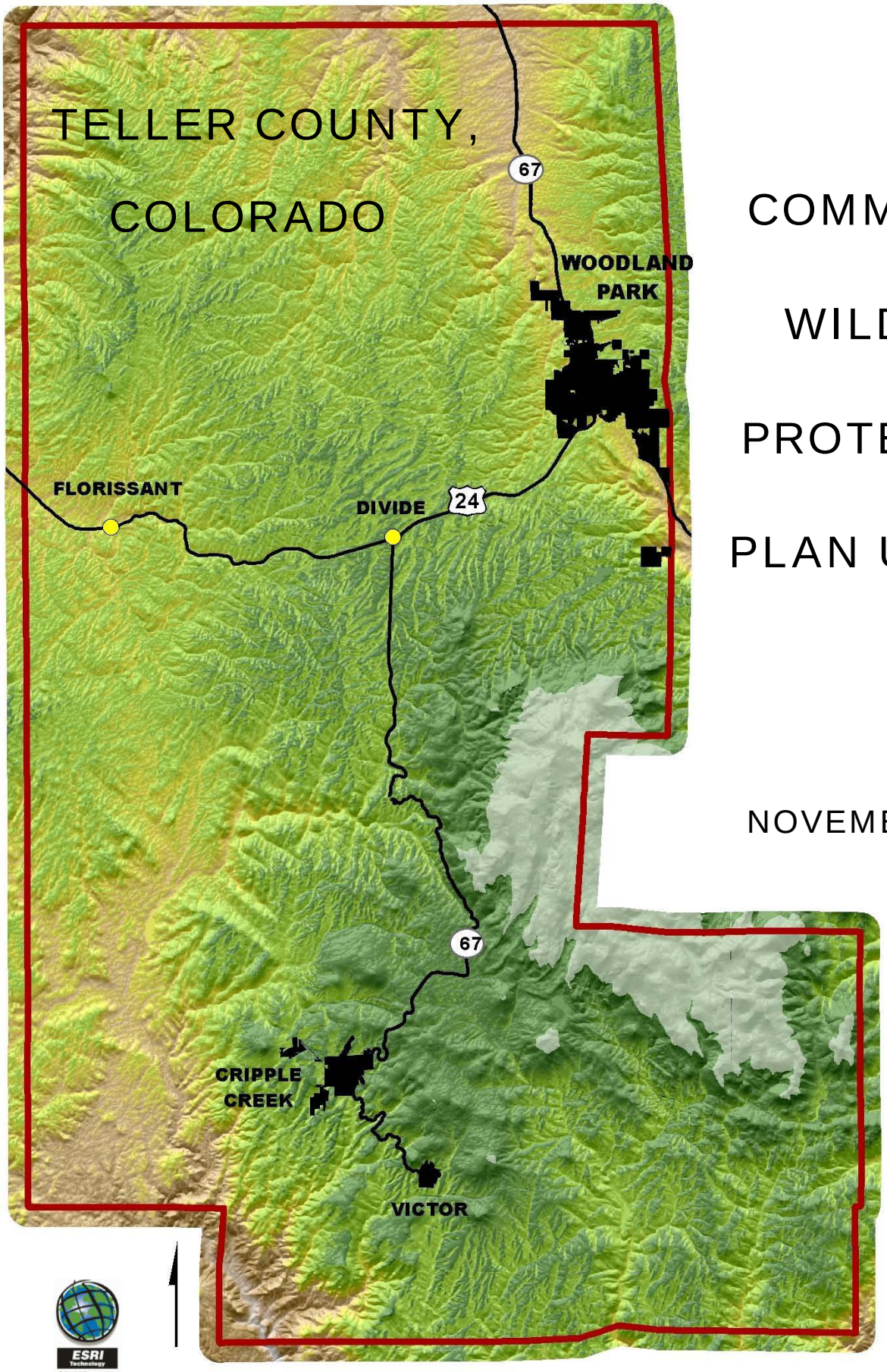

COMMUNITY WILDFIRE PROTECTION PLAN UPDATE

NOVEMBER 2011

The maps in this document (unless otherwise cited) were created by staff of the Coalition for the Upper South Platte and made possible by a grant from the ESRI Conservation Program.

INTRODUCTION

With the completion of the original Community Wildfire Protection Plan (CWPP) in May of 2005, Teller County became the first county in the state to address the wildfire issues across an entire county landscape. Since that time Colorado Senate Bill 09-001, "Concerning the Establishment of Community Wildfire Protection Plans by County Governments," was passed and requires each county government to prepare a CWPP. This legislation directed that county CWPPs should only address the unincorporated portion of the county and, Colorado State Forest Service issued new guidelines for CWPP development in 2009. This plan adheres to those directives and guidelines.[1]

This all-County plan is broad scale, not suitable for on-the-ground project design, and does not replace any existing CWPPs completed by local communities. CWPPs prepared for individual subdivisions, neighborhoods, or fire protection districts capture the level of detail needed to take specific local actions. The development of local CWPPs brings together the neighborhood groups that plan mitigation projects and, in many cases, do the hands-on work. This approach respects the spirit of the national standards for CWPPs, which require local plans to be specific about wildfire hazards, community values at risk, and the projects needed to protect those values.[2]

This document, prepared by Teller County citizens has been approved or concurred by the following:

CWPP Update Committee 11/22/11

James R. Chapman
Jim Chapman, Resident

Marc Dettenrieder, Resident

Steven Steed, Office of Emer. Mgmt.

Tom O'Connor, Pres. Teller Co. Fire Chiefs Assoc.

Jim Ignatius, Teller Co. Government

Dave Root
Dave Root, Colorado State Forest Service

Mark Vanoni, Cripple Creek & Victor Gold Mining Company

Marti Campbell
Marti Campbell, Coalition for the Upper So. Platte

Teller County Board of Commissioners 11/23/11

[1] CWPP Minimum Standards, Revised, http://csfs.colostate.edu/pdfs/FINAL_Revised_CWPP_Minimum_Standards_111309.pdf
[2] Preparing Community Wildfire Protection Plans, http://csfs.colostate.edu/pdfs/cwpphandbook.pdf

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SIGNIFICANT ACTIVITIES AND PROGRESS

While many counties are just beginning to move forward with wildfire mitigation practices, Teller County has forged ahead with on-the-ground fuel reduction and other efforts to address the highest priorities identified. As a result, this updated CWPP is necessary to evaluate changes that have occurred, not only with the mitigation and education efforts, but to establish new priorities to guide the county for future years.

The following Goals and Objectives were established by the original 2005 CWPP[1]

2005 Teller County CWPP Program Goals and Objectives

"We recommend that several local governments and federal and state agencies operating in the County cooperate in supporting programs to increase the safety and health of our forest on both private and public lands."

Goal 1 Reduce frequency and/or severity of Wildland fire in Teller County
- *Objective 1 Reduce the fuel load in strategic locations in the WUI*
- *Objective 2 Improve overall health of publicly owned forests*
- *Objective 3 Increase voluntary landowner responsibility for fuel reduction*

Goal 2 Reduce vulnerability of local assets to Wildland fire impacts
- *Objective 1 Improve defensibility of residential and commercial properties against wildland fire*
- *Objective 2 Reduce vulnerability of critical infrastructure to wildfire impacts*

Additional recommendations
- *Consider Land Use Regulation Enhancement*
- *Continue Slash Mulch program*
- *Responder Needs assessment*
- *Continue Priority Zone Identification*

REVIEW OF THE PROGRESS TOWARD ACHIEVING 2005 OBJECTIVES AND GOALS:

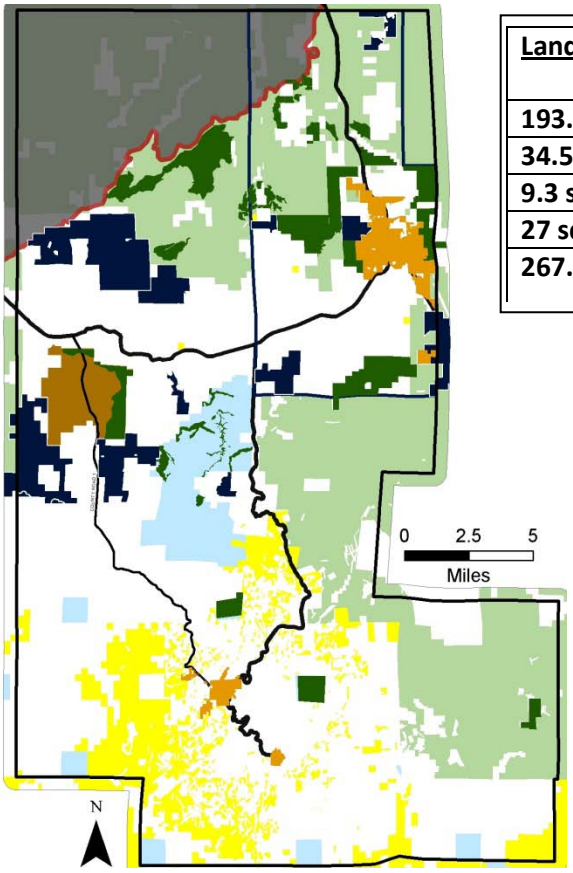
Both public land managers and private citizens throughout Teller County have made significant efforts toward these goals. Agencies and citizens have mitigated fuels, created fire breaks, and worked collaboratively on outreach and education. The next several pages review the outcomes that have occurred under the previous CWPP.

[1] Teller County Community Wildfire Protection Plan May 2005

Goal #1: ***Reduce frequency and/or severity of Wildland fire in Teller County***

Public Land Managers

Nearly 50% of Teller County lands are under the management of other agencies. Managers of all agencies have responded to the need to increase strategic acreage treated to reduce the risk of catastrophic wildfire and to improve the health of the forest. At the request of this CWPP committee, public land managers have submitted reports of significant projects that have occurred or are planned on lands they manage. These reports are included for resident information. Reports of accomplishments by each agency are included in Appendix A. Briefly, the results are as follows:



Land Ownership in Teller County	Acreage Treated
193.6 sq mi - US Forest Service	12,000 acres
34.5 sq mi Bureau of Land Mgmt.	803 acres
9.3 sq mi - National Parks	256 acres
27 sq mi - State Parks & State Land	2,051 acres
267.6 sq mi- Private Lands	3,455+ acres

Map 1: Land Ownership and CWPP Communities

Stewardship Contracts: A Tool for Public Land Managers

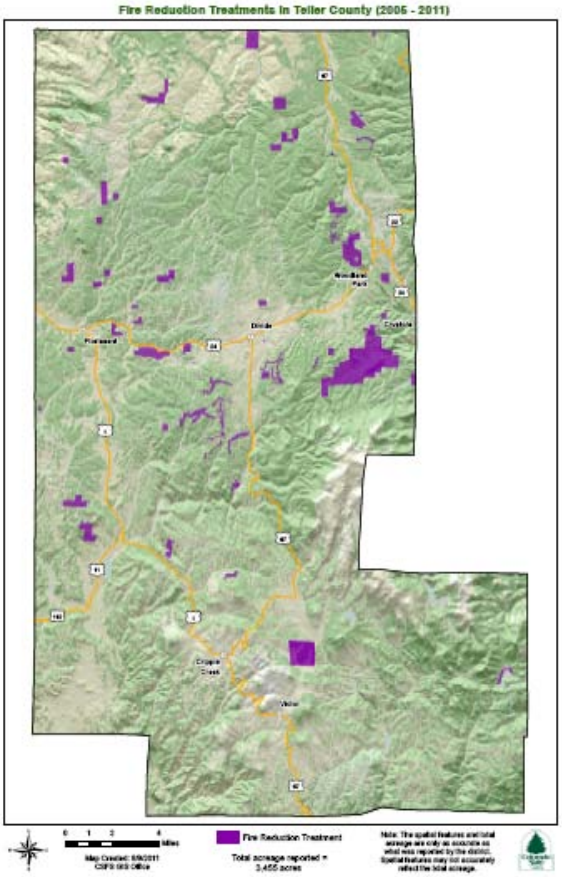
Traditionally, Forest Stewardship contracts have been offered by the US Forest Service to private contractors to harvest forest products on small acreage for a period of 2 years. In 2010 The Pike and Arapaho National Forests signed a 10 year stewardship contract with a private forest contractor to facilitate forest thinning, fuel mitigation, timber and biomass production where appropriate on selected acreage. The longer length of this contract allows the contractor the economic stability to maintain his business with a consistent supply of wood products and

provides the Pike National Forest with reliable management treatments over a extended period of time. Over the ten year period of the contract, approximately 2000 acres of Pike National Forest in Teller County are expected to be mitigated each year. In prior years the focus has been north, west and east of Woodland Park, concentrating in the "Trout West "area. Beginning in 2012 and continuing for the remainder of the stewardship contract the focus will shift to the Catamount area which is South of Highway 24 along the North Slope of Pikes Peak and the Colorado Springs watershed.

Goal #2: ***Reduce vulnerability of local assets to Wildland fire impacts***

Private Lands

Following the Hayman fire of 2002, Teller County, fire departments and many local groups have taken the necessary steps to inform residents of the dangers of wildfires and to demonstrate techniques they can use to personally protect their property. Colorado State Forest Service continues to provide onsite assessment and offer recommendations to private property owners as well as providing individual and community cost-share grants to assist financially in fuel reduction and forest health activities.



Map 2: Fuel Reduction Treatments, Teller County

On-the ground efforts in Teller County have gained momentum over the years and the Colorado State Forest Service (CSFS) continues to provide grant funding for private property mitigation projects in communities with a local CWPP. CSFS tracks acres of fuel mitigation accomplished on private and state lands as a result of CSFS involvement through cost share, Forest Agriculture, and other landowner assistance programs. Twice yearly the Woodland Park District office sends surveys to contractors to track acres that have been done without direct CSFS involvement. The data shows 3,455 acres have been treated in this manner since the Teller CWPP was written in 2005.

There are undoubtedly some acres that have not been reported. Often landowners do mitigation without direct CSFS involvement or without the services of a contractor, and these may not be tracked. Since 2005 the CSFS, CUSP and others have made concerted efforts to educate landowner about the importance of fuel mitigation and thinning for forest health. Many landowners take these messages home and do mitigation on their own initiative. (See CSFS report in Appendix A)

Economic factors[2]

The cost of forestry work may create a barrier to mitigation for many residents, even those with small lots. Often the cost of moving equipment in and out of a project results in significantly higher per acre costs on small projects compared to larger ones. Those who are physically incapable of this work or have lower incomes may be unable to consider hiring a contractor for even a small project to create survivable (defensible) space or trim branches, even when they agree with the need to do so.

Owners of large forested holdings also face economic challenges, as these large parcels can be very expensive to thin. Standing timber in the county is generally too small or too inaccessible for commercial use, and there is currently little market for small diameter wood or slash.

Teller County supports the Colorado State Forest Service competitive grant programs for mitigation and forest health projects on private lands. This funding assistance has been crucial in enabling private land owners to leverage their funds and time in order to accomplish significant on-the-ground treatment based on State, county and local prioritizations.

Local CWPPs

As of this date, there are eleven local communities that have shouldered the responsibility for creating a detailed specific Community Wildfire Protection Plan for their residents based on the community's values and priorities. Many of these communities have completed on-the-ground projects to mitigate the wildfire risk and improve the health of the forest around them. Majestic Park became the first community to complete the fuel mitigation goals established by their CWPP. Other communities are making progress. Ridgewood was designated a "National Firewise Community" in 2011. Cost share grant funding opportunities are available to communities with approved CWPPs through CSFS and other sources.

Additionally, the Woodland Park Healthy Forest Initiative created a 63,000 acre, Community Wildfire Protection Plan in the northeast section of the county which includes the highest population concentrations. This project has helped public and private partners to work more strategically in this large landscape. For more detailed information about this initiative, visit the website: www.wphfi.org.

[2] www.frontrangeroundtable.org/

PROGRESS ON RECOMMENDED ACTIONS

Consider Land Use Regulation Enhancement

Teller County Land Use Regulations are designed to be convenient, ensure safety, promote health, preserve aesthetics, and enhance prosperity for the inhabitants of the county. As such, Section 6.5, "Wildfire Hazard Areas," was added to Chapter 6: Critical Areas of the Teller County Land Use Regulations in 2007. These regulations were established in order to reduce the threat of Wildfire Hazard Areas to prospective and existing developments in Teller County. The provisions of Section 6.5 apply to all applicable development permit applications where it is deemed required that wildfire hazard areas are satisfactorily addressed.

The Standards section (6.5c) consists of five elements that were created to minimize the potential impacts of fire hazards on an occupant's property and/or adjacent properties. First, hazards need to be minimized. A development should be designed to minimize conditions that would compromise public health and safety. Second, adequate roads and firebreaks need to be incorporated into a development plan. Third, a development must provide a legal, adequate, and dependable supply of water and facilities for fire suppression. Additionally, recommendations from referral agencies like the Colorado State Forest Service, local Fire Protection District, or the Teller County Fire Marshall are to be included in the development plan. If no recommendations apply, then guidelines, standards, and requirements of the Colorado State Forest Service, Teller County Fire Code, and the National Fire Protection Association must be recognized.

Last, full disclosure of any identified moderate, high, severe, or extreme fuel hazard areas must be provided by the development on all final plats. These measures help protect the environment and important natural, cultural, or historical resources within Teller County. See Appendix B.

Continue Slash Mulch Program

Volunteers from Teller County began operating a slash collection site in 2003. It was estimated by private landowners that slash was removed from over 685 acres of private property the first year. In 2005, the county provided a long-term collection site in Divide and the operation of the program was transferred to the Coalition for the Upper South Platte)CUSP). By 2010, over 6500 truck-loads of slash had been collected. This is an ongoing program to benefit property owner fuel reduction efforts.

Photo 1: Divide Slash Site and Chipping

Slash is received for a small fee throughout the summer months. At the end of the season, the slash is chipped and the mulch made available to contractors and homeowners for erosion control and landscaping use. The Woodland Park Waste Water Treatment plant also uses 2000 cubic yards of the chipped wood products from the slash site each year as part of their process for treating solid waste. The "Grade A/Unrestricted Use" compost produced is certified pathogen (disease) free and is available at no cost for landscaping use in limited quantities.

OTHER ACTIVITIES

Teller County Government and Projects

County Government has participated on committees such as the Governor's Forest Health Council and the Colorado Counties Inc. Steering Committee to develop policies related to wildfire on a Federal, statewide and local level. Commissioners have also been instrumental in cooperative partnerships with the Front Range Fuel Treatment Round Table and public land managers in designing projects to benefit Teller County fuel mitigation goals.

Teller County Roads and Parks also took on the responsibility of reducing fuels along the 630 miles of county road easements, right-of-ways and in the county owned parks. Each year road crews remove hazardous trees and mow 30-50 miles along county maintained roadways. Parks have participated in fuel reduction projects averaging treatment of five acres each year along trails and within the County open space areas.

The County Road Department welcomes the opportunity to work with communities on roadside issues that may impact safety of travel including, for example, wildfire mitigation, fire department access or emergency evacuation routes. For more information about specific roadway questions, please call Teller County Public Works at 687-8812.

Ownership of County Maintained Roads:

The management activity on roadsides depends on the legal authority and the volume of use.

The term "right-of-way" refers to a surveyed buffer width along and including a roadway that is owned by Teller County. These occur most commonly in platted subdivisions where the developer constructed the roads then conveyed legal ownership of the road and right-of-way tract(s) to the County. The private property along platted right-of-ways has a surveyed, platted lot adjacent to the right-of-way that is specified on the plat. The adjacent private property has no ownership in the right-of-way or roadway itself. When deemed necessary for public safety, the county has the authority to work within the right-of-way to modify the roadway or roadside.

An "easement" is legal permission given to the County by an individual deed or property owner to allow use and maintenance of the road, but not does not transfer ownership. Each easement has its own history and the specifications are variable. An easement may include only the roadway itself or may extend several feet to each side to allow for maintenance along the roadway. It should be noted that the roadway may not be located in the center of the easement.

Property owners are strongly encouraged to verify their property line location adjacent to the roadway and review the property deed and/or plat to determine if there is an existing easement or right-of-way.

Biomass Use

In 2006 and 2007 Colorado Springs Utilities test fired woody biomass by blending it with coal to feed an existing steam boiler at Martin Drake Power Plant. The 1,000 tons of sawdust was a preliminary test for a co-combustion/co-firing project. Full implementation will require the construction of a $10 million receiving, processing and biomass injection plant to co-combust/co-fire 100,000 tons of woody biomass per year and will replace 75,000 tons of coal annually.

Biomass fuel produced within a 75 mile radius of the power plant is most cost effective and most competitive with coal fuels. Teller and El Paso counties will benefit by providing a portion of the needed biomass in conjunction with stewardship programs, reclamation projects, and regional utility needs among other uses.

Unfortunately the Colorado Springs' Utilities Electric Integrated Resource Plan (EIRP) and the tightening of utility spending will most likely push back the woody biomass project beyond 2012 and/or 2013. Of course, positive input to this public process may influence progress of the biomass co-combustion/co-firing project schedule.[3]

Education – Media, events, etc

Teller County has hosted four public "Be Aware and Prepare" Wildfire Prevention Fairs to provide information regarding protection of personal home and property and to highlight other forest health, wildfire prevention and mitigation activities throughout the county. Additionally, the local news has carried frequent stories regarding community efforts to reduce the wildfire hazards. Teller County and agency partners have hosted tours for state and federal elected officials and bureaucrats. A wide variety of presentations by forest professionals are offered for interested residents and organizations to discuss development of Community Wildfire Protection Plans and to distribute more specific information about home protection and forest health issues. Contact Colorado State Forest Service, 687-2921 for more information.

WILDFIRE PROFILE AND COMMUNITY RISK ASSESSMENT

Before human occupation, fire was a natural part of the Rocky Mountain environment. Frequent low intensity fires thinned trees and removed dead or down fuels, which helped to recycle nutrients and promote healthy forest growth and diversity. These naturally occurring fires also encouraged the growth of a variety of other vegetation that provided food sources and habitats necessary for wildlife to thrive.

[3] Any questions about the EIRP, contact John Romero at 719-668-4027 or jromero@csu.org

As people moved into the wildland to homestead, wildfire was seen as a destructive force to be avoided at any cost. Strict adherence to a stop-all-fires-immediately approach to fire suppression over the last one hundred years has interfered with the natural wildfire cycle that was present in this area, particularly in Ponderosa ecosystems[4]. These actions have allowed forest fuels to accumulate, thus reducing forest and vegetation diversity and limiting wildlife habitats. The ongoing increase of vegetation density goes hand in hand with the sky-rocketing occurrence and costs of catastrophic wildfire, in terms of dollars, resources and aesthetics.

This CWPP Update will be used to identify those areas of the county where the greatest wildfire hazards exist and identify and prioritize those that require closer examination using enhanced evaluation methods to reduce local wildfire hazards. Understanding what factors contribute to wildfire hazards is essential.

A profile and assessment process looks at a number of criteria in order to help the community and land managers understand risks and opportunities. The following pages describe some of these considerations.

Fire History

As reported in the fire history data[5] of wildland fires greater than five acres in Teller County, in the decades between 1980 -1989 there were four fires and an average of 24.8 acres burned. The fire number dropped in 1990-1999, with three fires that burned an average of 14.6 acres each. In the last decade, 2000-2010, the numbers increased to fourteen fires and the acreage burned averaged 37.7 acres, more than double the size of the previous decade -without including any acreage burned in the Hayman Fire of 2002. These numbers indicate that Teller County is experiencing more fires and that these fires are burning over larger acreage.

Population / New buildings

The Teller County Building Department reports that, while the number of housing permits has decreased since 2005, there are 724 new structures and 5 new commercial buildings. Population in Teller County remains relatively stable, with slight growth occurring. The majority of the population continues to be concentrated in Woodland Park and a large percentage of the fuel mitigation projects have been positioned to reduce the wildfire threat to this area.

Suppression Capabilities and Advances

Wildland fire poses the greatest natural hazard threat to Teller County through potential damage to private and public lands as well as loss of life. There are two paid "city" fire departments, serving the incorporated communities of Cripple Creek and Victor, and one paid district, Northeast Teller, which includes the City of Woodland Park. The remainder of the

[4] Stephen A. Fitzgerald, *Fire Ecology of Ponderosa Pine and the Rebuilding of Fire-Resilient Ponderosa Pine Ecosystems* (USDA Forest Service, 2005)

[5] Source: Federal Wildland Fire Occurrence Data, http://wildfire.cr.usgs.gov/firehistory/data.html

county is served by four volunteer fire districts except of an area in southeast Teller that has no assigned fire protection. Each fire department or district (henceforth simply referred to as departments) is responsible for fire suppression in their own designated areas. However, if wildland fire suppression exceeds the capabilities of the department to control or extinguish, the Teller County Sheriff is responsible for coordination of other fire suppression assets, including coordinating with neighboring departments and, based upon the size and complexity of a wildfire, requesting additional fire suppression resources through the federal land managers to assist.

National wildfire suppression training is made available to all paid and volunteer fire department and district personnel ; 66 of these individuals have current "Red Card" certification for wildland fire suppression. Through grants administered through Colorado State Forest Service, the departments continue to upgrade fire suppression equipment with attention given to dual purpose items used in both structure and wildland fires such as personal protective equipment, shelters, hand tools, packs, hose and portable pumps. In addition to equipment owned by respective fire departments and districts, specific types of wildland fire trucks are provided to respective departments under an annual lease agreement with the Colorado State Forest Service.

The Teller County Office of Emergency Management (OEM), Sheriff's Office, Department of Public Works, Community Development Services Division (CDSD), and fire departments are proactive in working with communities to understand wildfire threats. Fire departments participate in assisting communities in development of wildfire protection plans and appropriate mitigation actions which can reduce the risk of property damage. Several fire districts use "Red Zone©" software to conduct and maintain property assessments that provide information regarding structures and vegetation types to property owners. The software assessment tool is limited in its use, however, due to budget and man power short falls.

The Teller County government and fire department share similar concerns for the future going forward from 2011:

- It is important to continue efforts toward public education and outreach regarding the development of local subdivision and neighborhood CWPPs and fire mitigation.
- Water supplies for fire suppression are still very limited. Only two communities have installed cisterns that can provide 30,000 gal. of emergency water each since 2005. The cost of cisterns is prohibitive without outside funding support.
- Increased manpower and budgets will allow for more accurate assessment of the wildland fire and public safety threats and assist in development of effective strategies to reduce the fire hazards.

- The escalating cost to conduct wildfire suppression creates an enormous economic burden upon Teller County General Funds. A strategy for establishing a county emergency contingency funding mechanism must be developed to reduce the potential for Teller County to incur a significant reduction in General Funds to pay for wildland firefighting resources.

The fire department personnel are available to speak at public meetings such as subdivision or home owner association annual meetings and provide reliable, local information regarding safety and fire prevention for both the inside and outside of the home. For more information, contact your local fire department. (See Appendix E)

WILDFIRE SCIENCE

Wildfires can be broadly categorized into two types based on the intensity of the fire and the damage caused to the environment, crown fires and ground fires. The most severe type is a crown fire, such as the Hayman Fire of 2002. A crown fire burns in the canopy of the forest, jumping from treetop to treetop, killing most if not all of the trees in its path, and producing extreme heat.

Photo 2: Crown fire rapidly advancing through tree tops

The frequent high winds in Teller County increase the risk of crown fires. The heat produced in a crown fire is intense enough to damage the soil. Long after a crown fire is extinguished, precipitation runs off the impermeable soil causing flash flooding and environmental degradation far beyond the burn area. In addition, because of the intense heat and soil damage connected with a crown fire, vegetation re-growth is significantly delayed. In a large portion of Teller County the current forest condition is classified as a closed canopy with a high rating for crown fire risk.

A less severe type of fire is the so-called ground fire. This type of fire is typical of open ponderosa pine forests and open grasslands. In forests that are not overgrown, wildfires burn more slowly and often stay closer to the ground, clearing away excess fuel such as needles, fallen branches and small seedlings.

Such a fire revitalizes the forest without destroying the healthy trees. The heat produced is less intense, does little damage to the soil and rarely penetrates the thick fire resistant bark of the ponderosa trees. Due to the release of nutrients that results from such a fire, new herbaceous plants re-sprout quickly after the fire cools. Prescribed fires mimic this type of fire.

Photo 3: Low-intensity ground fires are desirable to improve forest health, and when lit and maintained by foresters are **called prescribed fires, or RX fires.**

Factors Affecting Fire Behavior

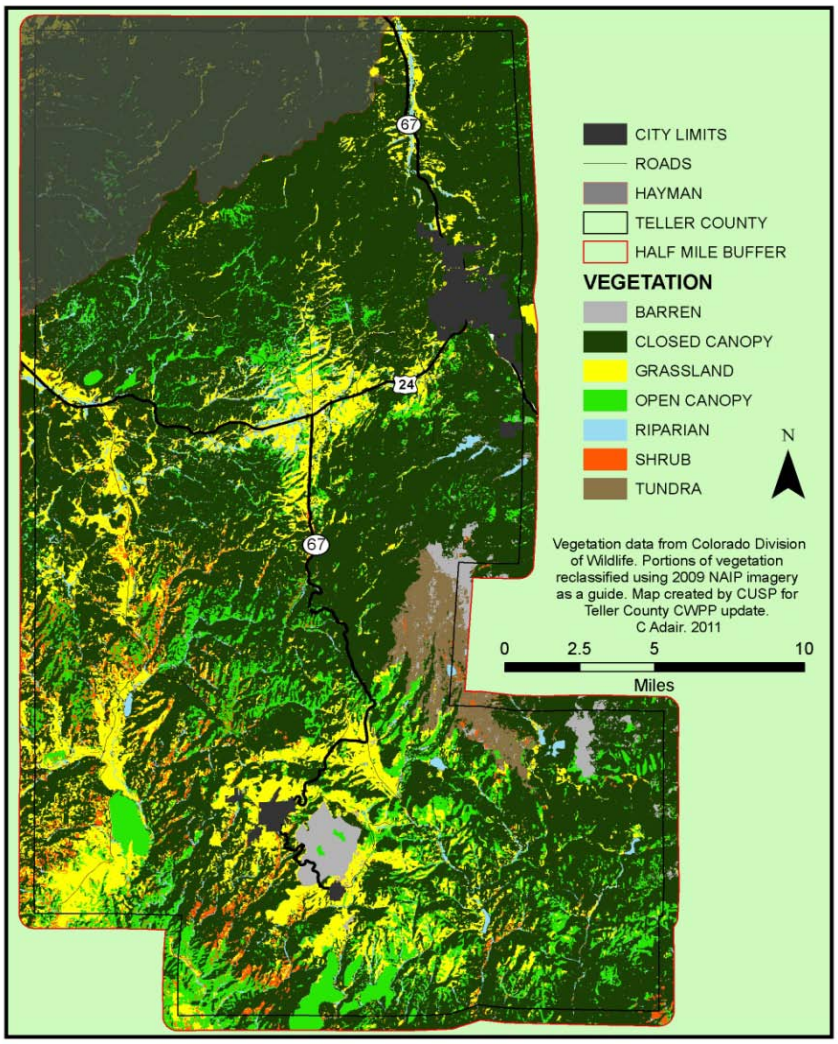
In order to understand the wildfire hazard in Teller County, it is necessary to understand the factors that influence how fires burn. The three primary factors that determine fire behavior are weather, fuel, and topography.

Weather

Weather is the "wild card" of fire behavior and cannot be predicted. While lightning or human activity may ignite a fire, high temperatures, low humidity and strong winds increase its intensity. Drought and dry conditions any time of year can increase the frequency and intensity of wildfires; however, such fires are usually less severe in cold seasons.

Fuel

The two types of fuel in a wildland-urban interface are vegetative and structural. The fuel available to a fire influences how much heat is produced. Vegetative fuels consist of living and dead trees, brush and grasses. While the focus of wildfire management is usually on forested areas, some portions of Teller County have more grassland and brush than trees. Typically, grass and brush fires ignite more easily and move faster than fires in timber.



Map 3: Teller County Cover Vegetation

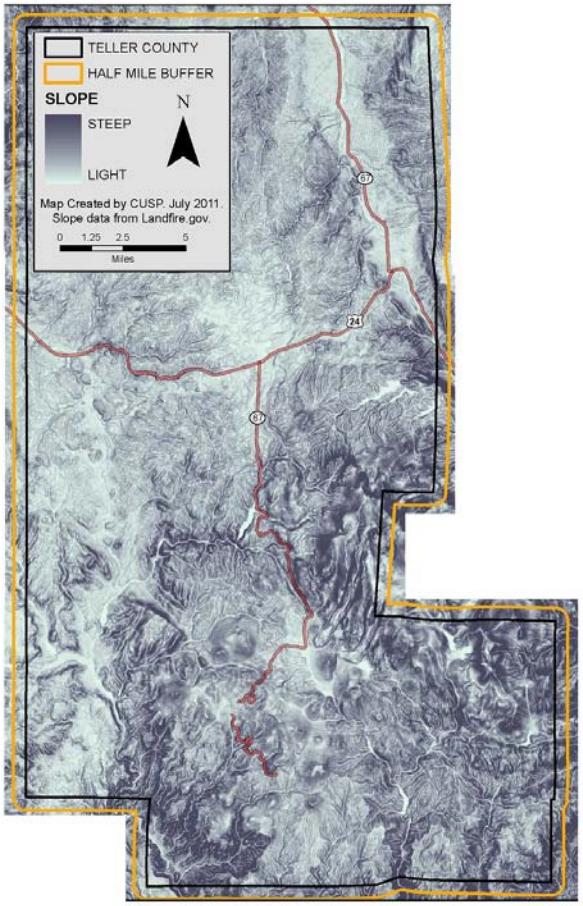
Structural fuels, which can include houses, outdoor equipment, lawn furniture, ancillary buildings, fences and firewood, add to the natural fuel load available to a fire. Not only can a wildfire move into a structure from a forest or grassland, a structure fire can move outward into the grassland or 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.

The dense forest conditions in Teller County not only raise the potential of catastrophic wildfires, it also increases the opportunity for cyclical outbreaks of insects and disease. Trees weakened by overcrowding and competition for water and sunlight are more susceptible to invasion. (See Appendix C for Insect & Disease)

Topography

Slope, the change in elevation on the land, and *Aspect*, the direction a slope faces, are two factors of topography, or the shape of the land, that have a major impact on fire behavior.
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.



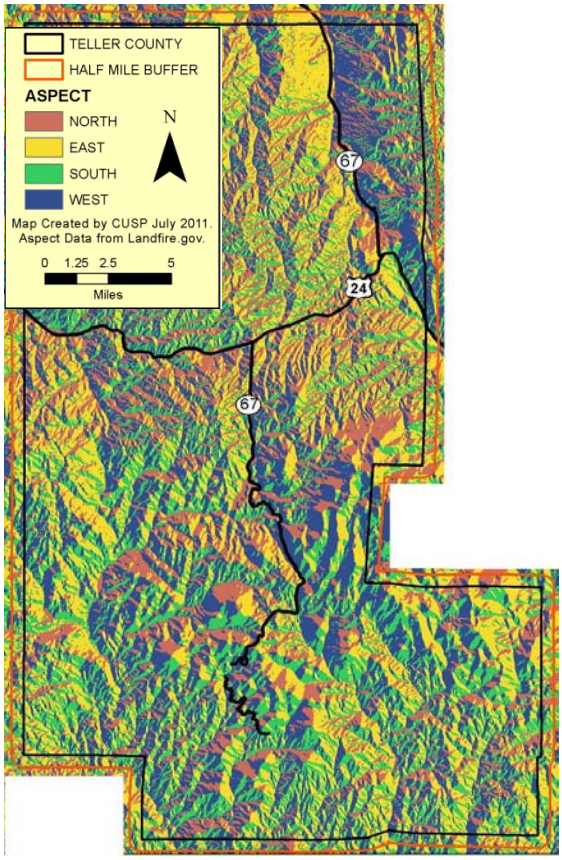
On a slope, the heat rises above a fire, pre-heating and drying the fuel above. The drier upslope fuels ignite more easily and burn more quickly than down slope fuels. The steeper the slope, the more pronounced the effect.
Notice that the steepest slopes are in the southeastern part of the county south of Highway 24. These are also the least populated portions of the county.

Map 4: Slope assessment, Teller County

Aspect

The primary direction that a slope faces is called the aspect and plays an important part in the intensity of wildfire.

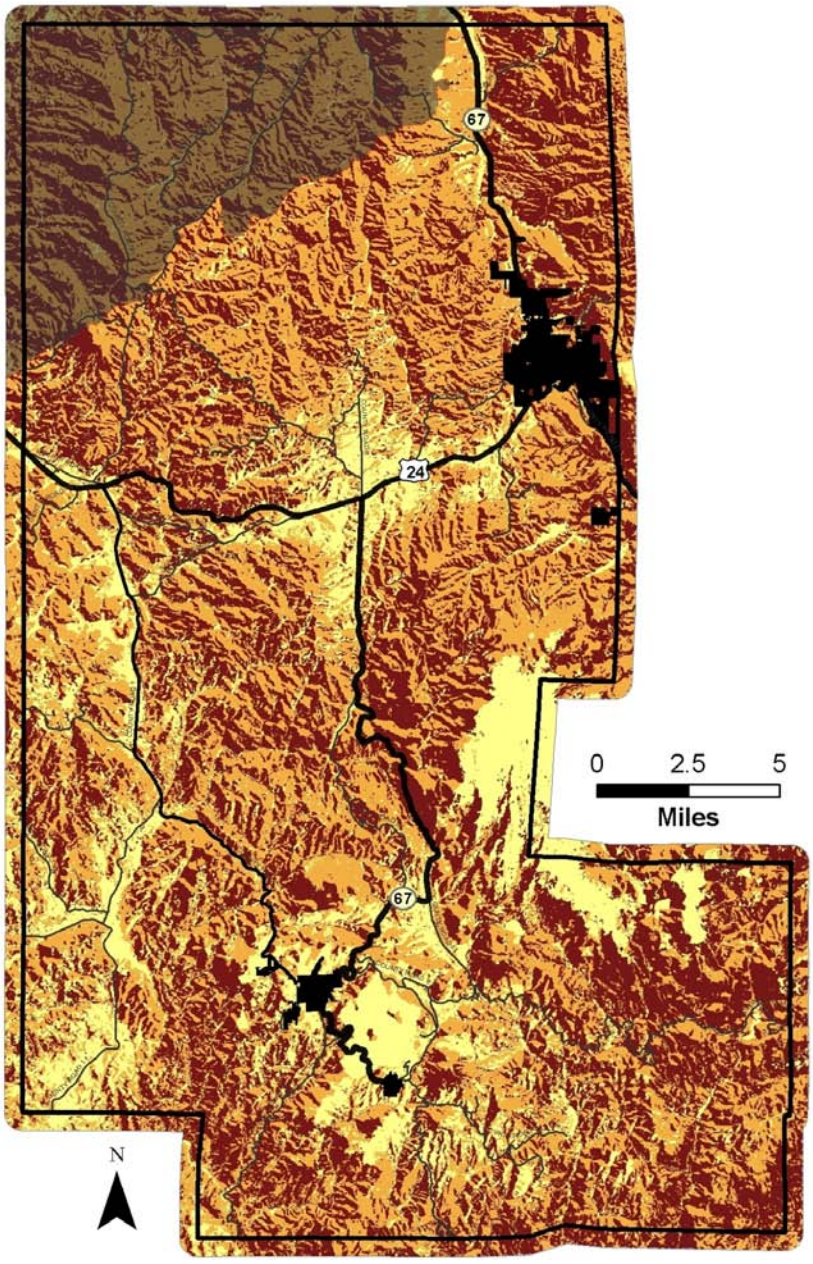
At this high elevation, slopes in Teller County that face south and west are pre-heated and dried by strong sunlight. This solar heating makes these areas more vulnerable to rapidly igniting fuels. This map indicates the aspect of the Teller County terrain and highlights those areas that are most exposed to the solar influence.



Map 5: Aspect assessment, Teller County

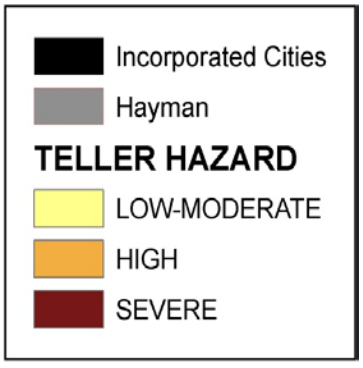
Identifying High Hazard Areas

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. The maps of Teller County hazards have been revised.



Map 6: Combined rating assessment of slope, aspect and vegetation, Teller County

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 distribu<on 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 6 provide a general representation of the areas with the highest risk of destructive fire. This map can be used to prioritize fuel mitigation projects within a given subdivision.



Forest Health

While Teller County has not had the major impact of forest insect epidemics that nearby counties have suffered, the forest condition is declining. Not only are forests crowded due to the lack of natural fire or forest management, the drought cycle continues to reduce the resistance of many tree species to insect damage and death. The Colorado Aerial Detection Survey of 2010 identified these insects and the acreage affected in the county:

Douglas-fir Beetle - 1600 acres
Mountain Pine Beetle -9700 acres,
Western Spruce Budworm -2700 acres,
Moderate Aspen Dieback and Mortality -90 acres.

These infested or diseased forests cover about 22 sq miles in Teller County. For more information on insect, disease and drought effects, see Appendix C.

Other Values at Risk

The first concern during a wildfire occurrence is the protection of life and safety, followed by the protection of property if possible. Teller County experienced losses of other values, environmental and economic, as a result of the Hayman fire.

Infrastructure

Among other values at risk are the components of critical infrastructure, facilities that provide power, communication, emergency services, and the landscapes that provide water supplies, as well as scenic and recreation opportunities must be taken into consideration.

Utility Facilities

Utilities infrastructure follows in the footsteps of the population, and typically the equipment and facilities are situated along major roadways. However, some inter-regional systems are located in separate corridors apart from the highway system in Teller County.

Electrical distribution facilities have few underground lines locally and rely on wooden poles to carry the lines that bring electricity to communities from substations. The major power lines coming into these substations are either wooden poles or steel towers set on concrete piers. While power companies do have a responsibility to remove trees in the easement that could fall on the lines, priority has not been given fuel reduction in easements.

Communication equipment such as telephone cabling is often installed on the same poles as electrical distribution wiring. Wireless communication (telephone, radio, and TV) relies on antenna towers, often located on ridges or high points that wildfire naturally seeks. Wildfire can disrupt any of these systems.

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. During a wildfire, transportation can be interrupted by smoke, flame from closely encroaching fuels, or falling debris. After a fire, mud and debris runoff can block roads, and flash flooding can wash out bridges and paving. However, when right-of-ways or easements are kept clear of heavy vegetation, roads can serve as fire breaks that reduce the risk of wildfires spreading, and as anchor points for firefighting operations.

NATURAL RESOURCES

Also at risk from catastrophic wildfire are the landscapes that provide municipal water supplies, habitat for Colorado's wildlife, and scenic and recreational opportunities for citizens. These values and assets must be taken into consideration.

Water Supplies

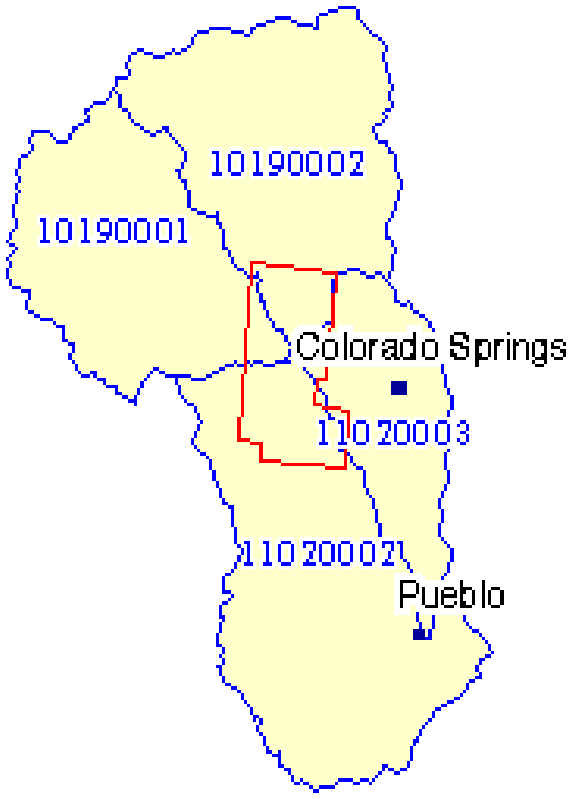
"When we try to pick out anything by itself, we find it hitched to everything else in the universe."
John Muir

This quote by John Muir can be applied to efforts to manage any fire impacts including those in watersheds. High intensity wildfire in any of the four watersheds of Teller County could have several potential impacts. Watersheds and water distribution systems are threatened by the flooding that commonly follows large fires. After large areas of vegetation have burned away, rain that would have been taken up by plants will instead run off, causing severe erosion. This runoff can be particularly heavy after high-severity fires that consume all organic material in the soil, and create a hydrophobic (water resistant) layer several inches below the soil surface.[6] Large amounts of ash, topsoil and debris can wash into streams and clog reservoirs, pipelines, or treatment facilities, requiring costly rehabilitation and ongoing maintenance of these systems.[7] Hydro-electric power supplies could also be disrupted.

Water delivery systems that rely on surface water sources are most vulnerable to wildfire damage. According to Colorado Springs Utilities, which owns land in Teller County on Pikes Peak, "Catastrophic wildfire poses one of the greatest threats to water quality and collection system infrastructure."[8] Denver Water, one of the largest water suppliers, has estimated the costs incurred by wildfires over the last 15 years are over $11 million.[9]

[6] Jan Cipra, et. al., *Hayman Fire Case Study: Soil Properties, Erosion, and Implications for Rehabilitation and Aquatic Ecosystems* (USDA Forest Service, 2003) 206-207.
[7] Dennis Le Master, Guofan Shao, Jacob Donnay, *Protecting Front Range Forest Watersheds from High-Severity Wildfires* (Front Range Fuels Treatment Partnership, 2007)
[8] Naomi J. Marcus, *Pikes Peak Watershed Forest Management Plan* (Colorado State Forest Service, 2010) 21.
[9] Don Kennedy, Environmental Scientist, Denver Water

Local water supplies and water resources for communities within Teller County are also threatened. At risk are ponds and reservoirs that provide beauty and recreation for homeowners, or water for livestock and wildlife, to community wells and systems for the cities of Woodland Park, Cripple Creek and Victor.



Map 7: Watersheds in Teller County

10190001 South Platte Headwaters;
10190002 Upper South Platte;
11020002 Upper Arkansas;
11020003 Fountain Creek;

Teller has four major watershed units that are critical to water supplies for Front Range communities and are at risk to damage as a result of a wildfire event. Both the South Platte Headwaters, north of Woodland Park, and the Upper South Platte drainages, west of Divide, have sustained major impacts from wildfires in the last 15 years. The Fountain Creek watershed begins south of Woodland Park, and continues down Ute Pass. The drainages south of Mueller State Park flow into the Arkansas watershed. These watersheds are essential to water supplies for Denver, Colorado Springs, Pueblo and other communities downstream.

Protection of our water resources begins with each homeowner's attention to the prevention of contamination and pollution. On a larger scale, surface water and adjacent shorelines must be protected from events that promote erosion and are given a higher rating in this document as "other values at risk".

Species of Concern

A wide variety of "sensitive and rare" species of animals and plants [10]can be found in Teller County. A major event such as a wildfire could destroy the necessary habitats for a number of these species. Any man-made changes in the forest, such as fuel treatments, should take into consideration protection of these species and the associated habitat needs.

Mammals	**Plants**
Aberts Squirrel	American Yellow Lady's Slipper
American Black Bear	Least Moonwort
Black-footed ferret	Least Grape-fern
Elk	Prairie Goldenrod
Fringed Myotis (bat)	Rattlersname Fern
Birds	Reflected Moonwort
American White Pelican	Rocky Mountain Columbine
Bald Eagle	Western Moonwort
Great Blue Heron	White Adder's-mouth
Osprey	**Natural Communities**
Wild Turkey	Lower Montane Forests
Fish	Montane Grasslands
Greenback Cutthroat Trout	Xeric Tall Grass Prairie

Tourism, Recreation

According to the Visitor's Bureau, "Teller County, Colorado has been welcoming visitors from around the world for over 100 years. Located at the base of Pikes Peak, the most visited mountain in North America, first time visitors are amazed by the area's natural Colorado Rocky Mountain beauty…. abundant Colorado wildlife like elk, mule deer, and even eagles…. rock climbing, hiking, mountain biking, camping, fishing, horseback riding, ……"[11] As demonstrated in 2002, loss of the income created by tourism and recreational opportunities has a serious impact throughout the county. Another large fire could cause long lasting repercussions for the local economy.

HISTORICAL/CULTURAL ASSETS

National Register of Historic Sites

Throughout Teller County many buildings exist that are well over 100 years old, the last remnants of early settlement, mining, and ranching. The largest concentrations of these old structures are in the vicinity of Victor and Cripple Creek, and many are still in use. In other areas, scattered homes, barns and corrals remain as evidence of pioneer living. These cultural assets are considered as having a protection priority. Most are located in incorporated areas

[10] Center for Biological Diversity, CO Div. of Wildlife, USFWS, CO Natural Heritage Program

[11] Official Website of The Teller County Vacation & Visitors Bureau, www.VisitTellerCounty.com

and have fire protection provided by local departments. However, some are located in unincorporated sections of the county and attention should be given to reduction of wildfire hazards in their vicinity.

Cripple Creek Historic District	Midland Terminal Depot
Florissant Grange/School	Stratton Independence Mine & Mill
Goldfield City Hall and Fire Station	Twin Creek Ranch
Hornbeck House	Victor Downtown Historic District
Manitou Experimental Station	Victor Hotel

Other Historical Values

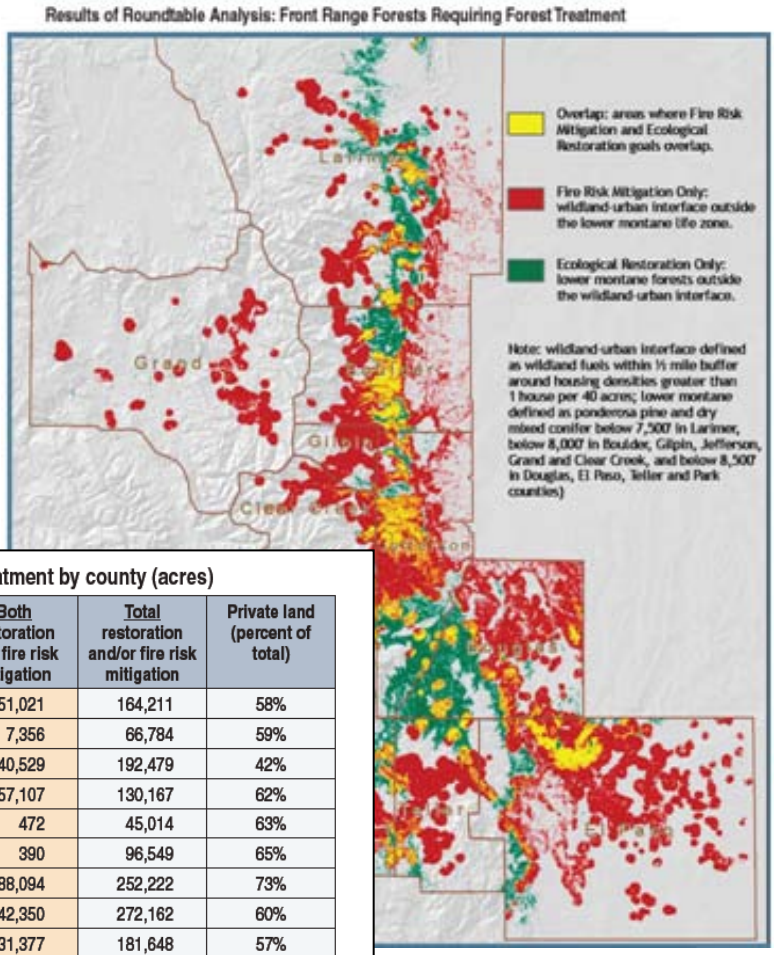
Before European settlement, the Ute Indians travelled through Teller County and as part of their culture, they modified the shape of living trees for ceremonies or to indicate directions and harvested strips of bark for food or medicine. Many of these Ute Culturally Scarred trees[12] still exist in the forest and care should be taken to identify and preserve these historical relics during forest treatment projects if possible.

Photo 4: Ute Cultural Tree, Photo courtesy of Pike Peak Historical Society

[12] http://www.pikespeakhsmuseum.org/Museum/UteCulturalTrees

INTEGRATING VALUES AND WILDFIRE HAZARDS

As the committee worked on this update, they looked at integrating values-at-risk information with the wildfire hazard analysis. At an even broader scale, the Front Range Roundtable Report evaluated the forests with a perspective similar to this plan across the ten counties for the Front Range from El Paso and Teller in the south to Larimer and Weld in the north. The scope and acreage of fuels and forest restoration treatments needed is overwhelming, as seen in this map. [13] However, the way for all parties to most effectively and strategically work is through this type of methodical analysis and planning.

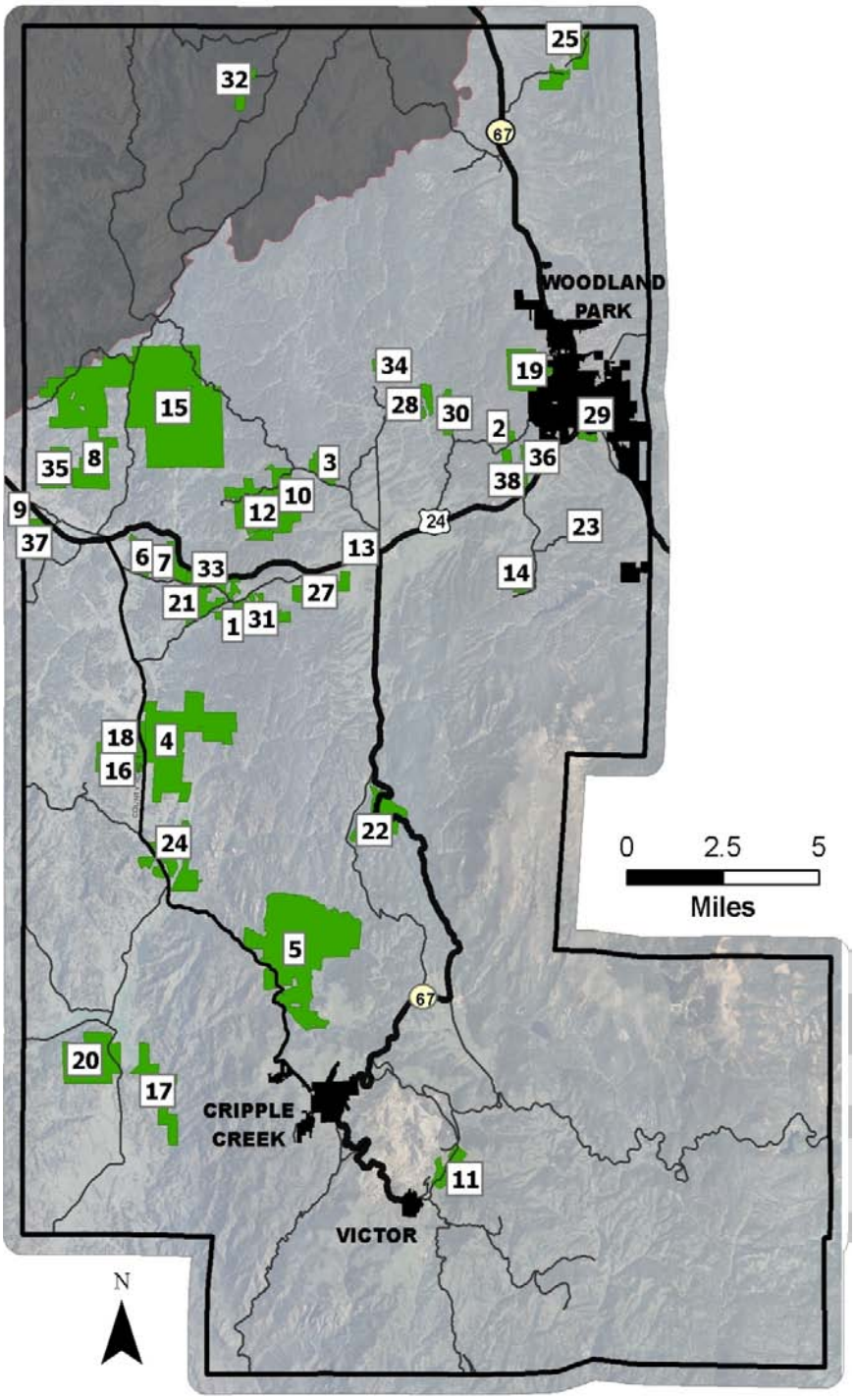


Front Range forests requiring forest treatment by county (acres)

	Restoration only	Fire risk mitigation only	Both restoration and fire risk mitigation	Total restoration and/or fire risk mitigation	Private land (percent of total)
Boulder	35,978	77,212	51,021	164,211	58%
Clear Creek	833	58,595	7,356	66,784	59%
Douglas	90,807	61,143	40,529	192,479	42%
El Paso	31,169	41,891	57,107	130,167	62%
Gilpin	2,177	42,365	472	45,014	63%
Grand	1,838	94,321	390	96,549	65%
Jefferson	71,157	92,971	88,094	252,222	73%
Larimer	98,856	130,956	42,350	272,162	60%
Park	27,463	122,808	31,377	181,648	57%
Teller	27,211	86,848	23,168	137,227	61%
Total Front Range	387,489	809,110	341,864	1,538,463	60%

Wildland Urban Interface Identification

For the purpose of this plan, the Wildland Urban Interface (WUI) is considered to be those locations where man-made structures and values intersect with natural wildland vegetative fuels. The largest concentrations of structures are in the incorporated communities of Cripple Creek, Victor and Woodland Park and these are not evaluated in this plan.

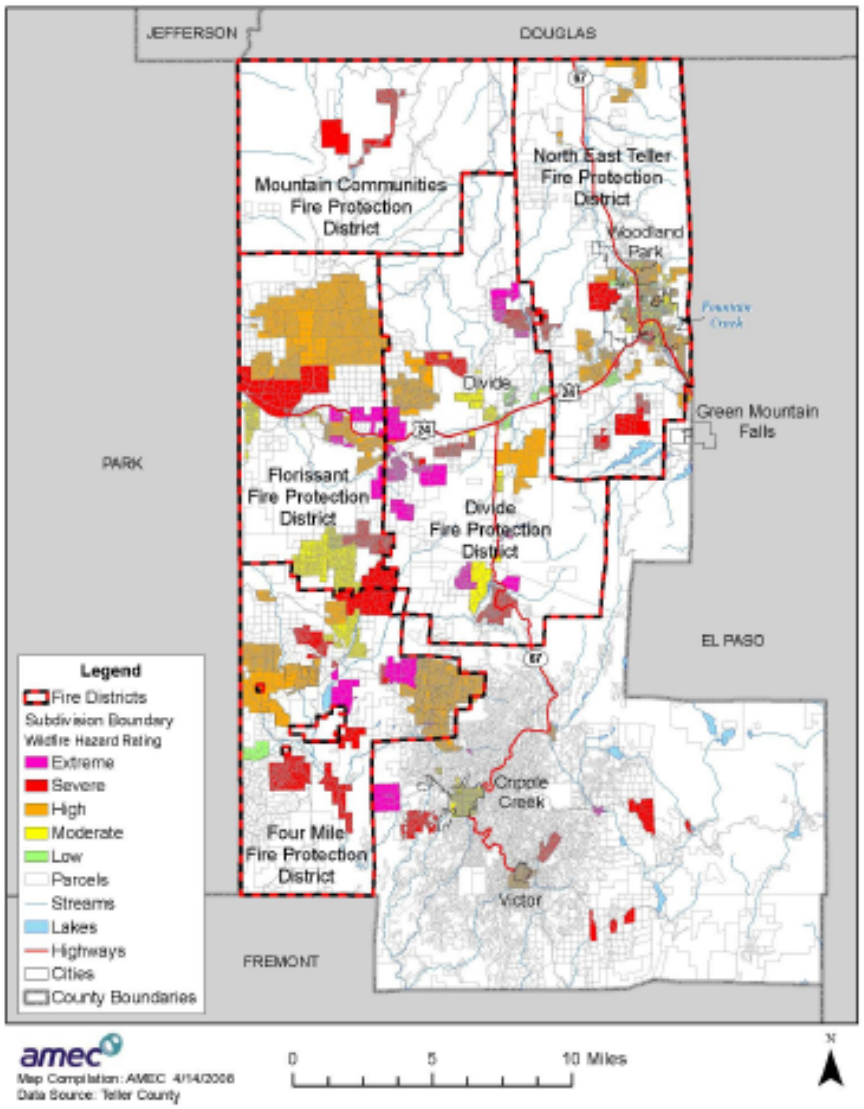


1	Arabian Acres
2	Aspen Hills
3	Aspen Village Subdivision
4	Colorado Mountain Estates
5	Cripple Creek Mountain Estates
6	Crystal Peak Estates
7	Druid Hills Subdivision
8	Florissant Heights
9	Forest Glen Sports Association
10	Golden Bell Nazarene Ranch
11	Goldfield
12	Highland Lakes Subdivision
13	Grand View Estates Subdivision
14	Holiday Hills
15	Indian Creek
16	La Montana Mesa
17	Lakemoor West
18	Las Brisas Ranchettes
20	Navajo Mountain Mesa
21	Palmer Village Subdivision
22	Rainbow Valley
23	Ranch Estates Subdivision
24	Ranch Resorts Of Colorado
25	Ridgewood Subdivision
26	Rosewood Hills
27	Sherwood Forest Estates
28	Spring Valley Subdivision
29	Sunny Slope Acres Filing No. 1
30	Tranquil Acres
31	Trout Haven Subdivision
32	Turkey Rock Ranch Estates
33	Twin Rocks Subdivision
34	Ute Lakes Club
35	Valley - Hi Mountain Estates
36	Westwood Lakes
37	Wilson Lake Estates
38	Woodland West

Map 9: Subdivision with at least 100 residents

The 2008 Teller County Pre-Disaster Mitigation (PDM) Plan[14] used ratings obtained in the 2005 CWPP to estimate the wildfire risk of communities with populations over 100. This map and charts illustrate those rankings. The chart (see page 30) has been edited to include only the unincorporated communities in the county with Medium to Extreme Fire Risk. Maps of individual fire districts and communities published in the Pre-Disaster Mitigation Plan, 2008, are included in Appendix D which includes a detailed explanation of mapping protocol.

Figure 4.23. Teller County Subdivisions Wildfire Hazard & Fire Protection Districts



Teller County
Multi-Hazard Mitigation Plan
August 2008
4.100

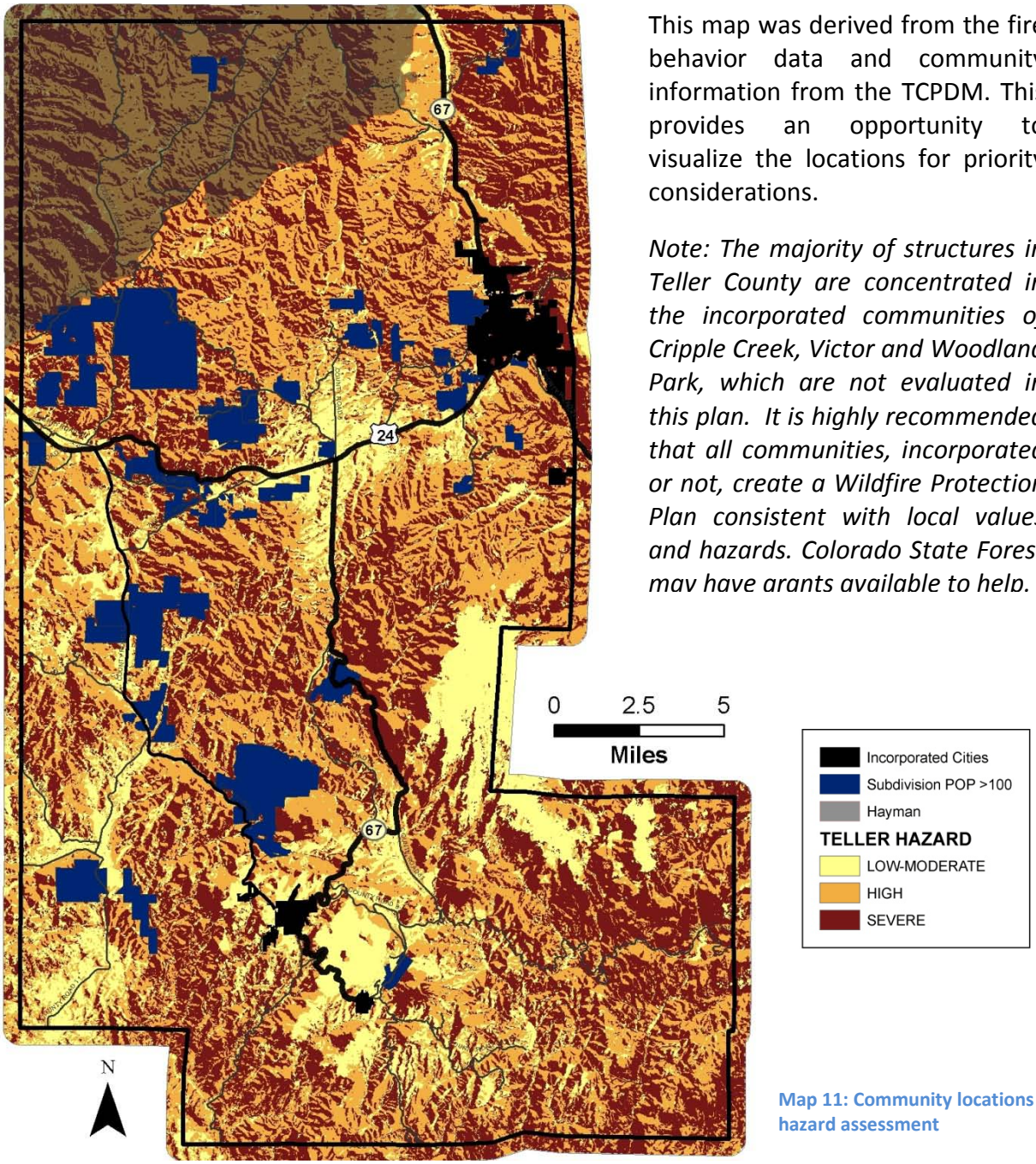
Map 10: Prioritized subdivisions
(see page 30 for a list of subdivisions by priority)

**It should be noted that communities were assessed as a whole, not by individual structures, and those ratings change as communities take action to reduce the risk of wildfire.*

[14] http://www.co.teller.co.us/OEM/tellercopdm_plan.pdf

Communities and Other Values at Risk

While fire is natural in this environment, the protection of lives, structures and other values at risk becomes the focus of CWPP development. Small subdivisions and communities are scattered throughout the county, accounting for 59% of the population. Additionally, several other "values at risk" previously described in this update have been identified as areas to be included as priorities.



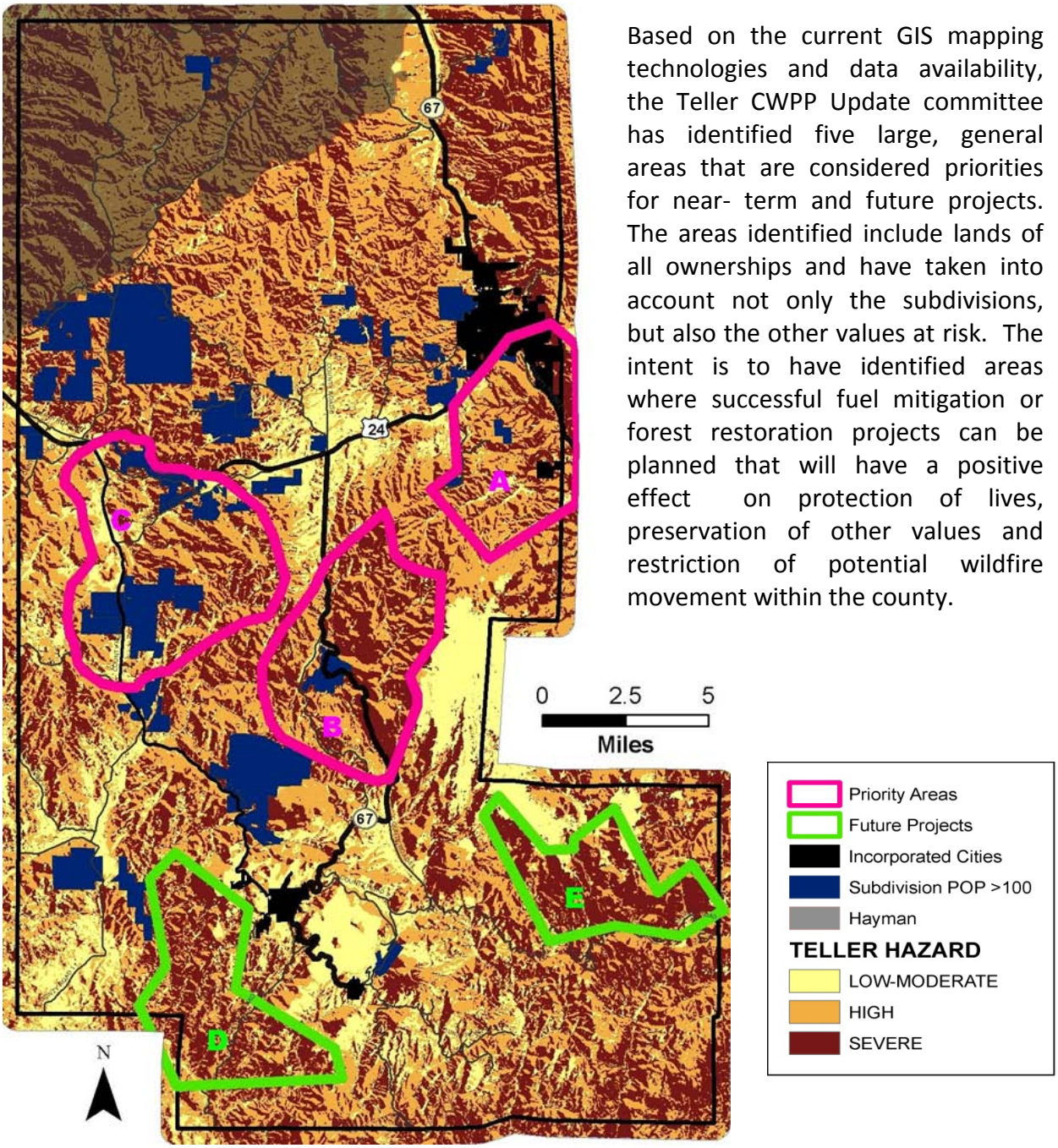
This map was derived from the fire behavior data and community information from the TCPDM. This provides an opportunity to visualize the locations for priority considerations.

Note: The majority of structures in Teller County are concentrated in the incorporated communities of Cripple Creek, Victor and Woodland Park, which are not evaluated in this plan. It is highly recommended that all communities, incorporated or not, create a Wildfire Protection Plan consistent with local values and hazards. Colorado State Forest may have grants available to help.

Map 11: Community locations in hazard assessment

PRIORITY AREAS OF TELLER COUNTY

While this document does describe some priority areas of the landscape, it provides only general information.

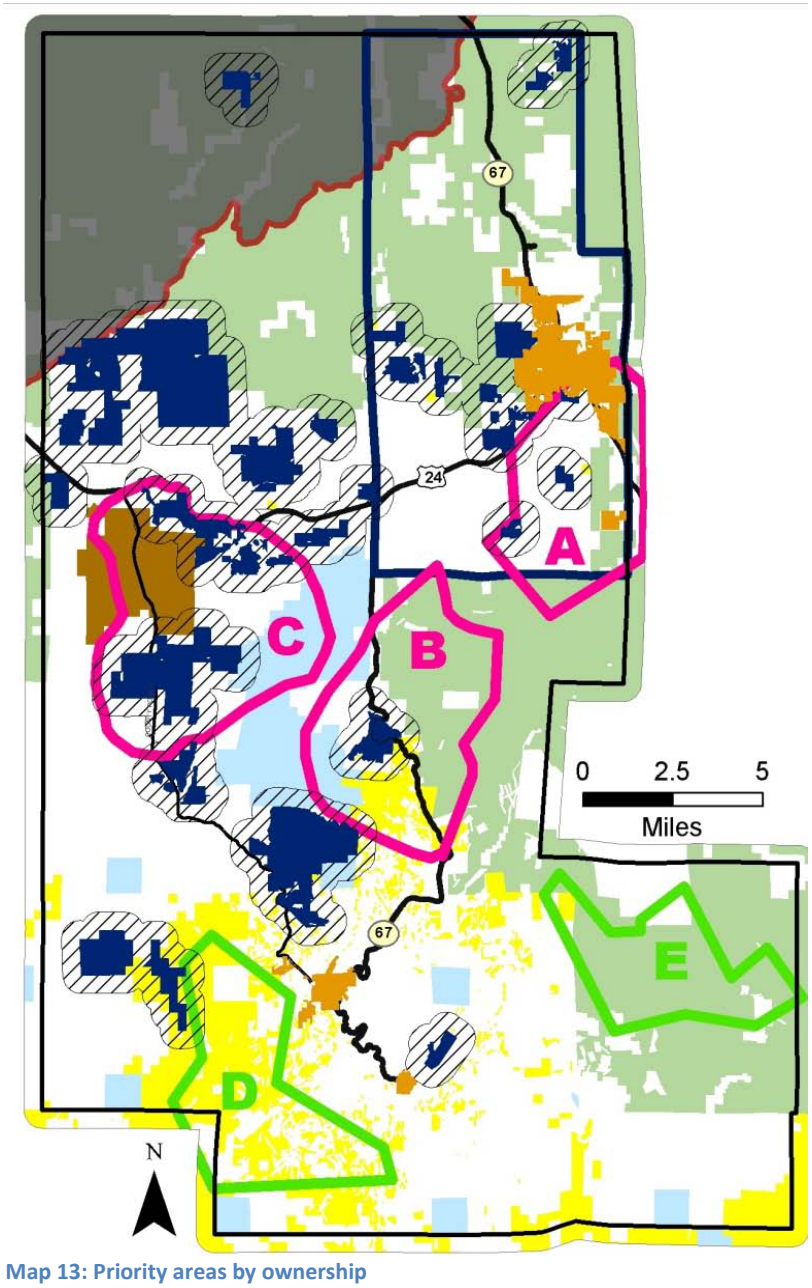


Map 12: Priority areas selected by CWPP committee

Based on the current GIS mapping technologies and data availability, the Teller CWPP Update committee has identified five large, general areas that are considered priorities for near- term and future projects. The areas identified include lands of all ownerships and have taken into account not only the subdivisions, but also the other values at risk. The intent is to have identified areas where successful fuel mitigation or forest restoration projects can be planned that will have a positive effect on protection of lives, preservation of other values and restriction of potential wildfire movement within the county.

Each priority area will need to be closely examined to determine:

- Where, precisely, does work need to be done?
- What type of mitigation technique is needed to achieve desired results?
- What type of cost-share funding or grant will accomplish the project most efficiently?
- Which partners are willing and able to collaborate to improve or enhance the project results?



Map 13: Priority areas by ownership

The Wildland Urban Interface guidelines recommend assessing the half mile buffer zone around a community to identify hazard that are outside of the subdivision boundaries that may pose a wildfire risk. In some cases, these boundaries are shared with public lands and in others the land is privately owned. Identification of this buffer offers to opportunity for discussion of cross-boundary risk reduction between all land owners.

The priority areas highlighted in this updated CWPP include both public lands and several subdivisions.

MITIGATION RECOMMENDATIONS

Within Teller County, the vegetation types prone to wildfire range from meadows through several forest types to alpine tundra. Even one forest type, mixed conifer for example, can vary with respect to species composition, age structure, and insect or disease, over the landscape. Over the broad expanse of Teller County it is impossible to create a one size fits all prescription that works for each wildland acre. Instead landowners contemplating forest or range management should consult with qualified professionals to assess the project area and recommend practices specific to the area and the landowner's objectives.

In general, a properly designed mitigation project should accomplish specific objectives, but in a way that is tailored to the conditions of a specific forest stand. Effective fire mitigation should:

- reduce the threat of crown fire by creating spaces in the forest canopy;
- remove ladder fuels so that fires on the ground will tend to stay on the ground;
- leave the forest more resistant to insect and disease;
- address an insect or disease issues already present in the forest;
- address other landowner objectives.

The science of forest management continues to develop, in a large part in response to the major nationwide wildfire events of the last fifteen years. The trend and science is moving more toward landscape-level forest restoration projects. This management technique looks closely at the historical forest composition that was present prior to the all-out fire suppression efforts of the last century. By mimicking the previous naturally occurring forest stand density and diversity, the locally specific forest management activities will take steps toward establishing the biological conditions necessary for a thriving, sustainable forest for the future. These more resilient forests will have increased capacity to:

- adapt to the impacts of a changing climate;
- remain resilient through insect and disease outbreaks;
- encourage ecological, economic, and social sustainability;
- leverage local resources with national and private resources;
- facilitate the reduction of wildfire management costs, including through reestablishing natural fire regimes and reducing the risk of uncharacteristic wildfire;
- demonstrate the degree to which various ecological restoration techniques achieve ecological and watershed health objectives; and,
- Encourage utilization of forest restoration by-products to offset treatment costs, to benefit local rural economies, to and improve forest health.

Adapted with permission of the Front Range Fuels Treatment Partnership Roundtable (source)

Excerpt from The Front Range Roundtable Report[15]

> *"In all life zones, whether the treatment goal is to protect communities or restore forest health, the Roundtable strongly recommends that every effort be made to select treatment methods that optimize ecological benefits. This means that wherever possible:*
>
> *· Prescribed fire should be used to restore natural processes.*
>
> *· Extraction (removing trees and limbs from treated acres) should be favored over scattering biomass on the forest floor.*
>
> *· Fuels reduction projects should avoid the creation of sterile, park-like forests that have evenly-spaced trees and no shrubs or downed logs. Instead, treatments should achieve a complex mosaic of forest structures with patches of variable tree densities and ages that favor retention of the older trees.*
>
> *· Treatment plans should minimize any adverse impacts on the habitat requirements of species of concern (especially threatened and endangered species)."*

Accordingly, this Teller County update supports the efforts of forest managers across the county not only in fuel mitigation projects, but also in the restoration of our forests where appropriate.

GOALS AND OBJECTIVES, 2011

The information provided by this county-wide CWPP process is general and cannot be used effectively for detailed on-the-ground project planning. However, there are recommendations that can be made in reference to the integrated risk assessments.

Goal #1 Pursue opportunities for restoration, mitigation and forest health projects in or near high priority areas identified in this plan.

Objective #1 – Establish and maintain collaborative partnerships with public land managers to promote fuel reduction and forest health activities throughout all ownerships in the county.

Action 1: Expand partnerships with public land managers to promote cross-boundary efforts on Teller County projects.

Action 2: Remain focused on managing the lands of Teller County in an environmentally responsible manner to promote healthy, resilient and sustainable forests for the future.

Action 3: Pursue funding opportunities in all venues to promote landscape-scale projects on private lands in high priority areas.

Objective #2 -Participate in local, regional, and State committees to have input on policy and funding issues that have an impact on the Teller County fuel reduction and forest health goals.

[15] www.frontrangeroundtable.org/

Action 1: Continue support for participation by Teller County officials in Federal, State and regional committees that create or influence land use policy that impacts Teller County.

Action 3: Maintain visibility of Teller County forest projects and plans using various media outlets and presentations to other concerned organizations.

Objective #3 - Pursue County departmental collaboration when opportunities arise to enhance efforts to mitigate fuels and improve forest health on county maintained roads, parks and open spaces.

Action 1: Expand opportunities for regular maintenance by County departments to achieve multiple goals including public safety, fuel mitigation and overall forest health issues.

Action 2: Monitor conditions in county open space and parks to prioritize maintenance of fuels and forest as necessary for healthy, sustainable environment.

Goal #2 -Support a "Firewise" social climate throughout the community to foster the public understanding of forest restoration and fuel mitigation principles and actions.

Objective #1 -Support the development of Community Wildfire Protection Plans that facilitate public safety, on-the-ground project planning and fuel mitigation.

Action 1: Create additional links on county website to direct residents, developers and contractors to additional information and assistance in developing individual CWPPs, understanding and compliance with land use regulations and guidelines, and designing effective projects.

Action 2: Create and maintain a GIS database at the county level containing geographic information from this plan and records of forest health projects completed by public and private land managers for reference in future planning and local CWPP development.

Action 3: Encourage collaboration between CWPP communities and adjacent public land managers to identify cooperative projects for mutual benefit.

Objective #2 - Support additional educational opportunities for private landowners regarding restoration and fuels reduction in the county.

Actions 1: Partner with organizations offering forest health and fuel reduction education and training to demonstrate county support.

Action 2: Use county website to provide outreach to residents regarding forest activities occurring or planned throughout county.

Objective #3 – Explore opportunities for biomass use to support economic sustainability of local forest projects.

Action 1: Keep up to date on opportunities for biomass use in regional and local commercial ventures.

Action 2: Continue to support slash site use by private land owners and promote markets for the biomass generated by this project.

Action 3: Encourage private sector development of markets for biomass and small diameter timber harvested as a result of forest health and fuel mitigation projects in the county.

PRIVATE LAND RECOMMENDATIONS AND ACTIONS

The Front Range Round Table Report of 2006 issued this guidance:

Firewise practices are critical to protecting structures from wildfire

- **Firewise practices include**:
  1. Creating a defensible space of at least 10 meters around all structures by:
     a. Properly thinning trees and brush within the defensible space.
     b. Removing trash and debris from the defensible space.
     c. Clearing leaves and other debris from roofs and gutters.
     d. Removing branches overhanging any roof and chimney.
     e. Stacking firewood uphill or on a contour away from house.
  2. Using fire-resistant construction such as noncombustible roof and deck materials, fire curtains, and chimney screens.
  3. Developing an emergency access and disaster plan in the event of a wildfire. This includes installing and testing smoke detectors; practicing family fire drills and evacuation plans; ensuring availability of outdoor water supply, fire tools, ladders, and fire extinguishers; posting address signs and load limits on bridges; and ensuring that driveways are wide enough for fire trucks and equipment.
- To be effective, Firewise practices require **comprehensive implementation** and **continual maintenance.**
- **Additional information** can be found at www.firewise.org.

SUBDIVISION-LEVEL RISK ASSESSMENT

Teller County Multi Hazard Plan Aug 2008

Unincorporated Subdivision Wildfire Hazard Risk (Population 100 or More)

Hazard Rating	Subdivision Name - (subdivision with CWPP 8/2011)	Number of Structures	Improved Value	Actual Value	Pop. Est.
Extreme	Trout Haven Subdivision	146	$21,319,404	$24,047,434	374
Extreme	Arabian Acres	134	$20,255,116	$23,041,727	343
Extreme	Ute Lakes Club	41	$2,620,857	$3,301,688	105
	Extreme Total	**321**	**$44,195,377**	**$50,390,849**	**822**
Severe	Colorado Mountain Estates	454	$72,584,591	$79,127,613	1,162
Severe	Sherwood Forest Estates	239	$31,085,508	$33,974,771	612
Severe	Spring Valley Subdivision	215	$38,590,918	$46,180,185	550
Severe	Tranquil Acres	207	$15,720,041	$17,951,315	530
Severe	Rainbow Valley	139	$21,442,579	$23,177,628	356
Severe	Navajo Mountain Mesa	94	$9,728,748	$11,649,877	241
Severe	Turkey Rock Ranch Estates	90	$11,118,041	$13,463,577	230
Severe	Ranch Estates Subdivision	75	$12,286,510	$12,898,441	192
Severe	Goldfield	61	$3,287,385	$3,810,752	156
Severe	Holiday Hills	53	$12,140,281	$15,137,049	136
Severe	Sunny Slope Acres Filing No. 1	52	$10,376,602	$14,068,966	133
Severe	Aspen Village Subdivision	40	$9,412,084	$13,962,764	102
Severe	Lakemoor West	40	$6,139,087	$8,263,873	102
	Severe Total	**1,759**	**253,912,375**	**293,666,811**	**4,502**
High	Indian Creek	601	$75,275,428	$94,328,053	1,539
High	Highland Lakes Subdivision	347	$69,549,662	$79,205,919	888
High	Cripple Creek Mountain Estates	309	$46,631,510	$50,880,866	791
High	Westwood Lakes	137	$26,638,727	$32,470,562	351
High	Florissant Heights	125	$17,150,699	$19,851,969	320
High	Woodland West	117	$22,815,406	$37,915,614	300
High	Ridgewood Subdivision	85	$20,432,002	$27,476,252	218
High	Druid Hills Subdivision	75	$15,832,850	$18,323,666	192
High	Palmer Village Subdivision	74	$16,810,671	$19,857,415	189
High	Golden Bell Nazarene Ranch	56	$7,289,110	$8,910,931	143
High	Crystal Peak Estates	54	$7,052,603	$7,907,307	138
High	Twin Rocks Subdivision	51	$7,675,440	$9,340,272	131
High	Aspen Hills	48	$9,438,339	$12,439,950	123
High	Rosewood Hills	48	$9,330,552	$11,691,862	123
High	Valley - Hi Mountain Estates	46	$7,079,201	$8,905,644	118
	High Total	**2,173**	**359,002,200**	**439,506,282**	**5,564**
Medium	Wilson Lake Estates	111	$12,166,474	$13,868,615	284
Medium	La Montana Mesa	93	$18,673,054	$21,515,741	238
Medium	Ranch Resorts Of Colorado	85	$15,853,440	$18,140,471	218
Medium	Las Brisas Ranchettes	81	$9,480,997	$12,527,247	207
Medium	Grand View Estates Subdivision	51	$9,320,384	$10,785,576	131
Medium	Forest Glen Sports Association	48	$3,542,304	$4,116,147	123
	Medium Total	**469**	**69,036,653**	**80,953,797**	**1,201**
	Grand Total	**4,722**	**726,146,605**	**864,517,739**	**12,089**