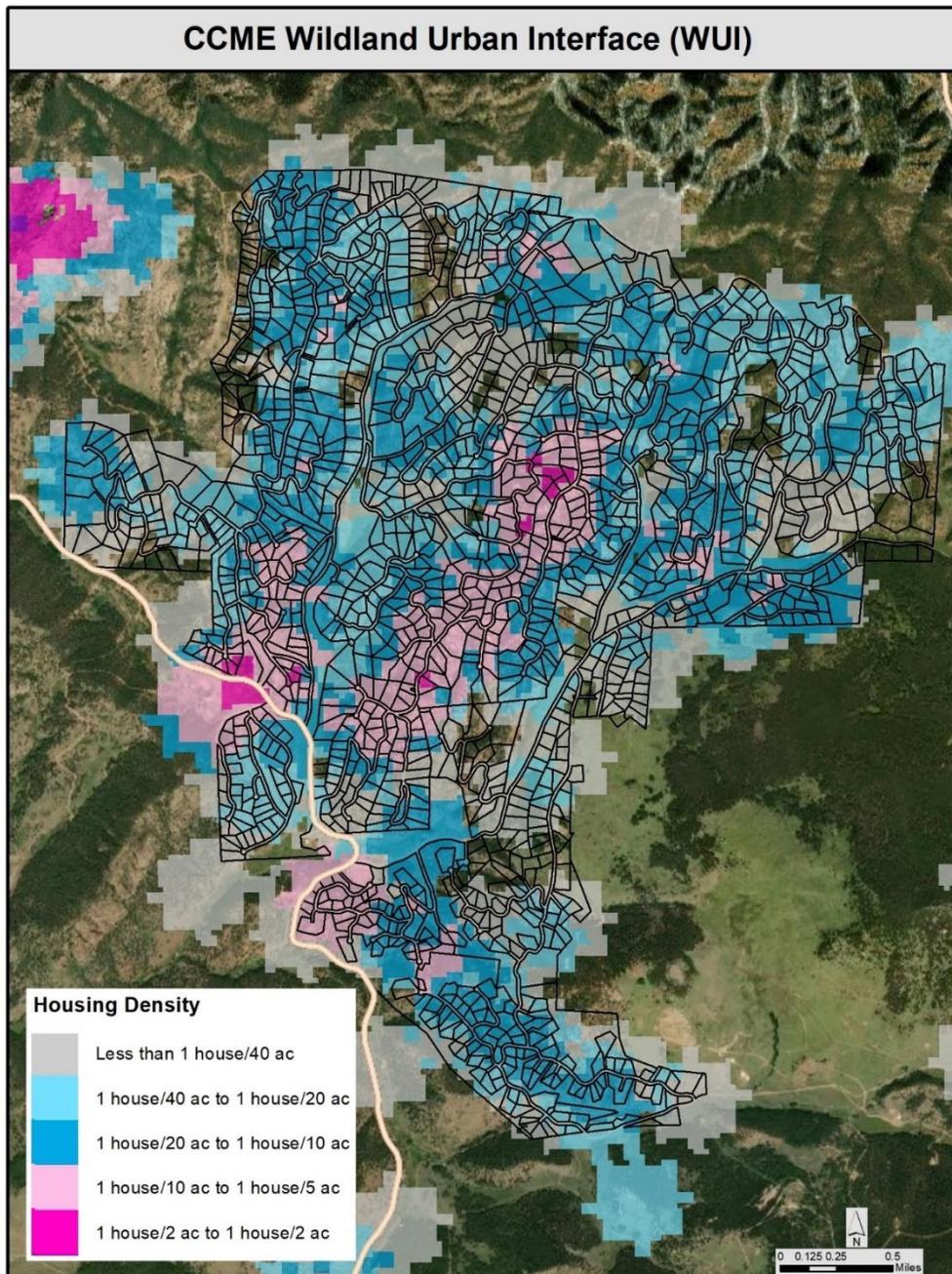


Map 2: CCME Base Map

Wildland Urban Interface (WUI) Map

The Wildland Urban Interface (WUI) is the geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels. It refers to the area within and adjacent to the community where a wildfire would directly impact the community.

Map 3: CCME WUI

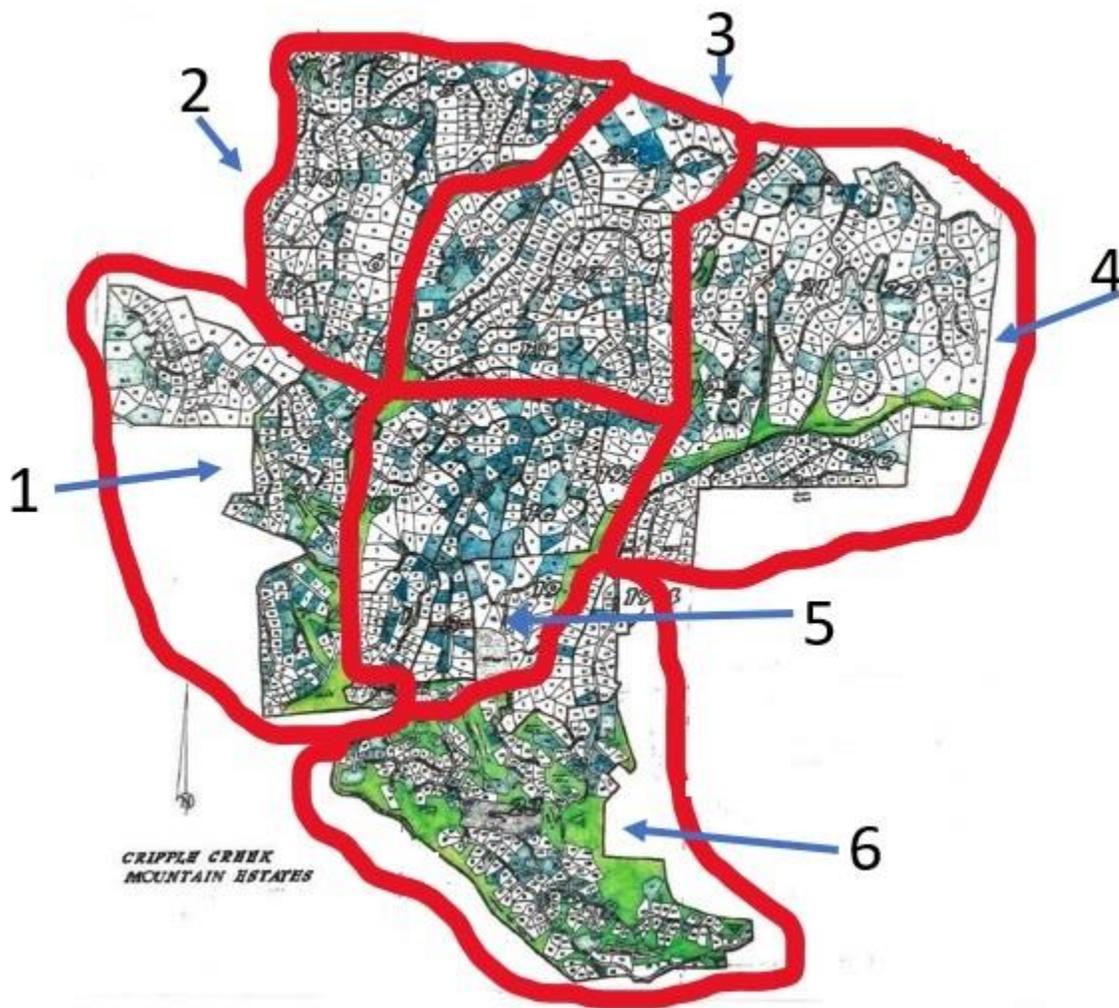


CCME Zones

The CCME CWPP Wildfire Mitigation Team believes that community risk reduction will be most effective when neighbors work together. Due to the physical size of the CCME subdivision, the properties need to be broken down into smaller segments to manage the fire mitigation efforts.

Map 4 depicts six zones—communities within the community that will form the basic units for fire mitigation efforts. Each zone will have a captain who will promote and organize the CWPP implementation activities described in Sections IV and V of this document.

Map 4: CCME Zones for Fire Mitigation



III. COMMUNITY RISK ASSESSMENT

Fire History--Recent wildfire events in our local area.

High Chateau Fire—June 30 – July 6, 2018. Four miles south of Florrisant Fossil Beds National Monument. Eleven homes were destroyed.

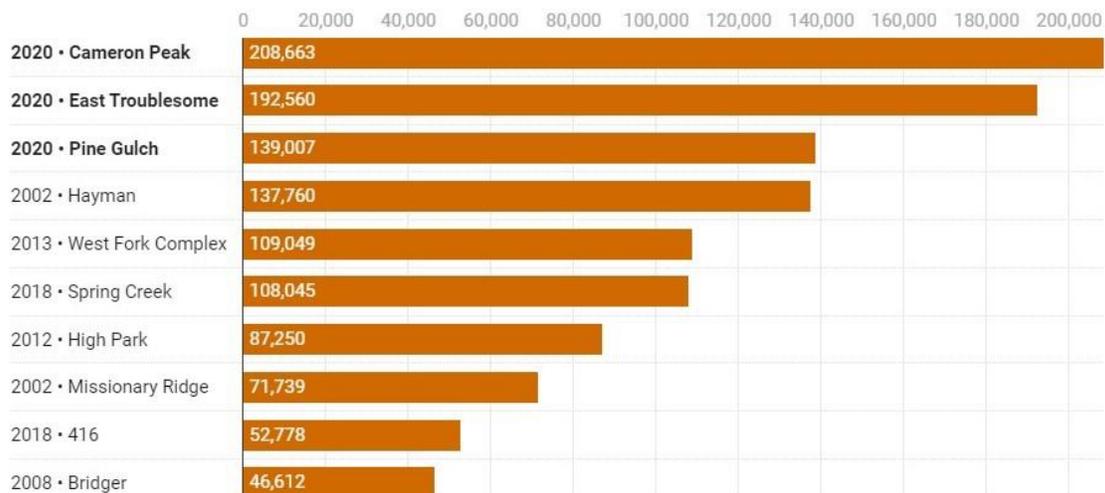
Waldo Canyon Fire—June 9 – July 11, 2012. Fire active in the Pike National Forest and adjoining areas, covering a total of 18,247 acres, causing the evacuation of over 32,000 residents of Colorado Springs, Manitou Springs, and Woodland Park and several small mountain communities along the southwestern side of Highway 24. There were 346 homes destroyed.

Nash Ranch Fire—June 24 – June 27, 2008. Impacted 1,000 acres in nearby Park County.

For the last 100 years, U.S. fire suppression policies have largely kept fire from playing its natural role, resulting in unnaturally high “fuel” levels in forests and other areas throughout the country. Removing fire from ecosystems that depend on it to stay healthy, coupled with more people building houses in flammable natural areas, have created a costly and dangerous wildfire problem (FireAdaptedNetwork.org).

According to the Colorado State Forest Service, the wildfire season in Colorado has lengthened due to a changing climate, resulting in wildfires that start earlier, last longer, cost more to suppress, cause more damage and threaten more lives than ever before. Climate impacts and vulnerabilities are influencing vegetation and fire occurrence through warmer temperatures (annual and seasonal), more days with extreme heat and more variable precipitation. The three of Colorado’s largest wildfires occurred in 2020.

Colorado's largest wildfires



Number of acres burned

Chart: Kevin Hamm, The Denver Post • Source: [Denver Post research, InciWeb](#) • [Get the data](#) • Created with [Datawrapper](#)

CCME Community Risk Assessment

To assess the risk of wildfire occurrence in the area of CCME, we first reviewed a risk assessment of subdivision wildfire hazard ratings that was included in the Teller County CWPP (2005). Factors rated included **Subdivision Design** (ingress/egress, primary road widths, accessibility, secondary road terminus, average lot size, street signs), **Vegetation** (fuels/density, defensible spaces completed), **Topography** (slope), **Fire Protection** (response time, hydrants), **Structure Hazard** (predominant building materials), and **Utilities** (placement of gas and/or electric). As show below, the results placed CCME in Category III for crown fire hazard and Category II for property loss hazard.

Subdivision	FPD	Ingress Egress	Road Width	Accessibility	Road Terminus	Lot Size	Street Signs	Fuel Density	Defensible Space	Slope	Response Time	Hydrants	Draft Sources	Materials	Utilities	Crown Fire Hazard	Category	Property Loss Hazard	Category	# of lots
COUGAR CANYON EST (AMENDED)	Divide	3	1	5	5	3	0	10	10	7	3	3	2	3	1	20	IV	30	III	7
COUNTRY RIDGE EST	NE Teller	0	1	5	1	1	0	10	10	1	1	0		3	0	12	III	22	II	68
Creekside Est.	4 mile	3	1	1	1	3	0	3	1	1	1	1		3	1	7	I	16	I	9
CRESTWOOD PARK	NE Teller	0	1	1	1	1	0	7	1	1	1	0		3	0	9	II	9	I	80
Cripple Crk Mtn Est	4 mile	0	1	1	1	2	0	7	10	4	1	1		3	1	13	III	21	II	1602

Rating Key: Crown Fire Hazard

	Category 1	3 to 8
	Category II	9 to 11
	Category III	12 to 14
	Category IV	15 to 20

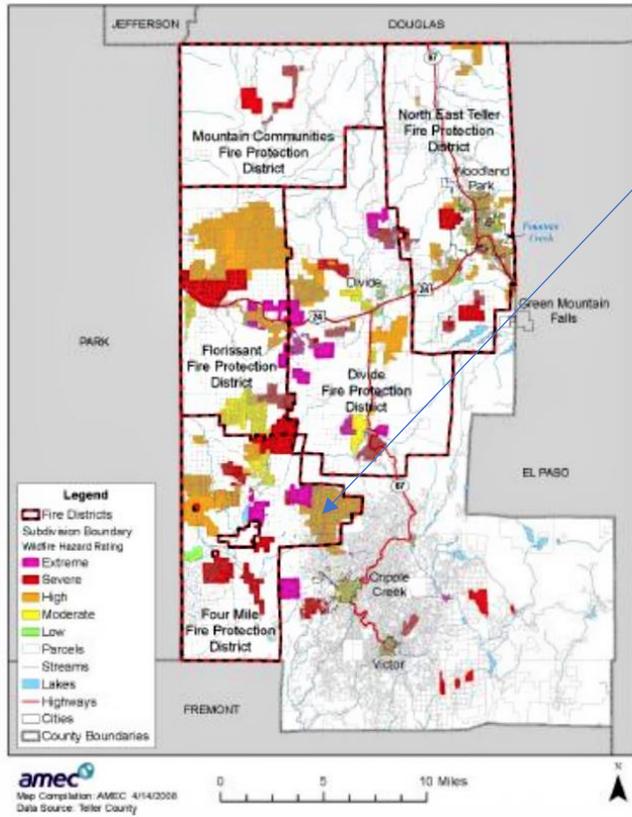
Property Loss Risk

	Category 1	6 to 17
	Category II	18 to 24
	Category III	25+

As reported in the more recent Teller County CWPP Update of 2021, data from the Teller County Multi-Hazard Plan dated August 2008 placed CCME in the overall **“High Risk”** category for wildfire hazard risk.

The Four Mile Fire Protection District (2013) CWPP, addresses the Teller Hazard fire ratings (low, moderate, high, and severe) and are consistent with Teller County’s evaluations. The Four Mile FPD CWPP identified high-priority subdivisions with dangerous fuel conditions both inside and around the subdivision boundaries. These fuel reduction subdivision projects include Highland Meadows, Lakemore West, and Cripple Creek Mountain Estates.

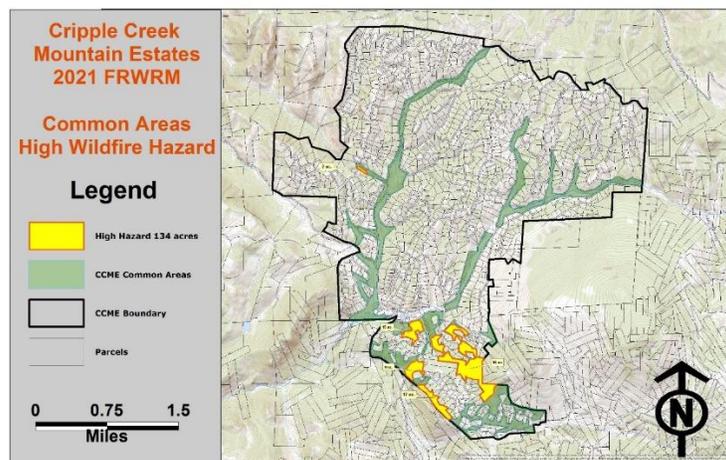
The following graphic depicts boundaries of Teller County’s fire protection districts and wildfire hazard ratings for specific areas (2020).



Cripple Creek Mountain Estates
Wildfire Hazard Rating High

In April of 2021, the CCME Wildfire Mitigation Team conducted an assessment of CCME, focusing on the common areas. Leading the assessment was David Root, forester from the Colorado State Forest Service. Based on the topography of the area (south-facing, steep, dense trees, fallen trees and other ground fuel), 134 acres of the CCME common area were identified as most “at risk” for wildfire.

Map 5: CCME Common Areas High Wildfire Hazard



Factors Affecting Fire Behavior

To further assess the wildfire hazard in CCME, it is necessary to understand the factors that influence how fires burn. The three primary factors that determine fire behavior are weather, fuel, and topography.

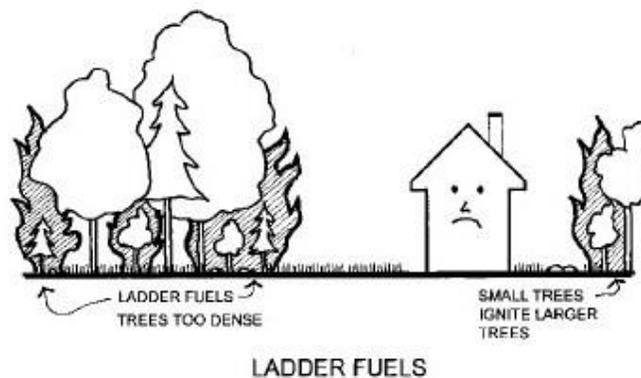
Weather

High temperatures, low humidity, and swift winds increase the probability of wildfires. Short and long-term drought further exacerbates the problem. In the CCME area, seasonal weather dramatically influences the wildfire risk. During the snow-covered winter months, the wildfire risk is moderate to low. However, the snow is often melted during the winter which exposes the vegetation to a fire danger. A compounding effect is high speed Chinook winds, primarily during the winter and spring months, that can be 50 miles per hour and significantly higher, which can both dry vegetation and push a wildfire. The low, single-digit humidity levels at times in the summer months also have a drying effect and dramatically increases the risk of a wildfire. This risk is compounded by frequent summer thunderstorms featuring dramatic lightning strikes.

Fuel

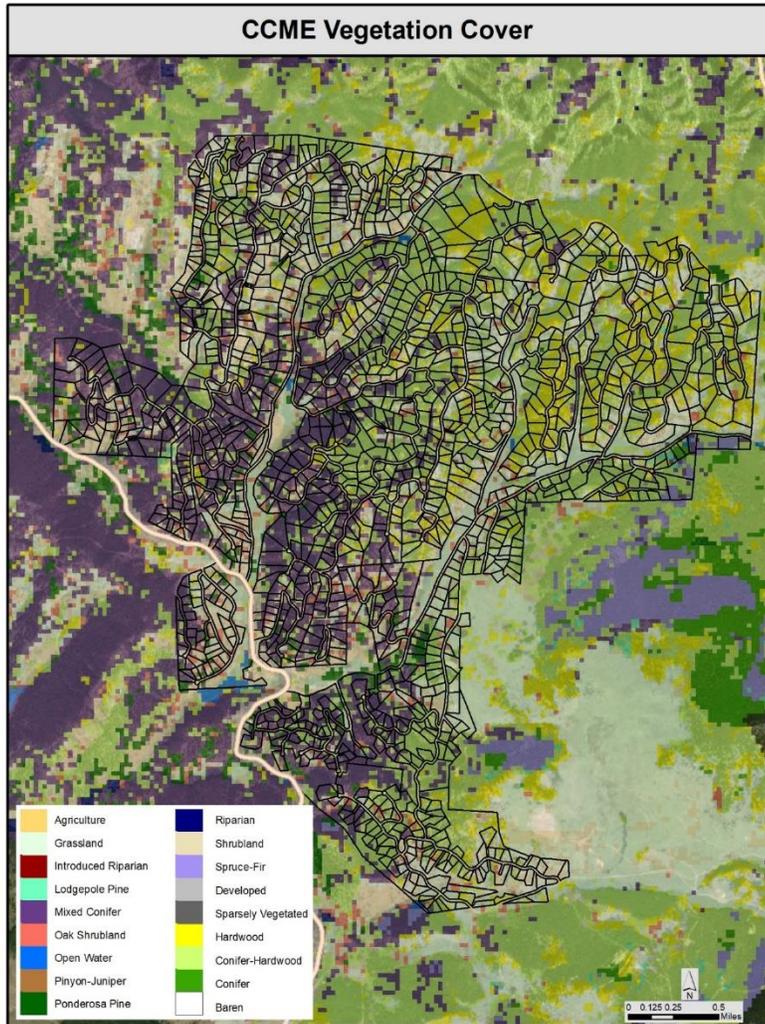
The two types of fuel in a wildland-urban interface are vegetative and structural. The following descriptions are taken from Teller County CWPP Update (2021) and *Is Your Home Protected from Wildfire Disaster: A Homeowner's Guide to Wildfire Retrofit* (2001).

Vegetation: Fuel in its natural form consists of living and dead trees, bushes and grasses. Typically, grasses burn more quickly and with less intensity than trees. Ladder fuels are defined as smaller trees and brush that provide vertical continuity, which allows a fire to burn from the ground level up into the branches and crowns of larger trees. Lower branches on large trees also can act as ladder fuels. Ladder fuels help convert a ground fire to a crown fire (tree tops) which moves much more quickly.



Map 6 depicts the vegetation cover in CCME. The majority of the CCME subdivision is moderately to heavily forested. Only a small percentage of CCME is open grassland.

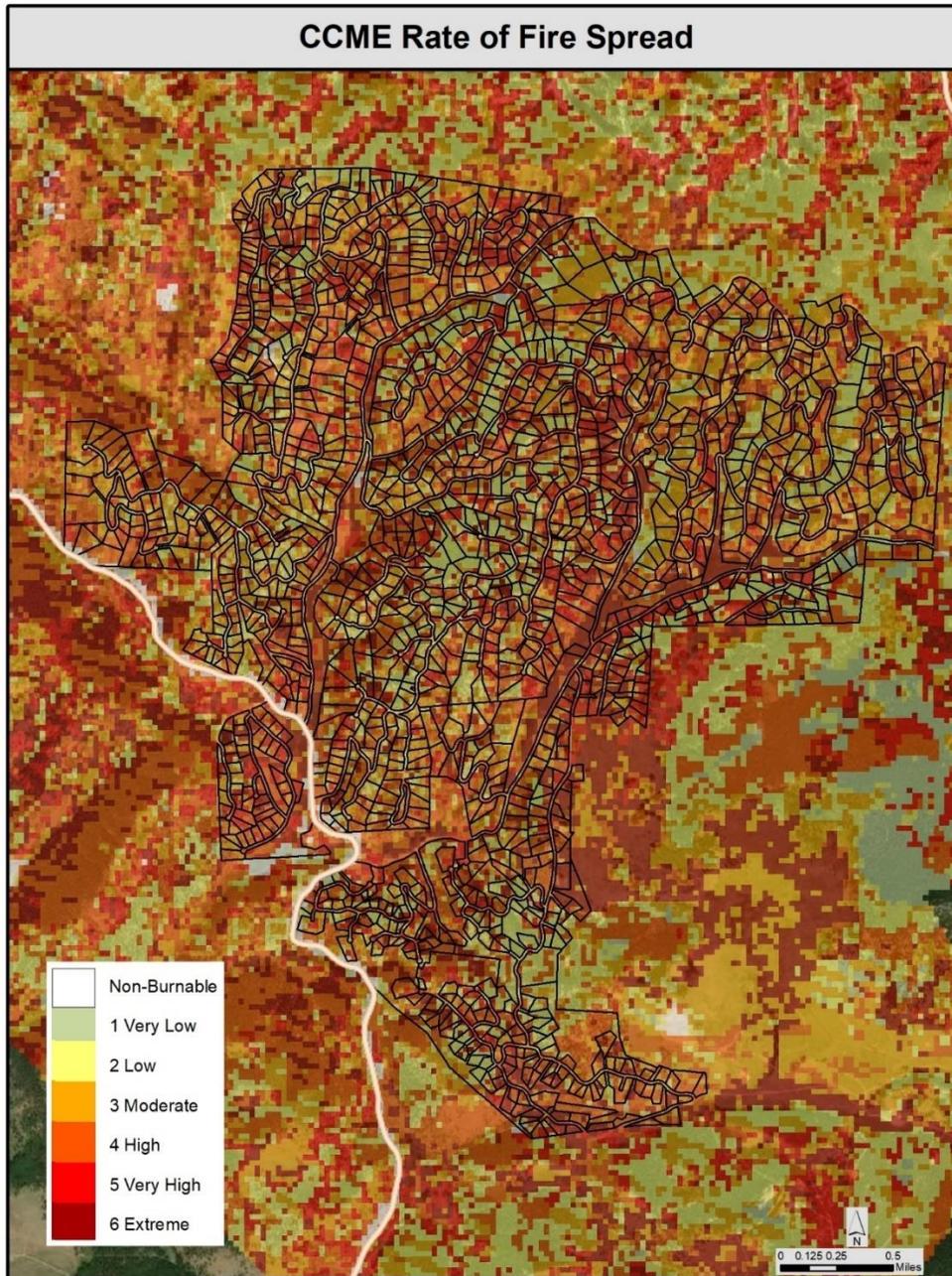
Map 6: CCME Vegetation Cover



Structural fuels, which can include houses, outdoor equipment, lawn furniture, ancillary buildings, fences and firewood, add to the natural fuel load available to a fire. Not only can a wildfire move into a structure from a forest or grassland, a structure fire can move outward into the grassland or forest and become a wildfire. Any wildland fire, regardless of fuel type, can be extremely hazardous to life and property.

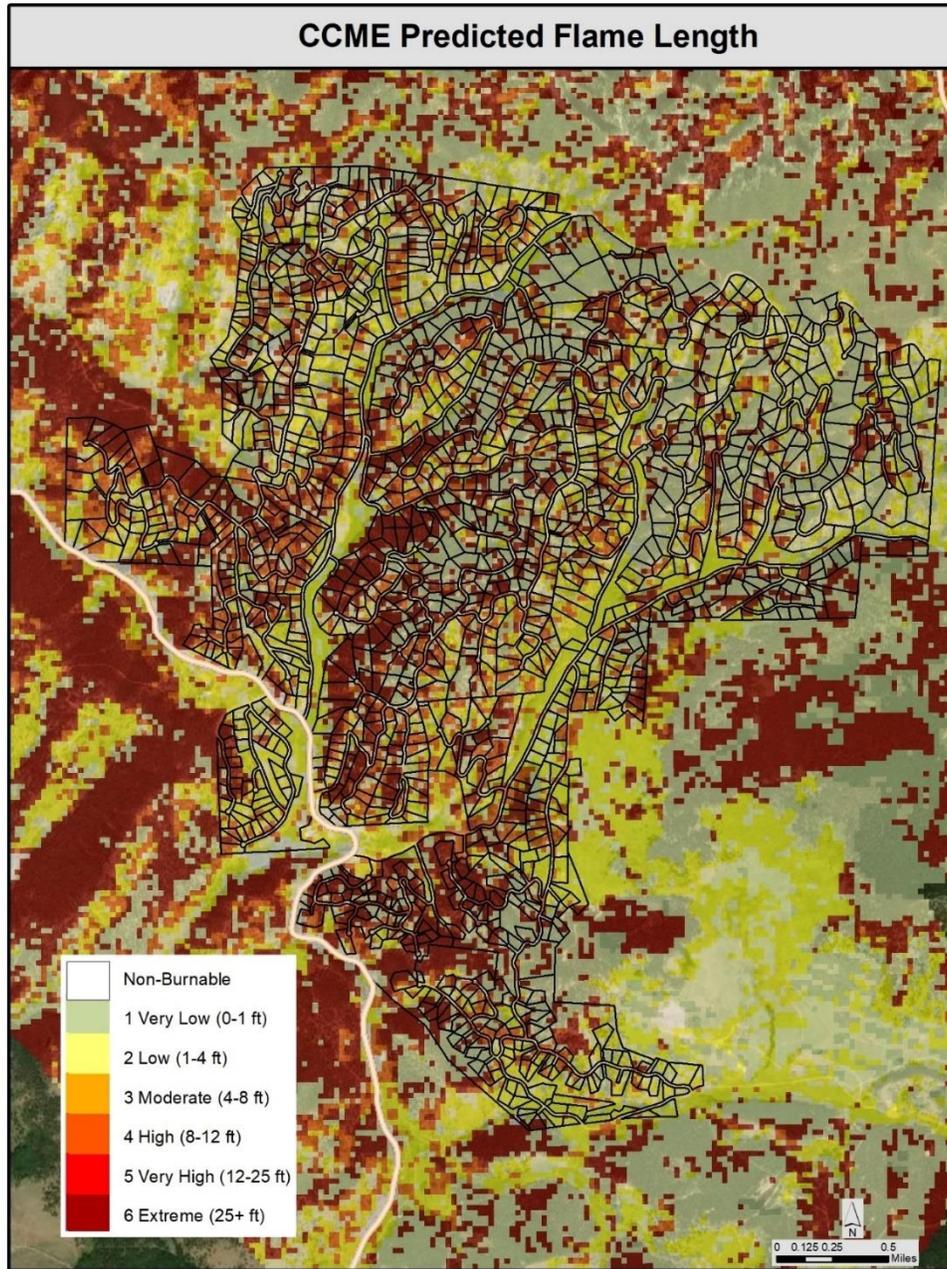
The severity of a wildfire is proportional to the amount of available fuel. The size of fuel also affects fire behavior. In a wildfire, the smaller fuels such as dry grass or small branches ignite easily, create relatively low heat, and act as kindling. The larger fuels such as dead or down trees ignite more slowly but create significantly greater levels of heat and damage.

Map 7: CCME Rate of Fire Spread



As indicated in Map 7, significant portions of CCME and its WUI boundary would have a high - extreme rate of spread.

Map 8: CCME Predicted Flame Length



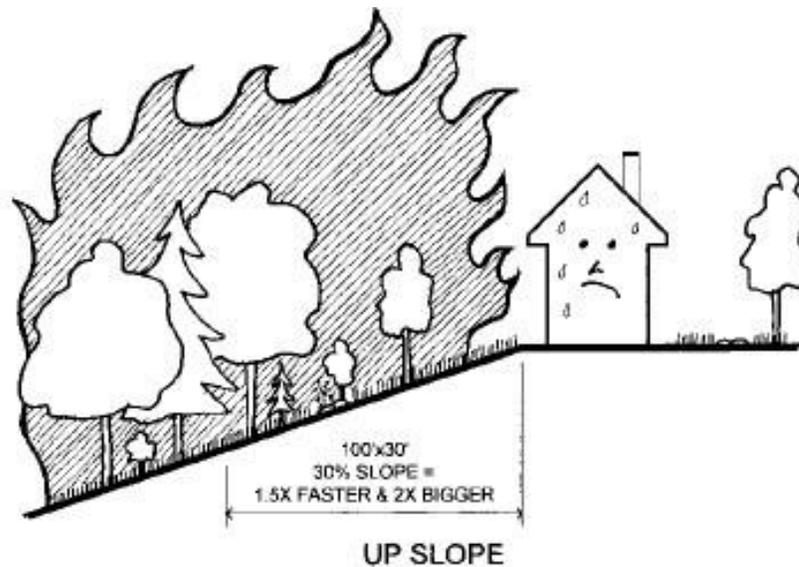
The length of flames is directly correlated with the amount of heat a fire produces. Flame lengths less than four feet can be attacked directly by hand crews. Flame lengths greater than four feet produce lethal amounts of heat, and require indirect attack methods where firefighters must work a safe distance away from the flaming. The predicted flame length in much of the area in CCME varies from moderate to extreme. Fuel modification in defensible spaces and fuel treatments is required to reduce the amount of heat produced by a wildfire.

Topography

Two factors of topography, or the shape of the land, that have a major impact on fire behavior—slope and aspect.

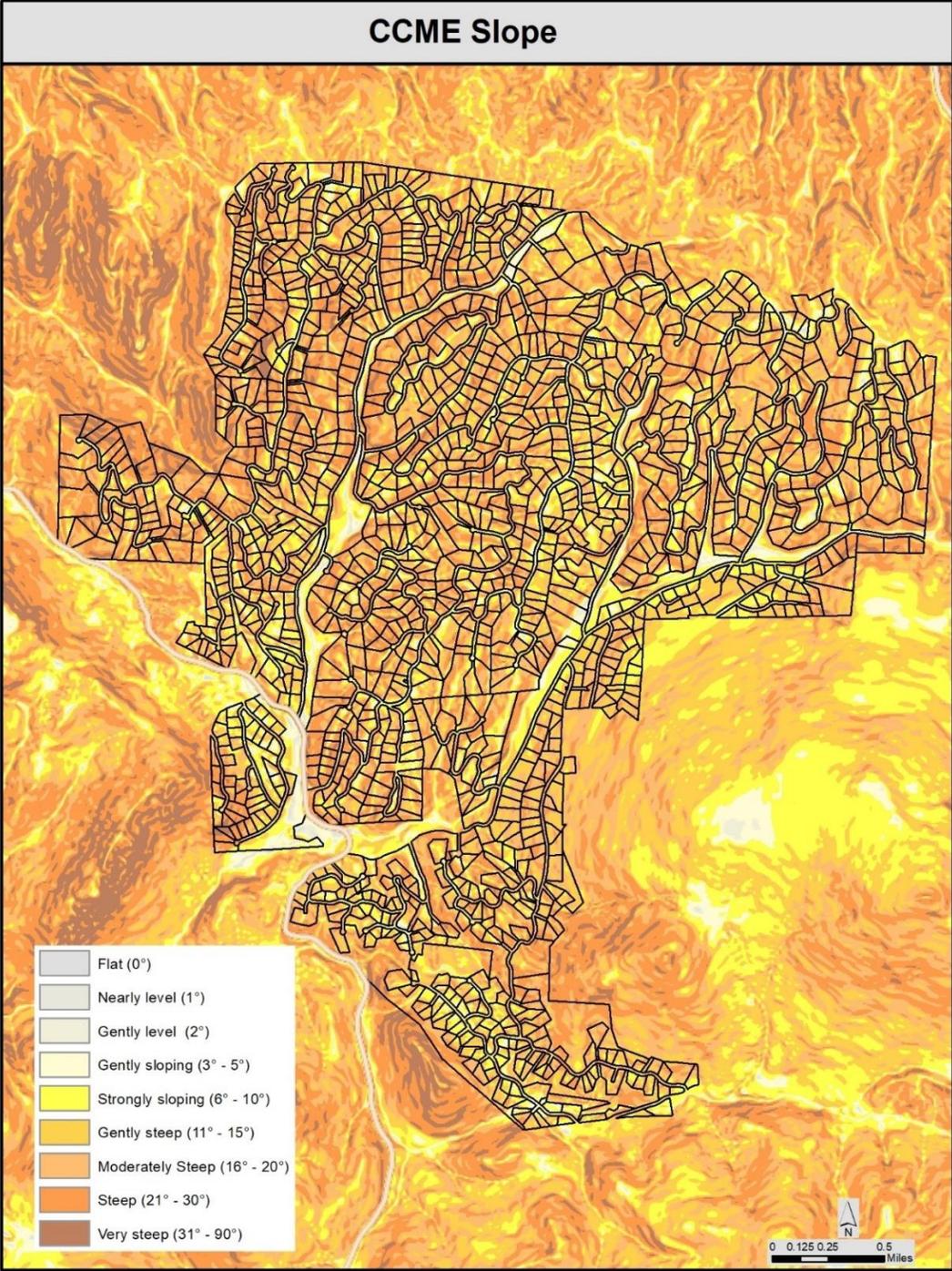
Slope. Slope is the upward or downward incline or slant of terrain. For example, a completely flat plain represents a 0% slope and a hillside that rises 30 feet for every 100 feet horizontal distance represents a 30% slope.

During the day, sun or fire warmed air rises and pushes wildfires upslope. Fires may move four times faster up slopes than on flat ground. On a slope, the heat rises above a fire, preheating and drying the fuel above. The drier upslope fuels ignite more easily and burn more quickly than down slope fuels. The steeper the slope, the more pronounced the effect.



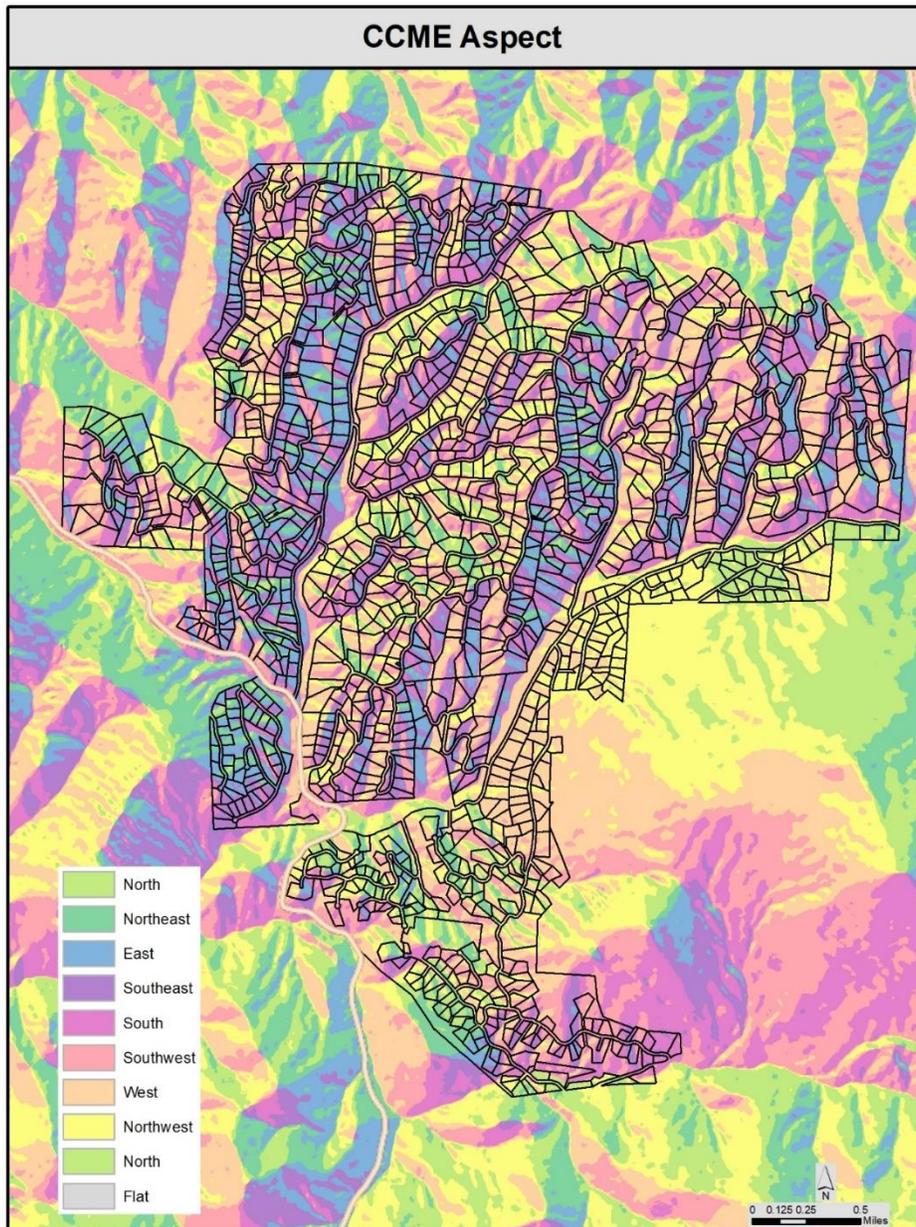
As depicted in Map 9 on the next page, on a scale of “level, sloping, or steep” the majority of acreage in CCME is in the “steep” category, increasing the rate of fire spread.

Map 9 CCME Slope



Aspect The primary direction that a slope faces is called the aspect and plays an important part in the intensity of wildfire. At this high elevation, slopes in Teller County that face south and west are pre-heated and dried by strong sunlight. This solar heating makes these areas more vulnerable to rapidly igniting fuels.

Map 10: CCME Aspect Assessment



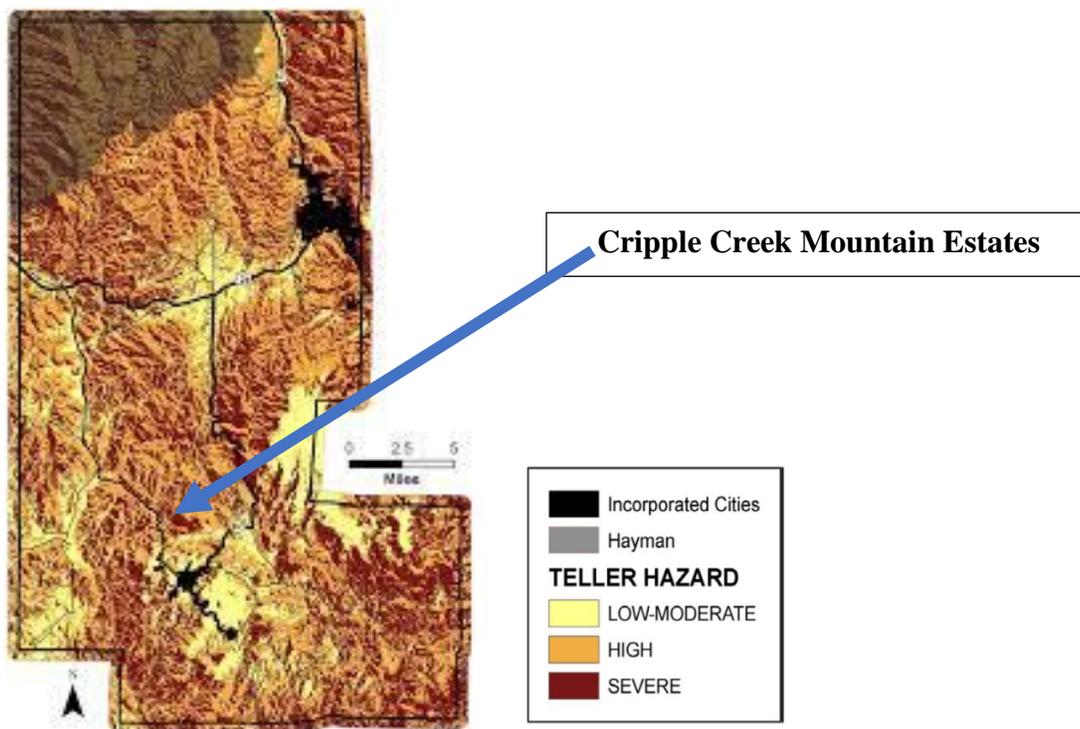
Identifying High Hazard Areas

As stated in the Teller County CWPP Update of 2021, there have been many advances in the ground information available through use of computerized data and Geographic Information Systems (GIS) to evaluate the many factors that impact wildfire hazard identification.

Once these factors are weighted and combined, they provide a visual representation that allows us to relate to fire behavior (fuels, topography, and weather) in a combined graphic layer that shows the geographic distribution of wildfire risk. The highest hazards consist of locations where the forest is most dense, where slopes are steep, and where the aspect is the least favorable.

The ratings shown by color in Map 11 provide a general representation of the areas in Teller County with the highest risk of destructive fire. CCME is located in the area north/northwest of the city of Cripple Creek, indicated as high to severe risk.

Map 11: Combined rating assessment of slope, aspect and vegetation for Teller County



Essential Infrastructure at Risk

As in any community, there are structures and essential infrastructure within CCME that would be adversely impacted by wildfire.

Power and communication lines

Electric lines are not buried, and often are located next to the roads near the trees and, in some cases, the lines run through easements not associated with roadways making the utility poles vulnerable to wildfire. Communication equipment such as Century Link telephone cabling is underground in most cases, however, the above ground pedestals are vulnerable to wildfire as well as any “temporary” lines that are left lying on the ground for extended periods (years).

While the power company (BHE) does periodically remove trees in the easements and roadway right of ways that could interfere with the lines, as part of on-going fuel mitigation treatment, CCME will need to coordinate with both the Teller County Transportation Department and Black Hills Energy to consistently trim/remove trees and vegetation along road easements.

Roads and highways provide evacuation routes for citizens leaving a wildfire-threatened area, and access for emergency response teams attempting to enter a hazardous zone. Roads within CCME are maintained by Teller County. As part of fuel mitigation treatments proposed in this CWPP, the WMT will coordinate with Teller County to keep roads within CCME clear of heavy vegetation so that roads can serve as fire breaks that reduce the risk of wildfires spreading.

Local water supply structures

Within the CCME subdivision, Mountain Mutual Water Company maintains five water tanks that hold between 20,000 and 100,000 gallons each and over 65 miles of transmission lines and mains. The MMWC office and equipment is located near the southwest corner of CCME. These facilities are a high priority for protection from wildfire.

CCME Community Center

Located in the CCME Community Center is a community meeting room, heated swimming pool, fitness center, and library. Surrounding the Community Center are picnic areas, a playground, tennis/pickleball courts, and a frisbee golf course. These facilities are available to the owners of properties within the subdivision and are important to protect. In the event of a wildfire or other emergency, the Community Center would become an important staging location for CCME residents for food and water availability and a site for restrooms as well as a staging area for firefighting personnel.

Four Mile Fire Protection District Station 2

Fire Station 2 is located at 142 Anger Dr. at Hwy. 67 and used as a sub-station and storage station. See page 21 for a more complete description.

Other Community Values at Risk

Property and home owners at CCME chose this community because it is steeped in the beauty of the forest, the surrounding mountains, the blue sky by day and magnificent stars by night. Owners can sit on their decks, drink coffee, and take in the beautiful views and often glimpse the many different types of wildlife that are seen within the community. Most of this would be lost after a devastating wildfire.



Mule Deer Near Pond in CCME

Home Construction and Vulnerability to Wildfire

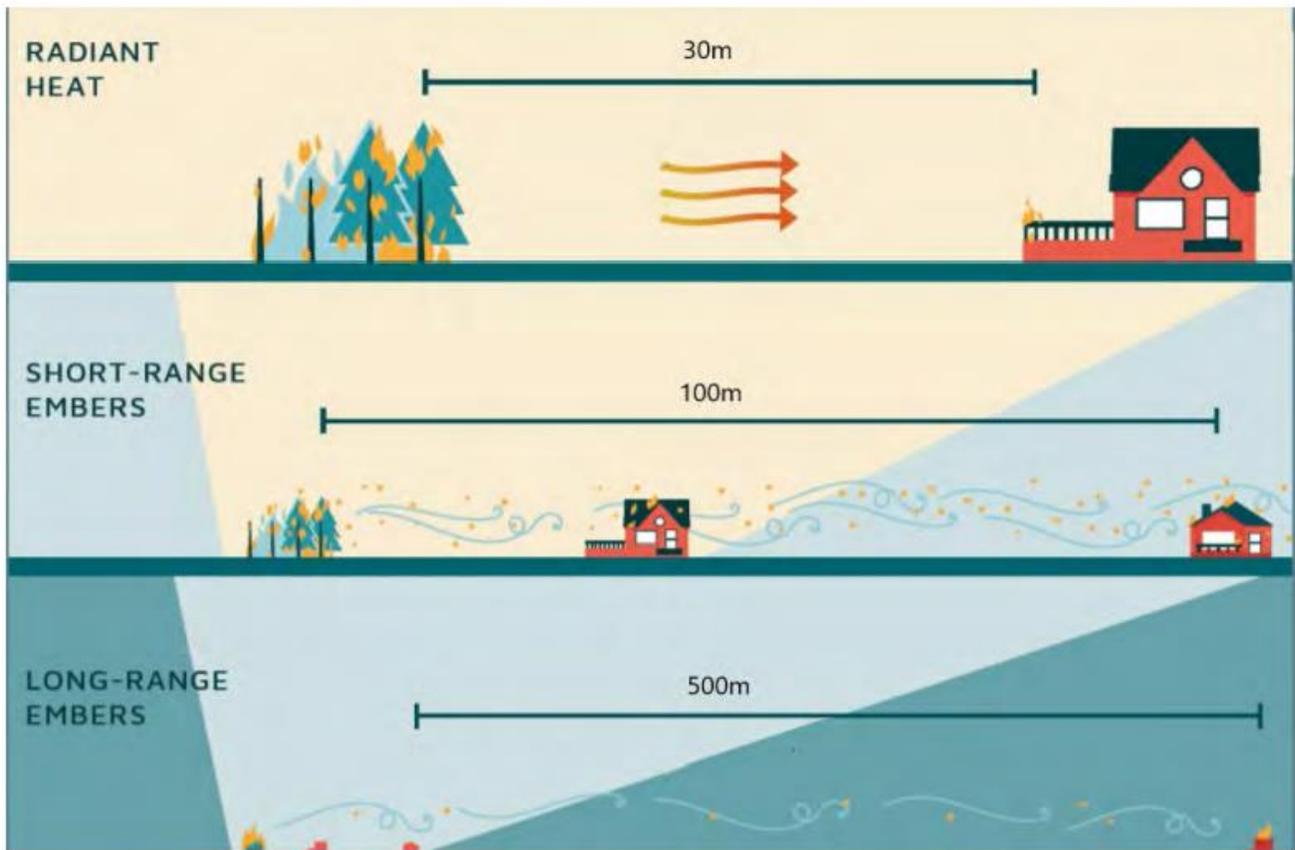
To assess the vulnerability of structures within the community, it is important to understand how structures catch fire.

There are three ways that a wildfire can transfer itself from natural vegetation, or burning homes, to other homes. They are through radiation, convection, and firebrands.

Radiation: Wildfires can spread to a home by radiating heat in the same way a radiator heats rooms in the wintertime. Radiated heat is capable of igniting combustible materials from a distance of 100 feet.

Convection: Direct contact with flames, or the wildfire’s convective heat column—the hot air and gasses rising from the flames--may also ignite a home. This will most likely occur when trees, debris or brush near a structure ignite and the flames touch a flammable part of the structure.

Firebrands: Firebrands are burning embers that are carried on winds from strong convection drafts in the burning zone. In most cases, the flame front passes quickly, but a shower of firebrands, impinges on the structure before and after the flame front passes. Firebrands are most often the cause of home loss, and can be carried long distances – more than a mile – by the winds associated with a wildfire. Many homes in community are particularly vulnerable to firebrands.



Because of the relatively continuous moderate and heavy forest throughout CCME, a wildfire driven by south or westerly winds that crowns in the subdivision could race across the whole subdivision. The homes in the community, with some exceptions, are at risk. The CCME assessment conducted by the Wildfire Mitigation Team estimated that most homes have flammable siding with non-flammable roofs and only about 25% of homes have defensible spaces around the structures. These homes would be especially vulnerable to ignition from fire brands, radiation and convection.

Local Preparedness and Protection Capability

Teller County Emergency Operations Plan (EOP)

The Teller County Office of Emergency Management, as an agency under the direction of the Board of County Commissioners, is charged with the duty of coordinating emergency preparedness, response and recovery activities related to emergencies and disasters within Teller County in providing for the prevention of injury and loss of life, and the protection of public health and property.

Resources to support firefighting operations include the Office of Emergency Management (Primary Agency) and many support agencies: Sheriff's Office, All Fire Departments/Districts, Department of Public Works, Department of Public Health, Department of Community Development Services, EMS Districts, Colorado Division of Fire Safety, American Red Cross, and Salvation Army.

Teller County emergency first responders consist of multi-jurisdictional, multi-discipline full-time and volunteer professionals that makeup our countywide law enforcement, fire and emergency medical services agencies.

Emergency response operations work under a defined command and control system, referred to as an Incident Command System (ICS). Incident Command Systems are designed to coordinate the activities of responding agencies and ensure that all forces work toward the single goal of resolving the emergency situations as quickly and efficiently as possible. The Incident Command System is a model for organizing a chain of command. It is expandable and flexible to adapt to any type or size of emergency.

In the event of a large emergency or disaster incident, the Teller County ICS chain of command structure will generally consist of five of response personnel groups that are integrated as necessary. Not all groups are activated at all times. The ICS is similar to an "on-call" system, in which only the minimal number of personnel are mobilized for a given situation. The groups consist of:

Command Staff

- A. Incident Commanders are the designated individuals from the public agencies or other responsible parties who have the authority to act on behalf of their respective groups.
- B. Safety Officers assess safety hazards and unsafe situations, and they have the authority, when necessary, to bypass the chain of command to correct unsafe acts immediately.
- C. Liaison Officers are the points of contact for assistance and to coordinate activities among agencies.
- D. Public Information Officers are responsible for interfacing with the media.
- E. Legal Counsel is appointed to represent the involved agencies and to ensure that legal issues do not impede response effectiveness.

General Staff

- A. Operations, Planning, Logistics and Finance Section Chiefs responsible for the management of the agencies that are assigned to a respective section.

Four Mile Fire Protection District

The fire department serving CCME is the Four Mile Fire Protection District (FMFPD). Four Mile Fire Protection District was founded in 1994, covering 68 square miles in Teller and Park Counties including the areas of Alpine Vale, Barnard, Chateau West, Cripple Creek Mountain Estates, Florissant, Fourmile Creek, Hay Creek, Hidden Canyon, Highland Meadows, Lakemoor West and Wrights Reservoir.

FMFPD is a volunteer department, with two stations, one full-time paid firefighter (Chief), 30 volunteer firefighters, one paid non-firefighting support staff, and five non-firefighting volunteers.

The average response time to the area is approximately 15 minutes for the district volunteer emergency response. In the event of a local wildfire, FMFPD will send a digital picture of the fire location to the CCME POA Board to distribute to all CCME owners, and if necessary, a notice to evacuate.

Fire Station 1 is located at 8437 Teller Rd. 11, Florissant, CO 80816



Fire Station 2 is located at 142 Angas Dr. in CCME and is used as a sub-station and storage station.



Following is the current apparatus at Four Mile Station 2:

Fire Tender – 1000 gallon tank

Fire Tender – 2000 gallon tank

Fire Engine - 1000 gallon per minute pump/300 gallon water tank

Type 6 Brush Truck – 300 gallon tank

IV. COMMUNITY WILDFIRE PROTECTION PLAN PRIORITIES

The CCME CWPP Wildfire Mitigation Team based its priority recommendations on several well-established principles of wildfire risk mitigation. Following is a simplified excerpt from the Teller County CWPP of 2005:

1. **Catastrophic Fire vs. Ground Fire.** Catastrophic fires are wildfires that move in dense forest and burn from the ground all the way through the tree crowns. They jump downwind by spotting and torching. They destroy forests, killing all or most trees, sterilizing soils, and accelerating erosion. Ground fire burns through a forest with flames staying near the ground and generally not reaching up into the canopy. The effects of ground fires are often beneficial to the health and safety of the forest and long-term damage to the forest and watersheds is minimal.
Catastrophic fires are nearly impossible to suppress. In unfavorable weather conditions, fire crews will rarely try to suppress the advance of an aggressive catastrophic fire, whereas ground fires present an opportunity for fire crews to be effective in suppressing the advance of the wildfire.
The wildfire mitigation goal is to reduce the likelihood of catastrophic fire and to provide areas or “zones” in the forest where an advancing catastrophic fire will “lay down” into a more benign ground fire.
2. **Causative Factors.** Catastrophic fires will usually occur in areas of increased forest density, steep terrains, plentiful “ladder fuels” and lower tree moisture levels. Ground fires will be usually maintained in areas where trees are thinned with substantial gaps in the canopy, trees are trimmed of low branches, ladder fuels are removed, and moisture levels are higher.
3. **Thinning Works.** A compelling body of evidence demonstrates that by performing thinning on an otherwise catastrophic fire-prone forest, its safety can be dramatically enhanced—even a dangerous crowning and torching fire that advances into a forest area that has been properly treated with thinning procedures, may “lay down” to become a manageable ground fire.
4. **Buffer Zones Work.** Fuel breaks or buffer zones should be designed to allow an advancing catastrophic fire to transition to a ground fire and hence give a possible opportunity to suppress the wildfire before it reaches homes and critical infrastructure.
5. **Defensible Space Works.** If sufficient defensible space is provided surrounding structures, a wildfire could advance through and around structures and other values without causing serious damage.
6. **Mitigation Responsibility.** Federal land managers have no responsibility for mitigation on private land. Fire departments do not have mandated responsibility for preparing private property for fire safety. The largest opportunity for reducing risk from wildfires lies in the hands of private property owners acting individually or as a community.

Given the magnitude of the tasks associated with fire mitigation efforts consistent with these principles, the strategy at CCME will be to develop a master Action Plan that will be implemented over the course of several years. To encourage CCME property/home owner involvement and promote a sense of accomplishment, sections of this plan will be incorporated into a simpler Plan-Do-Assess version for each year.

Priority 1: Property Owner Education.

Objective 1: Provide information, education, and resources related to a range of issues including: why the CCME area is at risk to wildfire, home hardening and defensible space, and other measures to reduce the ignitability of structures. (Major emphasis for Year 1; on-going support and updates thereafter.)

Proposed activities related to contacting/educating CCME owners and proceeding with fire mitigation for year 1 of our plan:

1. Design a newsletter and brochure to introduce our CWPP Wildfire Mitigation Team—purpose, summary of our proposed plans, and an invitation to the annual POA meeting where there will be a guest speaker who will present about wildfire preparedness and the need for fire mitigation.
 - a) Spring 2021—disseminate CCME newsletter to all owners via email.
 - b) Spring 2021—walk the neighborhood to disseminate brochure and answer questions from CCME homeowners. Hopefully we will have some volunteer “zone captains” to walk the neighborhood of their assigned zone.
2. Conduct a presentation at our annual CCME owners meeting. Invite a forester from CSFS to make a presentation at this meeting to provide information about the importance of wildfire preparedness, creating defensible space, and home hardening to reduce the ignitability of structures.
3. Hold periodic informal “neighborhood coffee” sessions to answer questions and provide support to homeowners in their efforts to implement defensible space and home hardening.
4. Host tours of demonstration sites in which defensible space and home hardening techniques have been implemented.

Since the two factors that have emerged as the primary determinants of a home’s ability to survive a wildfire are the quality of the defensible space and a structure’s ignitability, the informational content for each of these venues will focus on defining and providing examples of: a) the Home Ignition Zone (HIZ), b) defensible space and the three zones that need to be addressed when creating defensible space, and c) home building design/materials/components to reduce the ignitability of structures.

Resources that will be disseminated to CCME owners will include:

The Home Ignition Zone: A Guide to Preparing Your Home for Wildfire and Creating Defensible Space (Colorado State Forest Service 2021).

FireWise Construction: Site Design and Building Materials (Colorado State Forest Service)

Wildfire Home Retrofit Guide: How to Harden Home Against Wildfire (University of Nevada, Reno, 2020).

Living with Fire: A Guide for Homeowners (University of Nevada, Reno, USDA Forest Service, Colorado State Forest Service)

Wildfire & Insurance (Colorado State Forest Service)

CCME owners will be encouraged to follow the specific guidelines explained in detail in these publications.

Objective 2: Provide information, education, and resources related to wildfire preparedness and evacuation measures.

Proposed activities related to preparedness and evacuation measures for year 1 of our plan:

1. As part of the presentation at our CCME Wildfire Mitigation Community Meeting in June, present information related to family wildfire preparedness and evacuation in case of a wildfire.
2. Complete the actions necessary to become a member of the “Ready, Set, Go!” and National Firewise Committee programs (it is likely that this will not be completely finished in year 1).
3. Decide upon some staging locations for residents in case of a wildfire in which evacuations are necessary—sites for food and water distribution and access to restrooms.
4. Disseminate the following resources to CCME owners.

Ready, Set, Go! Personal Wildland Fire Action Guide (International Association of Fire Chiefs, USDA Forest Service, U.S. Department of the Interior).

How to Make a Home Fire Escape Plan (National Fire Protection Association).

Objective 3: At the end of year 1, assess progress towards Priority 1 objectives and design plans for years 2 and 3 that build upon year 1 successes.

Priority 2: Fuel hazard Reduction

Objective 1: Based on risk assessment data, divide CCME into fuel mitigation zones and recruit “captains” for each zone to coordinate fuel mitigation efforts in that zone.

Objective 2: Identify priority areas to establish fuel breaks (buffer zones) and coordinate with Four Mile Fire Protection District, Teller County Transportation Department, Cripple Creek Mountain Estates Property Owners Association, and individual property owners as necessary to create the recommended fuel breaks.

Objective 3: Coordinate with Teller County Transportation Department and Black Hills Energy to remove/trim trees along county roads and electric line easements within CCME.

Objective 4: Secure funding (from CCMEPOA budget or grants) to begin initial fuel hazard reduction (mowing, tree thinning/trimming, slash removal) on:

- a) Private lots in CCME
- b) CCME common areas
- c) Evacuation and access routes throughout CCME



Example of Tree Thinning in Progress

Example of Completed Fuel Mitigation Project



Before

After

Objective 5: Create a community chipping/slash disposal program. Ideally this can be implemented in year 1, but if not, plans will be made to conduct it in spring/summer 2022.

Objective 6: At the end of year 1, assess progress towards Priority 2 objectives and design plans for years 2 and 3 that build upon year 1 successes.

Priority 3: Emergency Preparedness

In case of a fire or other emergency, the primary notification to evacuate will be issued by the Teller County Sheriff by means of reverse 911 calls and NIXLE notification. Residents should follow directions provided in the recorded message. Other notifications may come from local TV and radio stations.

Note that many of the strategies described under property owner education also pertain to this priority. Listed below are some additional strategies planned for year 1.

Objective 1: Encourage CCME property owners to:

- a) maintain adequate driveway dimensions for emergency vehicle access (at least 12 feet wide or more and unobstructed)
- b) post clearly visible address signs (4" reflective numbers on non-combustible post)
- c) sign up for
 - Reverse 911 (<http://www.elpasoteller911.org/> are not automatically routed to cellular phones. Residents who rely only on cellular phones should register their cell phones at: <http://www.elpasoteller911.org/> to be certain of notifications),
 - NIXLE ([NIXLE.com](http://www.nixle.com)--Residents may register e-mail address for free to have notification sent to computer and mobile devices) and the
 - CCME email list to receive updates about wildfire mitigation and emergency notifications.
- d) Participate in mock evacuation exercises

Objective 2: CCME POA Board will:

- a) post and maintain a Fire Danger sign at each subdivision entrance
- b) coordinate with MMWC and FMFPD to repurpose a 30,000-gallon cistern from MMWC so that it can be used by pumper trucks.

Priority 4: Leadership and Maintenance

Objective 1: Provide leadership to support the implementation of the CWPP:

- a) Organize and conduct a CWPP Wildfire Mitigation Team meeting monthly during years 1 and 2 and periodically thereafter.
- b) Form sub-committees as needed to pursue specific CWPP projects.
- c) Become a Firewise Community and maintain that designation annually.
- d) Begin and continue cooperative discussions with adjacent private and public land managers regarding mitigation projects on land in close proximity to CCME.
- e) Report annually to the CCME POA Board and residents/owners regarding the prior years' accomplishments related to CWPP priorities.
- f) Utilize the CWPP Evaluation Guide to evaluate how we have addressed the objectives of our CWPP and modify actions for the future.

Objective 2: Ensure continuance of actions related to Priorities 1, 2, and 3 over time.

Education of CCME owners is an on-going process, as new owners buy into the subdivision. Fuel mitigation and emergency preparedness does not end when the 3-year period for the current CWPP project has elapsed.

- a) Continue fuel mitigation maintenance of common areas and road easements.
- b) Encourage CCME owners to conduct an annual review and conduct necessary fire mitigation actions on their property.
 - Assist property owners with woodcutting, trimming, and stacking slash along the road.
 - WMT to coordinate volunteers willing to help or in exchange for cut wood.
 - Encourage owners to apply for funds through CSFS (program designed to assist a group of adjacent neighbors to work together to maximize benefits of fire mitigation efforts).
- c) Distribute the following guidelines to all owners.

Survivable space, or any type of forest management, does not end when the initial project is finished. Continual maintenance is an essential part of any forest management. Even in well managed forests trees will die, storms and wind will damage trees, and new trees will germinate.

- Trees should be inspected every spring for any sign of damage from winter or spring wind.
- Prune any broken branches if they are not too high in the tree. Any trees bent by heavy winter snows should be removed, and check for any signs of insect activity or disease.
- Late October is the best time to inspect trees for attack by mountain pine beetles. Any dead trees in Zones 1 or 2, or trees in Zone 3 that may pose a hazard when they fall, and should be cut. In Zone 3 it may be desirable to leave one or two larger (greater than 10 inches in diameter) widely spaced dead trees per acre, as wildlife habitat trees.
- At five years check the canopy closure, especially in Zones 1 and 2. Remove any trees necessary to maintain openings in the canopy. Do any additional pruning or removal of trees and shrubs to eliminate ladder fuels.
- After ten years dense thickets of young trees (regeneration) may have become established, and these will need to be thinned. Not all regeneration should be cut since trees of various ages are important for forest diversity.
- Trees in openings with adequate room to grow should remain, and a useful rule of thumb for spacing is that the trees should receive sunlight from all sides. Regeneration that is likely to become ladder fuel or crowded by other trees should be cut. Depending on their objectives, landowners may want to consider removing some of the larger trees to make room for the younger ones.

V. ACTION PLAN AND IMPLEMENTATION STRATEGIES

Action Plan

Our Community Wildfire Protection Plan is an agreed upon document that identifies how the community of CCME will reduce its risk from wildland fire. Our corresponding Action Plan identifies tasks, roles and responsibilities, and timetables for carrying out the highest priority projects for the CCME CWPP. (See Table 1 on the next page). It is intended to be a multi-year action plan. To encourage CCME property/home owner involvement and promote a sense of accomplishment, sections of this plan will be implemented in a Plan-Do-Assess process for each year.

Table 1: Cripple Creek Mountain Estates CWPP Action Plan

This Action Plan is designed to meet the minimum CWPP requirements as required by the Healthy Forests Restoration Act:

- **Collaboration:** A CWPP must be collaboratively developed by local and state government representatives in consultation with federal agencies and other interested parties. Three entities must plan, do, and act together—local government, local fire department, and state entity responsible for forest management. In addition, planners must consult with local representatives from USFS/USDA and BLM/DOI and other interested parties or persons in the development of the plan.
- **Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- **Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce ignitability of structures throughout the area addressed by the plan.

Acronyms and definitions:

CCME: Cripple Creek Mountain Estates

CCME POA: Cripple Creek Mountain Estates Property Owner’s Association

CSFS: Colorado State Forest Service

CWPP: Community Wildfire Protection Plan

CUSP: Coalition for the Upper South Platte

Firewise USA: A national recognition program that provides instructional resources to inform people how to adapt to living with wildfire and encourages neighbors to work together and take action to reduce their wildfire risk.

FMFPD: Four Mile Fire Protection District

HFRA: Healthy Forests Restoration Act 2003

MMWC: Mountain Mutual Water Company

TCTD: Teller County Transportation Department

WMT: Wildfire Mitigation Team for CCME

Action Item	Support Agency/Resources	CCME Coordinator	Target Timeline
Priority 1: Education Provide information, education, and resources related to a range of issues including: why the area is at risk to wildfire, home hardening and defensible space, other measures to reduce the ignitability of structures, wildfire preparedness and evacuation measures.			
Disseminate a CCME newsletter to all owners via email which introduces our CWPP Wildfire Mitigation Team—purpose, summary of our proposed plans, and an invitation to the annual POA meeting.		WMT	Spring 2021
Walk the neighborhood to disseminate a CWPP brochure and answer questions from CCME homeowners.		WMT Zone Captains	Spring 2021

Action Item	Support Agency/Resources	CCME Coordinator	Target Timeline
Conduct a presentation at our annual CCME owners meeting. Invite a forester from CSFS to make a presentation at this meeting to provide information about the importance of wildfire preparedness, creating defensible space, and home hardening to reduce the ignitability of structures.	CSFS; CUSP	WMT	July 2021
Hold periodic informal “neighborhood coffee” sessions to answer questions and provide support to homeowners in their efforts to implement defensible space and home hardening.		WMT	Summer and Fall 2021
Host tours of demonstration sites in which defensible space and home hardening techniques have been implemented.		WMT Zone Captains	TBD
As part of the presentation at our annual CCME owners meeting present information related to family wildfire preparedness and evacuation in case of a wildfire and disseminate relevant brochures/resources.	CSFS; CUSP	WMT	July 2021
Decide upon some staging locations for residents in case of a wildfire in which evacuations are necessary—sites for food and water distribution and access to restrooms.	Chief Teague FMFPD	WMT CCME POA Board	Year 1
Complete the actions necessary to become a member of the “Ready, Set, Go!” and National Firewise Committee programs.		WMT FMFPD	Year 1
Create a CCME Wildfire Mitigation website to provide information about wildfire mitigation projects in CCME and to provide resources to property owners; provide links to other sites with useful information.		WMT	Spring 2021
Distribute handouts about wildfire preparedness and forest health at CCME community meetings.		WMT CCME Office Staff	On-going
Conduct at least one Firewise educational meeting each year in conjunction with the annual CCME homeowners meeting.	www.Firewise.org FMFPD	WMT	Summer 2022 Annually thereafter
Identify local mitigation companies interested in working on multiple sites at a discount in cost to the property owner and provide list to CCME owners.	FMFPD	WMT	Summer 2021

Use website, newsletter, and e-mail to keep residents aware of grant opportunities, CWPP activities and progress.			On-going beginning Spring 2021
Priority 2: Fuel Hazard Reduction			
Action Item	Support Agency/Resources	CCME Coordinator	Target Timeline
Divide CCME into fuel mitigation zones and recruit “captains” for each zone to coordinate fuel mitigation efforts in that zone.		WMT WMT Zone captains	Summer 2021
Investigate funding and grant opportunities to support fire mitigation projects over several years throughout CCME.	CUSP; CSFS; FMFPC Teller County	WMT	Spring 2021 Annually thereafter
Create fuel breaks (buffer zones) in identified priority areas. Coordinate as necessary with Four Mile Fire Protection District, Teller County Transportation Department, Cripple Creek Mountain Estates Property Owners Association, and individual property owners.	CSFS; CUSP; FMFPC TCTD	WMT WMT Zone captains	Fall 2021 or upon securing funding
Remove/trim trees along county roads and electric line easements within CCME.	TCTD Black Hills Energy Teller County OEM	WMT CCME Director of Operations	Fall 2021 or TBD depending on TCTD and BHE schedules
Begin fuel mitigation (mowing, tree thinning/trimming, slash removal) on: a) Private lots in CCME b) CCME common areas c) Evacuation and access routes throughout CCME	FMFPD	WMT CCME Director of Operations	Fall 2021 or upon securing funding
Conduct an annual community chipping/slash disposal program.	CUSP; FMFPD	WMT CCME POA	Fall 2021 or upon securing funding; Annually thereafter
Priority 3: Emergency Preparedness			
Provide owners information on the “Ready, Set, Go!” and other literature on preparing for an emergency evacuation.	FMFPD	WMT	Summer 2021
Encourage residents to have an emergency “5 minute” evacuation plan including where to meet if separated.	FMFPD	WMT	Summer 2021
Encourage owners to sign up for Reverse 911, NIXLE, and the CCME e-mail list to receive emergency alerts.	FMFPD	WMT	Summer 2021

Action Item	Support Agency/Resources	CCME Coordinator	Target Timeline
Encourage owners to have adequate driveway dimensions for emergency vehicle access.	FMFPD	WMT	Summer 2021
Encourage residents to post clearly visible address signs.	FMFPD	WMT	Summer 2021
Post and maintain a “Fire Danger” (High, Moderate, Low) sign at each entrance to CCME.	FMFPD	CCME POA	Summer 2021 and 2022
Coordinate with MMWC and FMFPD to repurpose a 30,000-gallon cistern from MMWC so that it can be used by pumper trucks.	MMWC FMFPD	WMT CCME POA	Summer and Fall 2021
Priority 4: Leadership and Maintenance Provide leadership to support the implementation of the CWPP and ensure continuance of activities over time.			
Action Item	Support Agency/Resources	CCME Coordinator	Target Timeline
Organize and conduct CWPP Wildfire Mitigation Team meetings.		WMT	Monthly years 1 & 2 periodically thereafter
Form sub-committees as needed to pursue specific CWPP projects.		WMT	Summer 2021; as needed thereafter
Become a Firewise Community and maintain that designation annually.	CSFS	WMT	Annually
Begin and continue cooperative discussions with adjacent private and public land managers regarding mitigation projects on land in close proximity to CCME.	FMFPD; BLM Colorado State Parks and Wildlife	WMT	Summer 2022 and on-going thereafter
Continue fuel mitigation maintenance of common areas and road easements.	Black Hills Energy	CCME POA	Annually
Continue to encourage owners to conduct annual review and fire mitigation on their property.	FMFPD	WMT	Annually
Report to the CCME POA Board and residents/owners regarding the prior years’ accomplishments related to CWPP priorities.		WMT	Annually
Utilize the CWPP Evaluation Guide to evaluate how we have addressed the objectives of our CWPP and modify actions for the future.		WMT	Annually beginning summer 2022

Identify Funding Needs

To implement mitigation on any significant scale, many CCME owners will need supplemental funding. Mitigation work that involves commercial foresters is very expensive, and many owners do not have the financial resources for this. Volunteer work has its limitations, as the amount of work that can be done strictly by volunteers is limited relative to the size of the community. In addition, improvements to community infrastructure such as retrofitting the 30,000-gallon water storage tank also requires funding.

The priority actions described in a previous section of this document will primarily protect the community itself, and thus CCME could be eligible for cost-sharing grants under the Healthy Forests Act.

In addition to these major funding needs, the CCME CWPP Wildfire Mitigation Team will require funds for ongoing expenses of mailings, office supplies, and hosting educational sessions for CCME owners.

Once this CWPP is approved, the WMT will investigate additional sources of supplementary funding through the FMFPD, Teller County, CSFS, and other sources. In addition, the CWPP Wildfire Mitigation Team will approach the CCME POA Board to request a line item in its annual budget to support our on-going efforts.

Table 2 depicts action items and estimated costs for implementation. This is still a draft—more research is needed to estimate costs. Complete data will be obtained prior to submitting proposed budgets for grant proposals.

Table 2: Estimated Cost for Implementation of CWPP Action Items

Note: Estimated costs listed includes only costs that the CCME CWPP intends to include as part of grant application proposals. Those action items for which there is no cost (time and effort donated by volunteers and the WMT) are included in this table as potential in-kind contributions.

Year 1: May 2021-May 2022		
Priority 1: Education Provide information, education, and resources related to a range of issues including: why the area is at risk to wildfire, home hardening and defensible space, other measures to reduce the ignitability of structures, wildfire preparedness and evacuation measures.		
Action Item	Notes/resources needed	Estimated Cost
Walk the neighborhood to disseminate a CWPP brochure and answer questions from CCME homeowners.	Zone captains donate time and car expense; Paper and copy costs covered by CCME POA budget T-shirts for fire mitigation volunteers	Local sponsors recruited to cover cost of volunteer T-shirts
Conduct a presentation at our annual CCME owners meeting. Invite a forester from CSFS to make a presentation at this meeting to provide information about the	Fees for forester	

importance of wildfire preparedness, creating defensible space, and home hardening to reduce the ignitability of structures.		
Hold periodic informal “neighborhood coffee” sessions to answer questions and provide support to homeowners in their efforts to implement defensible space and home hardening.	coffee and snacks; no cost to use room in CCME community center	\$30 per meeting
Decide upon some staging locations for residents in case of a wildfire in which evacuations are necessary—sites for food and water distribution and access to restrooms.	Cost for food and water incurred only if there is a wildfire	
Complete the actions necessary to become a member of the “Ready, Set, Go!” and National Firewise Committee programs.		Unsure of costs associated with this—needs investigation
Conduct at least one Firewise educational meeting each year.	If held in conjunction with CCME annual owners meeting, cost is covered by CCME POA budget	
Priority 2: Fuel Hazard Reduction		
Action Item	Notes	Estimated Cost
Investigate funding and grant opportunities to support fire mitigation projects over several years throughout CCME.	WMT donate time	
Create fuel breaks (buffer zones) in identified priority areas. Coordinate as necessary with Four Mile Fire Protection District, Teller County Transportation Department, Cripple Creek Mountain Estates Property Owners Association, and individual property owners.		Unsure of costs associated with this—needs investigation
Remove/trim trees along county roads (Right of Way thinning) and electric line easements within CCME.	Teller County TD Black Hills Energy Teller County OEM CUSP	Investigate cost-share funding from OEM/CUSP
Begin fuel mitigation (mowing, tree thinning/trimming, slash removal) on: d) Private CCME lots e) CCME common areas f) Evacuation and access routes throughout CCME		\$1500-3500 per acre*
Conduct an annual community chipping/slash disposal program.	Chipper rental cost if not covered by grants; volunteer helpers	Free chipper program through Four Mile Fire

Priority 3: Emergency Preparedness		
Action Item	Notes	Estimated Cost
Provide owners information on the “Ready, Set, Go!” and other literature on preparing for an emergency evacuation.		Depends on whether literature must be purchased
Encourage owners to have adequate driveway dimensions for emergency vehicle access.	Cost covered by individual home owners	None
Encourage residents to post clearly visible address signs.	Cost covered by individual home owners	None
Post a “Fire Danger” (High, Moderate, Low) sign at each of the four entrances to CCME.		\$600-\$800 per sign
Coordinate with MMWC and FMFPD to repurpose a 30,000-gallon cistern from MMWC so that it can be used by pumper trucks.		\$1,000-1,500
Priority 4: Leadership and Maintenance Provide leadership to support the implementation of the CWPP and ensure continuance of activities over time.		
Action Item	Notes	Estimated Cost
Become a Firewise Community and maintain that designation annually.		Unsure of costs associated with this—needs investigation
Continue fuel mitigation maintenance of common areas and road easements.		\$1500-2500 per acre*

*2020 Colorado Forest Action Plan (p. 20). See insert below.

FACTORS AFFECTING TREATMENT COSTS PER ACRE:

- **Acres** — size of project
- **Location** — travel distance to project site, cost to mobilize equipment
- **Handwork** — log and scatter, specialty and involved amount of handwork
- **Accessibility** — slope/terrain
- **Harvesting and hauling** vs. mastication vs. log and scatter vs. on-site whole tree chipping
- **Timber sale** vs. fuels reduction/forest health project
- **Product utilization requirements** — hauling timber, mulching, chipping
- **Complexity** of project
- **Equipment and crew** needed
- **Work around homes** (involving handwork/thinning and mastication). High-maintenance projects with frequent revisits, small lots, multiple landowners, structure types and values add complexity. All costs increase in wildland-urban interface.

(For an analysis of average costs and harvesting case studies, see Appendix 7)

Treatment Costs Vary Greatly, Depend on Commercial Value, Accessibility

Cost of treatment by acre is highly variable: some forest cover types have little commercial value (e.g., piñon-juniper) and will require high investment per acre. Large landscapes that are identified as high priority are sometimes largely inaccessible based on topography. Regional to local data and information should be incorporated in priority subwatersheds to identify additional considerations including operational capacity.

Total Acres of Colorado Forestland in priority watersheds, by cover type
All numbers are estimates. Treatment costs do not include overhead/administration, which averages 35% but can be up to 51%.

Forest Cover Type	Total acres in state	Acres in composite priority sub-watersheds	% of total acres in composite priority sub-watersheds*	Acres treated in composite priority subwatersheds 2008-2017**	% total acres in composite priority sub-watersheds treated 2008-2017**	Average cost per acre for treatment***	Total cost for untreated acres
Piñon-Juniper	5,162,565	664,579	12.9	6,125	0.9	\$1,733	\$1141,100,782
Mixed Conifer	2,490,326	667,949	26.8	65,235	9.8	\$2,087	\$1,257,864,118
Spruce-Fir	4,679,814	202,948	4.3	7,224	3.6	\$1,925	\$376,768,700
Ponderosa Pine	2,081,808	482,355	23.2	53,084	11.0	\$1,581	\$678,677,451
Conifer-Hardwood	2,290,536	203,429	8.9	12,554	6.2	\$1,500	\$286,312,500
Hardwood	2,807,121	111,255	4.0	6,730	6.0	\$1,416	\$148,007,400
Oak Shrubland	2,183,640	77,361	3.5	3,503	4.5	\$1,050	\$77,550,900
Lodgepole Pine	1,676,906	86,617	5.2	12,306	14.2	\$1,700	\$126,328,700
Riparian	833,745	67,029	8.0	4,869	7.3	\$1,950	\$121,212,000
Conifer	116,593	2,856	2.4	85	3.0	\$2,087	\$5,783,077
STATE TOTAL/AVG.	24,323,054	2,566,378	10.6	171,715	6.7	\$1,702.90	\$4,219,605,628

*Considered subwatersheds with priority value greater than 60. Values of 60 considered high priority based on natural breaks in the data.

**Includes CSFS, USFS, BLM. Dissolved based on geometry — only physical vegetation management at stand and plan level, prescribed fire and wildfire; does not include planned projects

***CSFS estimates; does not include cost offsets for timber sales

VI. MONITORING AND ASSESSMENT

To monitor and evaluate the outcome of our CWPP, we will use the process described in the *Community Wildfire Protection Plan Evaluation Guide* (Resource Innovations Institute for a Sustainable Environment University of Oregon, 2008). As noted in this guide, a community develops and implements a fire plan to reduce its risk from wildfire. Given the time, effort, and money dedicated to a CWPP, it is critical to monitor and evaluate the outcome of the plan. Over time, communities grow and change, as do the forests around them. The risk of wildfire to communities will change as they change; the plans and strategies to reduce risk must also change.

Our strategy to monitor and evaluate the CCME CWPP will identify whether our plan is on the right track or if there are changes that should be made to the implementation process.

We will use the *Action Item Review Form* (below) and follow a step-by-step process on an annual basis to monitor and evaluate accomplishments, challenges, and how well our goals have been met:

1. Identify Goals and Objectives
2. Identify Changes in the Community and its Wildfire Risk
3. Review Action Items
4. Evaluate CWPP Outcomes
5. Update the CWPP

Action Item Review Form

We will use this form to review the actions items in our CWPP, evaluate whether new actions are needed, re-prioritize existing actions, and identify significant accomplishments or challenges since plan implementation.

Action Item	Priority Objective Addressed	Status (completed, in progress, not yet initiated)	Successes	Challenges	Follow-up (new actions needed, funding changes, policy issues, etc.)

The following action items have been completed or are in process during the process of writing this CWPP.

Action Item	Priority Objective Addressed	Status (completed, in progress, not yet initiated)	Successes	Challenges	Follow-up (new actions needed, funding changes, policy issues, etc.)
Create Community Base Map	Writing the CWPP	Completed			
Create Wildfire Urban Interface Map	Writing the CWPP	Completed			
Complete Wildfire Risk Analysis	Writing the CWPP	Completed			
Summarize local preparedness and protection capacity	Writing the CWPP	Completed			
Complete CWPP including implementation plan	Writing the CWPP	Completed			
Secure local real estate and insurance agencies as sponsors to cover cost of T-shirts for fire Mitigation Team volunteers	Priority 1: Education	Completed	\$250 donated by sponsors		Coldwell Banker 1 st Choice Real Estate and Farmers Insurance committed to purchasing T-shirts; T-shirt design submitted to Western Skies

Action Item	Priority Objective Addressed	Status (completed, in progress, not yet initiated)	Successes	Challenges	Follow-up (new actions needed, funding changes, policy issues, etc.)
Create a project area map that illustrates CCME zones for proposed fuel mitigation projects	Priority 2: Fuel hazard reduction	Completed			
Get signatures of approval for CWPP	Writing the CWPP	Completed			
Summarize local preparedness and protection capacity	Priority 3: Emergency preparedness	Completed			
Recommend that the WMT become a recognized, funded member of the CCME POA. Report CWPP progress at the monthly CCME POA Board meeting.	Priority 4: Leadership and maintenance	Completed	2/13/21: CCME POA Board recognized WMT as a committee. Authorized a representative from this committee to report and monthly Board meetings.	WMT is still negotiating with the Board regarding a fire mitigation line item in the POA annual budget.	WMT has made a report to the CCME POA Board at the March, April, and May POA Board meetings.
Investigate funding and grant opportunities to support fire mitigation projects over several years throughout CCME.	Priority 2: Fuel hazard reduction	In progress			Submitted Forest Restoration and Wildfire Risk Mitigation FRWRM grant on May 19, 2021 with CUSP as the applicant/fiscal agent.
Conduct Wildfire Mitigation Community Meeting to provide information about the importance of wildfire preparedness, creating defensible space, home hardening to reduce the ignitability of structures, and scheduling chipping days.	Priority 1: Education	Completed June 24, 2021. 34 CCME owners attended	Held at the residence of the WMT co-chairs, Suzanne Adams and Loren Gollhardt. To build a sense of community, the co-chairs hosted a potluck dinner prior to the formal presentation.		PowerPoint presentation and other handouts were sent by email attachment to all participants.

<p>Annual CCME owners meeting— present update on Wildfire Mitigation Team projects and upcoming events. Invite CCME owners to session on Emergency Preparedness in August.</p>	<p>Priority 1: Education</p>	<p>In progress Scheduled for July 24, 2021</p>			
<p>The Wildfire Mitigation Team to conduct another community meeting later this summer to discuss emergency preparedness:</p> <ul style="list-style-type: none"> • Reverse 911 and NIXLE • Ready, Set, Go! program • Driveway dimensions needed for emergency vehicle access • Clearly visible address signs • Firewise Community 	<p>Priority 1: Education</p>	<p>In progress Scheduled for August 2021</p>			

VI. ACKNOWLEDGEMENTS

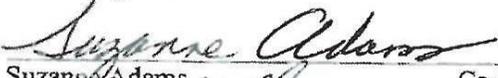
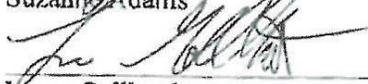
The CCME Wildfire Mitigation Team is grateful for the technical support provided by one of its members, Kimberlee Harvey. Using her expertise with Geographic Information Systems (GIS), she created several maps for this CWPP: Vegetation Cover, Predicted Rate of Fire Spread, Predicted Flame Length, Slope Assessment, and Aspect Assessment.

Ms. Harvey will undoubtedly contribute to the Wildfire Mitigation Team in the future given her considerable knowledge, skills, and certifications which include:

- Degrees in Geographic Information Systems and Natural Resources and Environmental Management
- 20 years of experience in wildland management in both the private and public sectors
- National Wildfire Coordinating Group (NWCG) as a Type 2 Wildland Firefighter
- Advanced wildland fire behavior classes including Field Observer (FOBS) and Fire Effects Monitor (FEMO) training
- FEMA National Incident Management System (NIMS) training
- Member of the Texas State GIS Emergency Response Team

VII. SIGNATORY PAGE

The following persons or organizations have been directly represented on the CCME CWPP Wildfire Mitigation Team, have provided technical support to sections of the CWPP, or have read and concur with the adoption of this CWPP:

Name /Signature	Organization	Date
 Suzanne Adams	Co-Chair, CWPP Wildfire Mitigation Team Lead author CCME CWPP	7/11/2021
 Loren Gollhardt	Co-Chair, CWPP Wildfire Mitigation Team	7/11/2021
 Jay League	Four Mile Fire Protection District	7/13/2021
 Andrew Schlosberg	<small>Digitally signed by Andrew Schlosberg DN: cn=Andrew Schlosberg, ou=Colorado State Forest Service, ou=Woodland Park, fo=US, c=US serial=Andy Schlosberg@coloradoforest.us, c=US Date: 2021.07.06.08:28:05 -0500</small> Andy Schlosberg Supervisory Forester	7/6/2021
 Donald Angell	Teller County Office of Emergency Management	10/8/21