Ute Lakes Fishing and Recreation Club

Community Wildfire Protection Plan

May 31, 2011

COMMUNITY WILDFIRE PROTECTION PLAN
Ute Lakes Fishing and Recreation Club
TELLER COUNTY, COLORADO
May, 2011

Submitted by:

CWPP Team

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Date 5/10/11

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Note: This document was prepared in good faith by the Ute Lakes Fishing and Recreation Club CWPP Committee for the benefit of the Ute Lakes residents and the committee assumes no liability in the preparation of this document. This document is intended only as a guide for the Ute Lakes to reduce fire risk and improve forest conditions for the next ten years. The information provided has been obtained from local forest professionals, homeowners participating in this project and from past knowledge and history of projects in the community.

UTE LAKES FISHING AND RECREATION CLUB
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Introduction

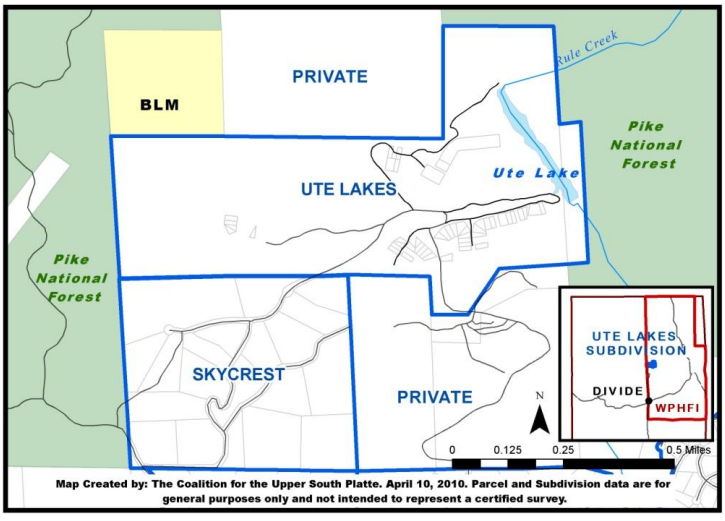
After the devastating wildfire season of 2002, Congress passed the Healthy Forest Restoration Act of 2003 that, among other provisions, allowed communities to develop plans to reduce their risk from wildfire. Community Wildfire Protection Plans provide a framework for a community to assess its wildfire risk, and develop specific projects to reduce that risk. Additional legislation passed by the Colorado General assembly in 2009 requires that plans list and prioritize the community's mitigation projects. Once a plan is completed, the community may apply for cost sharing to implement the projects within the plan. Ute Lakes Fishing and Recreation Club (ULFRC) began developing this plan in January, 2011. A core group was established consisting of representatives from the ULFRC property owners, the Colorado State Forest Service, and the Divide Fire Protection District. Representatives from the core team individuals were: Penny Brandt, Donna Bamber, Gunther Polok, Mary Ann Hussli, and Kit Eldridge, and Dave Root, Assistant District Forester Colorado State Forest Service; Marti Campbell, CWPP Facilitator, Coalition for the Upper South Platte.

Plan Objectives

The purpose of this plan is to guide ULFRC for a period of ten years toward the objective of reducing the wildfire hazard within the subdivision. This plan will be a living document, and will be revised and updated as conditions require. Specific objectives of the plan are:

1. Assess the wildfire hazard within and adjacent to the ULFRC community.
2. Make recommendations to reduce the ignitability of homes and other structures within the community.
3. Develop a prioritized plan to reduce the wildfire hazard within the community while improving the health of the forest.

UTE LAKES FISHING & RECREATION CLUB LAND OWNERSHIP MAP



ULFRC Location

ULFRC is located approximately five miles north of Divide accessed by County Road 5 on the western boundary of Woodland Park Healthy Forest Initiative (WPHFI). There are approximately 42 cabins within the 270 acre subdivision. Average private lot size is 1/6 of an acre. There is 250 acres of common space in ULFRC.

The ULFRC community is situated on the Upper South Platte watershed and a catastrophic wildland fire in this

location could degrade the water quality in streams with severe consequences to people and communities far from ULFRC. Properties adjacent to ULFRC include Pike National Forest, rancher Harry Hoth , the Aspen Moors subdivision, Skycrest subdivision and other private homeowners.

Most homes in the subdivision are constructed of wood, and have metal or composition roofs. Some of the homes have gables which may tend to catch debris in the roof corners and most have wooden decks. Electric lines are above ground and most homes have propane tanks. Water service is provided by wells and cisterns, and there are no fire hydrants in ULFRC. The lake provides a barrier against fire on the eastern side of the property and water for fire suppression efforts. The meadow, fed with many springs, also reduces the risk of fire spreading. The Divide Fire Department has determined that all roads are accessible to their equipment with adequate turn around space at the end of each road. Most cabins are marked with the address. A map of the property identifying roads and cabin numbers will soon be mounted on the first shed as you enter the property.

Ingress and Egress

ULFRC has a single point of ingress or egress and the entrance to the property has a locked gate. The Divide Fire Department and the Teller County Sheriff have keys to the gate. This would be of primary importance in the event of a wildfire since members evacuating and emergency equipment coming in must use the same road. Roads within the subdivision are gravel and wide enough for two-way traffic. Dense fuels along both sides of the community entry road could also present a safety issue if the fire were burning in this area. People leaving the property would go to CR 5 to evacuate the area.

Historical Fire Conditions

Before settlement, ponderosa pine forests in this area typically burned every twenty to thirty years. Lightning was a frequent cause, but some fires were started by native populations to clear underbrush and maintain wildlife habitat. Low intensity fires were the primary factor that shaped the forest, and the pre-settlement forest was an open pine savannah with approximately 40 large trees per acre. Such large trees with thick bark were rarely harmed by the fires that passed under them. Mature trees were often 400 years old, and the openings between trees had several age classes of younger trees, again thinned by frequent fires. The frequent low intensity fire regime had a cleansing effect on the forest and fuel build up between fires was minimal. Such fires rarely reached the upper canopy of the forest and recovery from the fire was quick.

However, in the early 1850's a rare large fire called the "Big Burn" started on the flank of Cheyenne Mountain near the present day Cheyenne Mountain State Park. Winds carried the fire north through Ute Pass and, in some accounts, as far as what is now Breckinridge and the western boundary of South Park. It is likely that the area that includes Ute Lakes was burned during this period. Old photographs from the 1880s show bare hillsides without trees in areas that are now densely forested.

Less than a decade after the Big Burn gold was discovered in the South Park area and the era of settlement began. Remaining forests were extensively logged during the late nineteenth and early twentieth century to provide ties for the Midland Railroad and timbers for mining in the Cripple Creek area. After the Pikes Peak gold rush, farms and ranches were established, and were later replaced by subdivisions. By necessity, fires were suppressed as quickly as possible, and the present forest grew back without maintenance by man or fire.

Current Forest Conditions

Most of our property is on slopes and ridges. We also have three meadow areas. Most of the structures are in the lower reaches of a slope, with five located on a ridge. There is one steep area on the northeast side of the property rising from the lake. Some areas are denser than others. There are grasses in the meadows and open areas, kinnikinnic and other low shrubs clustered around the trees.

Photo of ULFRC forest conditions courtesy of J. Brandt

Our forest is composed of conifer, consisting of ponderosa pine, Douglas-fir, Colorado Blue Spruce, some limber pine and scattered aspen . The current forest consists of trees that grew back after the logging era, and most trees are 120 to 140 years old. The present fire hazard in ULFRC is the direct result of the past fire, logging and re-growth. As a result, the forest is denser than the pre-settlement forest.

Competition for sunlight and nutrients is severe. In the dense canopy, the hazard of severe wildfires increases. Furthermore, trees stressed by severe competition and drought are more susceptible to attack from insects and disease.

Wildland Fire, Fuels and Risk

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

As people moved into the wildland, wildfire was seen as a destructive force to be avoided at all cost. The strict fire suppression activities of the last hundred years, which were meant to protect human life and communities, have interfered with the natural wildfire cycle allowing forest fuels to accumulate, reducing forest and vegetation diversity and limiting wildlife

habitats. The potential costs of catastrophic wildfire, in terms of dollars, resources and esthetics, have continued to rise as the density of the vegetation continued to increase.

Types of Wildfires

Wildfires can be broadly categorized into two types based on the intensity of the fire and the damage caused to the environment. 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. The frequent high winds in ULFRC 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 from the burn area. In addition, because of the intense heat and soil damage connected with a crown fire, vegetation re-growth is significantly delayed. As demonstrated in the Woodland Park Healthy Forest Initiative Community Wildfire Protection Plan, the current forest condition in ULFRC is classified as a closed canopy with a high rating for crown fire risk, and is a high priority project area.

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 not damage the soil and rarely penetrates the thick bark of the ponderosa trees. Due to the release of nutrients attendant to such a fire, new herbaceous plants re-sprout quickly after the fire cools. Prescribed fires mimic this type of fire.

Factors Affecting Fire Behavior

In order to understand the wildfire hazard in ULFRC area, 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

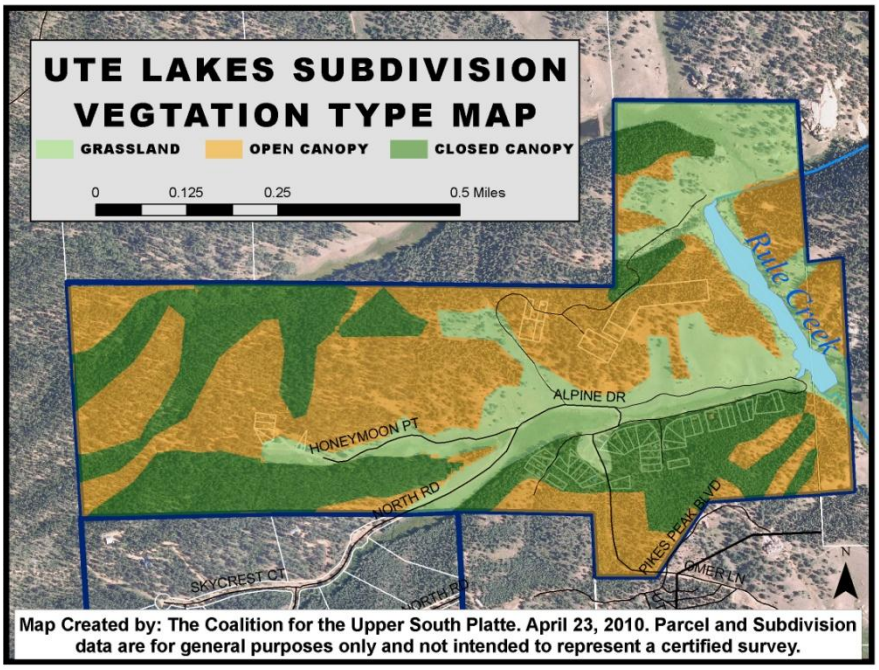
Weather is the “wild card” of fire behavior and cannot be predicted or changed. While lightning or human activity may ignite a fire, high temperatures, low humidity and strong winds increase its intensity. Dry conditions any time of year can increase the frequency and intensity of wildfires; however, 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 the ULFRC subdivision have more grassland and brush than trees. Typically, grass fires ignite more easily and move faster than forest fires. The flame front in a

grass fire moves quickly, and the fire intensity decreases shortly after the flame front has passed. Grass fires can be extremely hazardous to life and property.

The severity of a wildfire is proportional to the amount of available natural fuel. The diameter of fuel also affects fire behavior. Small diameter fuels such as dry grass or small branches ignite more easily than large diameter fuels such as large logs. In a wildfire, the smaller diameter fuels act as kindling, spreading the fire to the larger fuels. Fires burning in organic material on the forest floor usually move slowly and create relatively low heat.



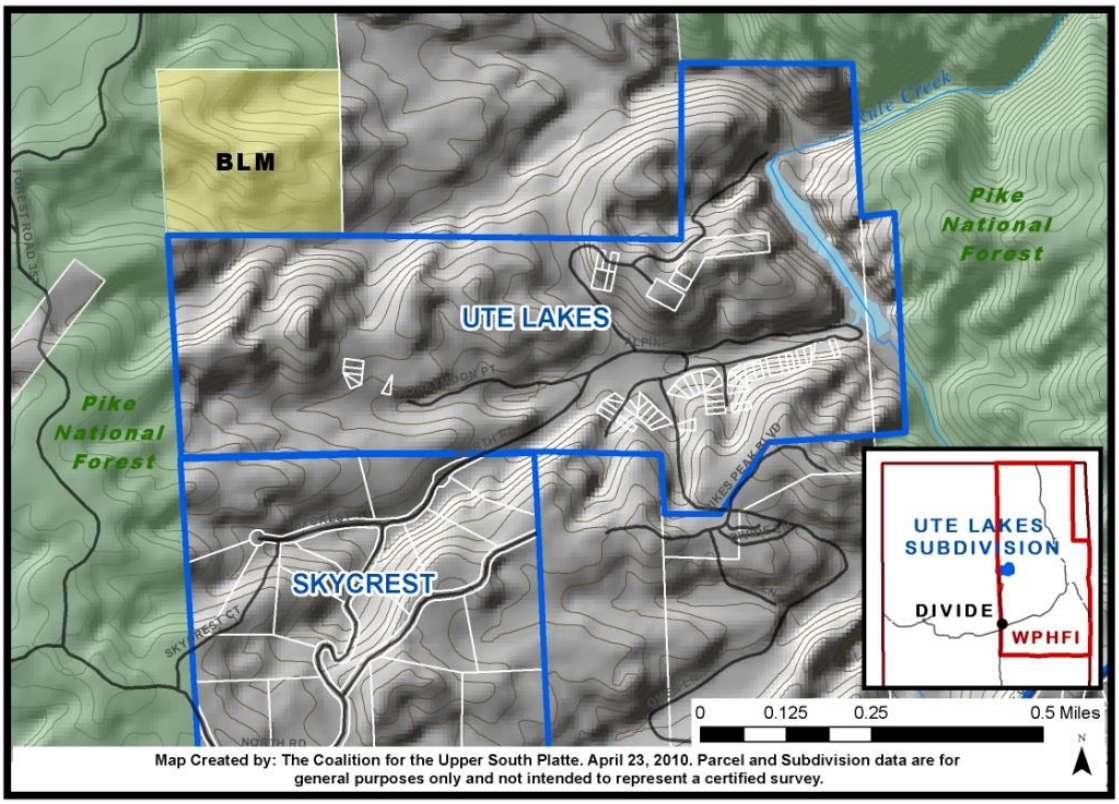
The unnaturally dense forest conditions that cause the potential for catastrophic wildfire in ULFRC also create the potential for cyclical outbreaks of insects and disease because trees weakened by overcrowding and competition for water and sunlight are more susceptible to invasion.

Of the three factors that determine fire behavior, only fuels can be altered to reduce the spread and intensity of a wild fire.

Topography

Topography is a term that describes the lay of the land. The influence of topography on wildfire is simply that heat rises. On a slope, heat rises above a fire, pre-heating and drying the fuel above. The drier upslope fuels ignite more easily and burn more quickly than downslope fuels. The steeper the slope, the more pronounced is this effect. During the day, warming air rises and pushes wildfires upslope. Fires may move four times faster up slopes than on flat ground.

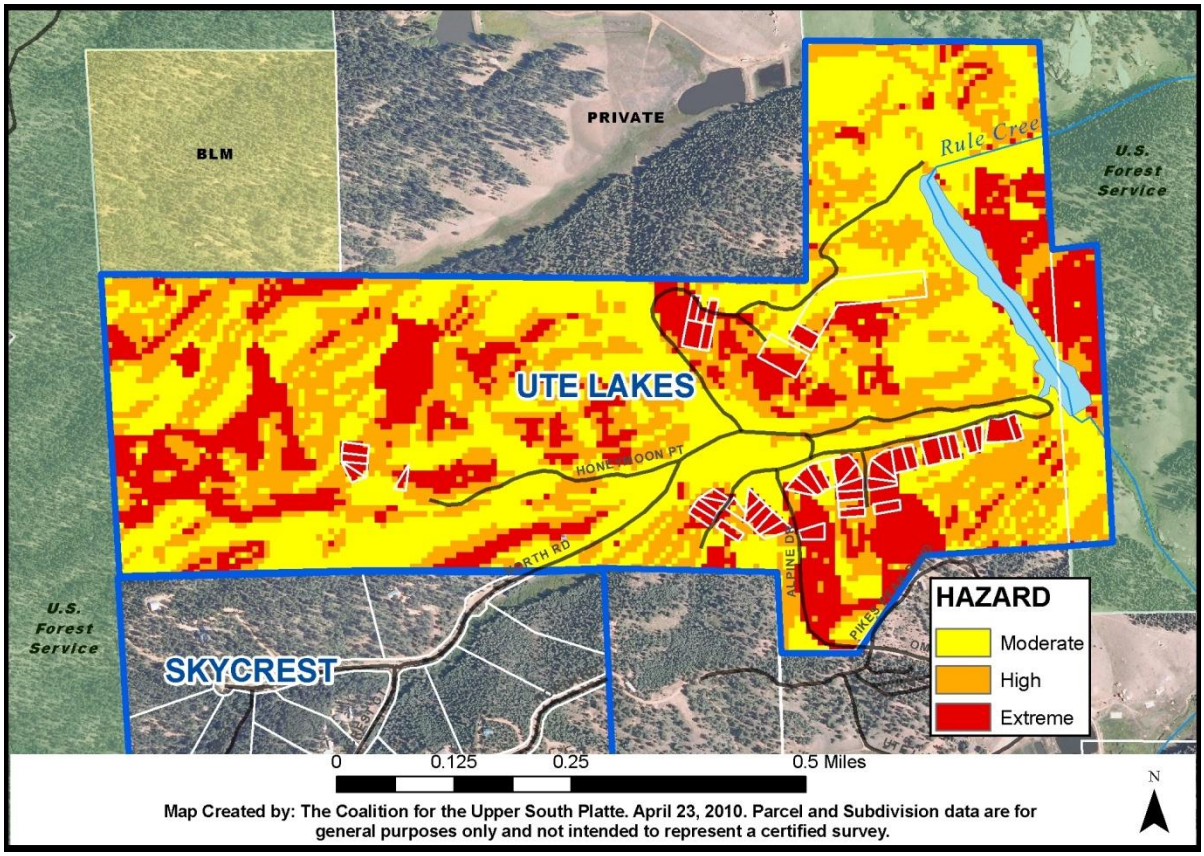
UTE LAKES FISHING & RECREATION CLUB LAND TOPOGRAPHY MAP



Solar heating also plays a part in the intensity of wildfire, and solar heating is a function of the aspect, a term that refers to the primary direction that a slope faces. At this high elevation, slopes in ULFRC that face south and west are pre-heated and dried by strong sunlight which makes these areas more vulnerable to rapidly igniting fuels.

Integrated Risk Assessment

Using computer-based Geographic Information Systems (GIS), the factors that relate to fire behavior (fuels, topography and weather) can be combined to calculate the geographic distribution of wildfire risk. Scores of 1 to 4 (1 being the lowest risk) are assigned to each of the fire behavior factors. Additionally, areas that have no structures were given a score of 1, and those areas with structures were given a score of 2. As a result, the highest scores were attached to areas where structures exist, where the forest is most dense, and where the topography is the least favorable. The total scores, shown by color in the following map, provide a general representation of the areas with the highest risk of destructive fire. This map will be used to prioritize fuel mitigation projects within the subdivision.



Notice that there are both high and extreme conditions in ULFRC. As described in project priorities, this is the area of highest priority for on-the-ground projects in ULFRC, pursuant to this plan, to demonstrate the benefits and practices of fuel reduction, fire breaks and fuel breaks.

Hazard descriptions are as follows:

Low/Moderate Hazard: Low hazard areas are those that are primarily open grasslands and open areas with widely scattered trees. It should not be inferred that low hazard is no hazard. Fires can burn in grass as well as timber. Grass fires move quickly as they are driven by the wind. The flame front from a fire burning in tall grass can easily cause injury or destroy property. The areas identified as moderate hazard are typified by scattered trees with an open canopy absent of ladder fuels and typically have flat slopes. Fire may reach the crowns of the trees, but would not be intensified by steep topography.

High Hazard: More heavily forested areas with abundant ladder fuels and steeper topography are rated as high hazard. The slightly steeper topography increases the risk that fuels ahead of the fire will be preheated by any flames on the slope below.

Extreme Hazard: Extreme hazard areas have a tight-closed canopy, steep terrain, and abundant ladder fuels which increase the chance for high fire intensity, as well as extension into the crowns. “Extreme” hazard areas may have poor access for firefighters and direct suppression efforts (fire fighters on the ground) may be considered too dangerous to risk firefighter safety even though a structure may be present.

Soils are often damaged during severe wildfire events. Frequently soils repel water after a severe wildfire, and the inability of water to penetrate the soil causes increased runoff after rains. Increased runoff can cause flash flooding, severe soil erosion and loss of life long after the fires is controlled. (See Appendix B)

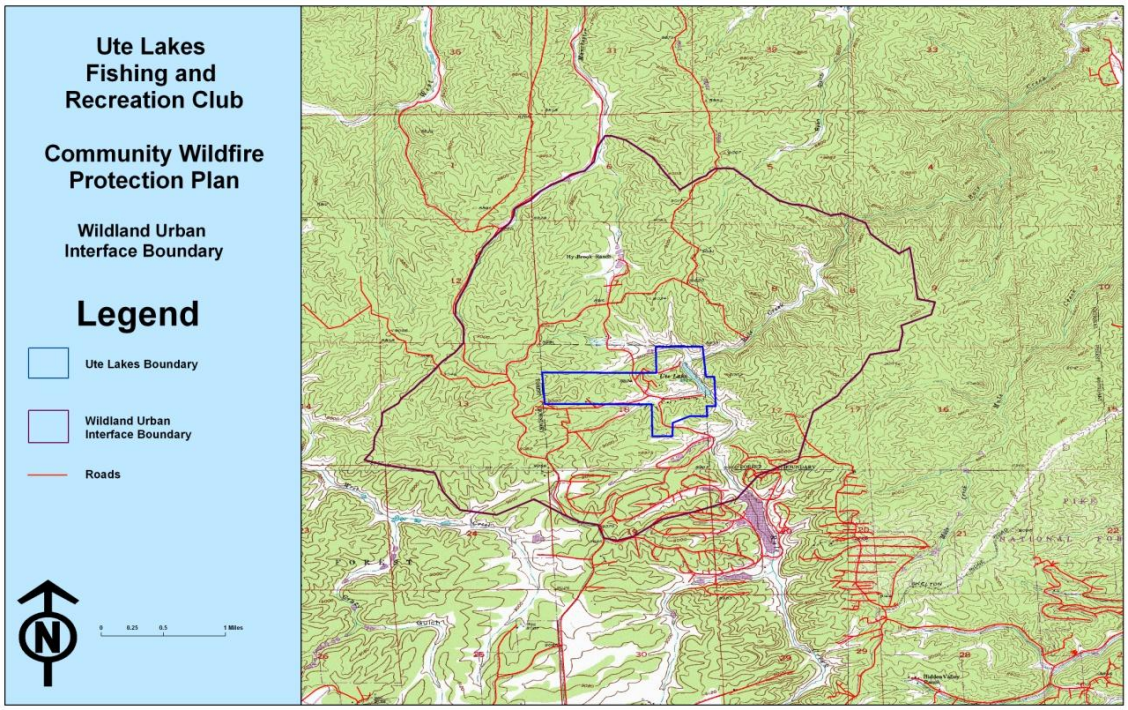
Erosion in unburned area following Hayman fire. USFS photo.

Data from the USDA Natural Resources Conservation Service indicates that 48.8% of the soils in the area have a high potential for damage, and the remaining 55.7% have a moderate potential for damage.

Erosion following the major Colorado wildfires of the last decade has been severe. Complete soils data and maps are in Appendix A.

ULFRC Wildland Urban Interface Boundary

The term Wildland Urban Interface (WUI) refers to those areas where developments are located in areas of wildland vegetative fuels. The homesites in ULFRC are located on forested parcels, and have various risks of being destroyed by a wildfire.



Essentially, due to the relatively small size of individual lots in this subdivision (1/6 acre) and location of the neighboring subdivisions, the entire area surrounding ULFRC can be considered wildland urban interface. Roads, meadows and the lake provide the only fuel breaks for the closed canopy forest.

The USFS forest treatments in Pike National Forest may decrease the risk of fire encroachment from the west and northwest. Due to the westerly and north westerly prevailing winds the community would be at the greatest risk from a fire to the west or northwest. Should a fire occur within this WUI area, the potential for loss of structures, destruction of property, and hazards to human life would be high.

Forest Prescriptions for ULFRC

Legislation passed in 2010 requires Community Wildfire Protection Plans contain specific projects and forest management prescriptions necessary to meet the project objectives. The prescriptions that follow are designed to meet the goals of ULFRC members to reduce the threat from severe wildfire, maintain the beauty of the property, improve wildlife habitat, and improve overall forest health.

Even so, these prescriptions are general in nature. The forests in ULFRC, or anywhere, for that matter, are highly variable. Each acre differs in some way from the surrounding ones. As the projects are designed on the ground, a qualified forester should be consulted for advice specific to the treated area.

Thinning to reduce wildfire threats consists of two basic elements: first creating large enough openings in the canopy to prevent fire spread through the tree crowns; second, to reduce the ladder fuels so that a fire on the ground is unlikely to reach the upper limbs of the trees. It is not possible to prevent all wildfires, so the management objective is to create a forest structure where damage is minimal and recovery is quick. This is called thinning from below

When thinning from below, foresters classify trees based on their position in the forest canopy. In order to make the prescriptions comprehensible to the reader, it is necessary to define the terms. For simplicity, we can divide the forest canopy into three levels: dominant trees, intermediate trees, and overtopped trees.

The dominant trees are the tallest trees in the forest. They are characterized by large diameter trunks and, by virtue of their height, their crowns are in full sunlight. Unless diseased or infested with insects, the dominants are the most vigorous.

The spaces between the dominant trees are occupied by shorter trees—called intermediates--that occupy the middle level of the canopy. They are suppressed by the larger trees around them, and do not receive full sunlight. Their limited supply of energy is used in an attempt to reach the light, and the trunks are smaller in diameter than the dominant trees. Suppressed trees usually have one sided crowns and flattened tops as a result of crowding by dominant trees.

In the lowest level of the forest canopy are the smallest trees that are completely overtopped. These are the least vigorous trees in the forest. The overtopped trees represent a significant fire hazard as so called "ladder fuels". Ladder fuels are those fuels near the ground that provide a pathway for ground fires to reach the upper forest canopy. Lower branches of dominant trees, dead branches, and shrubs can also be ladder fuels.

When thinning from below many of the intermediate trees are removed to make gaps in the canopy while all of the over topped trees are removed to reduce ladder fuels. Shrubs growing underneath trees are removed, and lower branches are pruned to remove ladder fuels. This method leaves the most vigorous trees in place, while creating the least visual impact. The general method can be altered to reflect other landowner objectives.

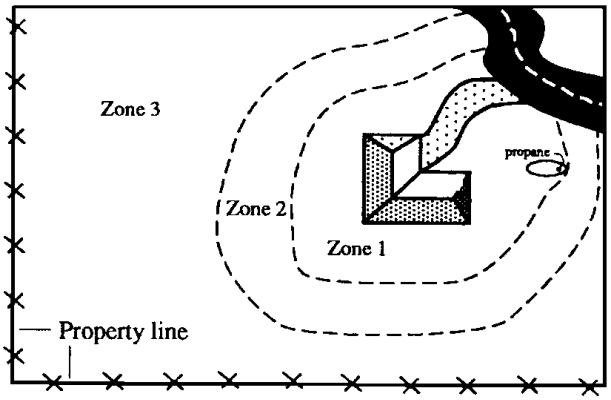
Once in the canopy, a fire becomes wind driven, produces intense heat, and cannot be controlled by firefighters with hand tools. Lack of forest management, recent droughts and unnaturally dense forests conspire to create a serious wildfire threat to the community.

Fire Risk to Structures

The introduction of structures in the flammable forest creates a different dilemma. In the past little information was available to homeowners and contractors regarding the wildfire threat to the structure itself. (*See Appendix B for more information.)*

Structural fuels include houses, outdoor equipment, lawn furniture, ancillary buildings, fences and firewood. In the WUI, structures can contribute to the quantity of fuel 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 a grassland or forest and become a wildfire.

Creation of Survivable Space



The first defense of a home or other structure against wildfire is to create and maintain a survivable space (also called defensible space) within 100 to 200 feet of the structure and along the driveway. This does not mean the survivable landscape must be barren. Survivable space is an area around a structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire toward or away from the structure. Survivable space also provides room for firefighters to safely do their jobs. A house is more likely to survive a wildfire if nearby grasses, brush, trees and other forest fuels are managed to reduce potential fire intensity long before there is a fire. The survivable space should also be clear of man-made hazards such as stacks of firewood.

Colorado State Forest Service publication 6.302, *Creating Wildfire Defensible Zones*[1] sets forth the standards for defensible space. This publication is written primarily for larger lot owners in ponderosa pine forests. Homes in the ULFRC that are in ponderosa and ponderosa with Douglas-fir stands should follow the guidelines as written.

However, most of the home sites are in the mixed Colorado blue spruce, Douglas- fir and aspen stands southwest of the lake. Spruce trees, when growing in dense stands may not be deeply rooted, and are likely to blow down when the canopy is thinned. Special techniques are necessary when creating defensible space in dense spruce.

Recommendations for zone one should be followed as written. If a tree is to be left in zone one, leave ponderosa, aspen or Douglas-fir, which are wind-firm trees. It is critical to remove all the spruce trees within 15 to thirty feet of a structure—not only to reduce fuel but also to avoid the hazard of the tree blowing down close to high use areas.

In zone two, leave clumps of three to five large spruces with approximately 15 feet of open space around the clump. Remove ladder fuels and most of the intermediate trees within the clump.

While many landowners are understandably reluctant to cut the larger trees, it is recommended that, in some areas with small spruce in the understory, the large trees be cut to leave a patch of younger trees. Any practice that increases the diversity of species and tree ages will reduce the devastating potential of a single insect type or disease, such as the current mountain pine beetle epidemic on the western slope.

Aspen are always desirable leave trees in fuel mitigation projects. Deciduous trees will not carry fire in their crowns and may be left in openings in the conifer canopy to maintain a forested appearance. Where there are patches of aspen thin the spruce around the edges of the aspen to enlarge the opening with minimal visual impact. Remove conifer regeneration in the understory of aspen groves. It will eventually overtop and shade out the aspen.

Zone three should be thinned in a clumpy manner as well. Clump size may be larger, for instance clumps of three to eight trees with 10 to 15 feet of space around the clump. Follow the guidelines for thinning in the understory as in zone two.

Structure Ignition

Structures burn when the heat from a wildfire is transferred to the structure. There are three ways that heat can be transferred. They are through radiation, convection, and firebrands. Heat transfer can be from surrounding burning vegetation to structures or from burning structures to the surrounding vegetation. The three methods of heat transfer are:

Radiation: Wildfires can spread to a home by radiated 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.

[1] "Defensible Space," CSFS Website http://csfs.colostate.edu/pages/defensible-space.html.

Convection: Direct contact with flames, or the wildfire's convective heat column, may also ignite a home. This is most likely to occur when trees or brush near a structure ignite and the flames touch a flammable part of the structure.
Firebrands: Firebrands are embers that are blown ahead of a fire on strong updrafts created by the fire. Firebrands can be carried long distances – more than a mile – by the winds associated with a wildfire. Roofs and decks are the most vulnerable parts of a structure to fire brands.

The 2002 Hayman Fire was Colorado's most devastating forest fire until the Four Mile Fire in Boulder County, 2010. The Hayman fire burned 138,000 acres and 132 homes in 20 days. Surprisingly, 662 homes within the perimeter of the fire were not destroyed.
USDA Forest Service scientists Jack Cohen and Rick Stratton reported on the causes of home destruction in the "Hayman Fire Case Study".[2] Many of the homes that survived did so without intervention by firefighters. The study objective was to determine if there were common factors among these surviving homes that might be helpful in preventing loss of homes in future wildfires. They found that "torching" or intense crown fires within 30 feet of a structure destroyed 70 homes. If a house was destroyed but the surrounding trees did not burn, they assumed that embers or firebrands ignited it. Based on this logic, they concluded that 62 of the 132 homes (47%) destroyed in the Hayman Fire were ignited by surface fires or firebrands.

Cohen and Stratton found that home destruction was related more to a house and its site-specific surroundings than to the context of the larger Hayman Fire. If the vegetation around a house allowed high intensity fires to burn near them, they did not survive. If the vegetation permitted only low intensity fires, the structures had a good probability of surviving. Flammability of roofs, decks, siding materials, and other house construction features raised or lowered the risk of flames igniting homes.

Currently, all cabins are recreational use only, however, several members plan on making ULFRC their primary residence in the near future. The Hayman and Manchester Fires both within 5 miles of ULFRC, highlighted the risk from fire that we face and served to focus our efforts. Since the Hayman Fire, our membership has diligently addressed the fire risk to our property. Through education all members now fully support plans to reduce risk of wildfire for our cabins, forest, meadows and lake. Many property owners have limbed trees, cleared brush and done some thinning on their site.

[2] "Hayman Fire Case Study" compiled by Russell T. Graham, Sept. 2003, USDA Rocky Mountain Research Station, Report RMRS-CTR-114, 396 pages.

Community Values at Risk

In addition to our residences, there are also about 22 outbuildings ranging from Club equipment sheds to an old hen house, former outhouses now used for storage, to a garage. These structures are valued by our community. Maintaining the health of the forest, lake, ponds and natural springs on the property benefit our wildlife habitat and the Rural Creek Watershed. Lake water is available for wildfire suppression. Structures from the original Ute Lake Ranch built in the 1920's are still located on this property and have historical value. The dam and overflow on Rule Creek, the lake, ponds, spring fed meadow, cabins that have been in families for generations, a grove of large aspens over a foot in diameter have high value to the members.

Photo of Prayer Tree courtesy of J. Brandt

Additionally, there are culturally altered Ute Indian trees on the property: the northern ridge has two prayer trees and there is a grove of about 24 medicine trees down by the lake. An unusual prayer tree is there, too, with branches growing in opposite direction. These trees have been identified by Celinda Kaelin, local historian, writer and expert on Ute Indian culture and need protection.

About 100 residents of ULFRC and additionally the residents of Aspen Moors, Skycrest, the Hoth Ranch, Spring Valley , the Kissinger Ranch and several private homeowners are at risk from a fire occurring on ULFRC property.

Suppression Capabilities

The ULFRC community expects prompt initial attack response from Federal, state, and local fire suppression resources in the event of a wildland fire start that threatens the community. When possible, aggressive initial attack, including the use of aircraft, has been shown to be the most cost effective approach for dealing with wildfires. The ULFRC community does understand that occasionally, due to reasons such as lack of resources, multiple fire starts, extreme burning conditions, or inability to mitigate firefighter safety issues, initial attack will not be successful; however, the community expects that each party with a role in suppression will take aggressive actions to contain, control, and fully extinguish wildfires during the initial attack period and thereafter, and agrees the primary concern is the extinguishing of wildland fires.

Divide Fire Protection District would have the responsibility to be first responder to a fire - wildland or structural -in the ULFRC vicinity. This department is composed of three part-time paid staff and 40 volunteer firemen. As a volunteer department, there are significant limits to the manpower, number of responding vehicles, and response time that can be anticipated in a fire emergency. Mutual aid agreements are in place with neighboring fire districts and additional personnel and equipment can be requested from other fire departments.

Fire Response -The Teller County Sheriff serves as Fire Incident Commander until other resources are on scene. Other assistance from the OEM (Office of Emergency Management) includes an emergency operations center which can request mutual aid from other fire departments in Teller County and the ability to request assistance from outside the county, if needed. In the event of an evacuation the Sheriff—not the firefighters-- would be in charge of evacuating residents. Information about evacuations is given out through the media and by the GEOCAST call 911).

The priorities of the first responding firemen are:

1 – Ensure the safety of the fire fighters and residents in and near the fire.

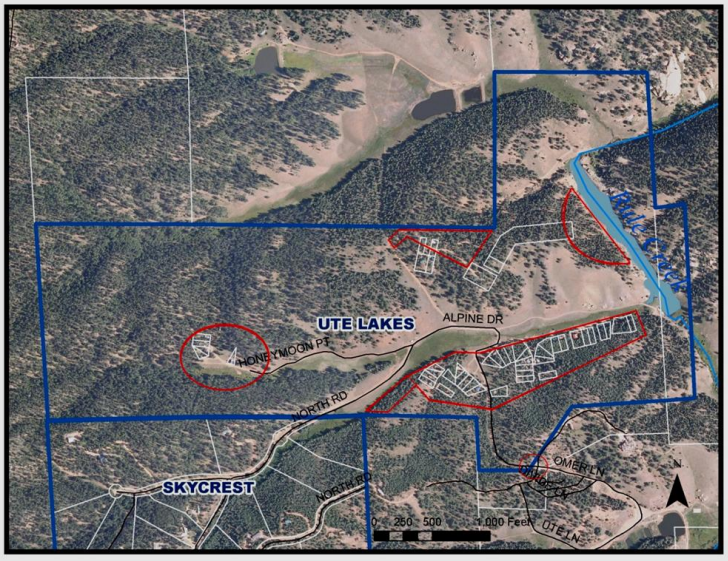
2 – Evaluate the fire situation, assign firefighters to specific duties to control and suppress the fire, and inform the sheriff and other agencies about the situation.

3 – Restrict the loss of homes and other property.

The most common causes of wildfire ignitions are 1) lightning strikes, 2) human actions such as fireworks, open fires, out-of-control burning, careless smoking, etc., and 3) a structure fire which ignites adjacent vegetation and spreads to other homes.

Fuel Reduction Priorities

ULFRC's highest priority is to reduce risk of damage by wild fire to persons and property of ULFRC by thinning forest in identified dense areas.



- Fuels treatment in the dense forested area and brush bordering the entry gate on Giggey Lane on the south side of the property.
- Assistance to residents in creation of survivable space around structures.
- Shaded fuel break south of the cluster of lots in the SE section of the property
- Hand thinning in the area surrounding the Ute Culture trees by the lake. This area also has dwarf mistletoe infested trees that should be removed to reduce the spread of this disease.
- Fire break along North View Road to improve emergency fire suppression access and to protect property from fire intrusion.
- Wetland restoration efforts and fuel reduction along the south side of Honeymoon Point west of entry gate. There is also some dwarf mistletoe in this area.

Safety
ULFRC's second priority is to develop a second egress from the property to be used by emergency equipment and personnel. At one time there was another access to the property at the end of Caretaker Point. This road is now fenced off by the current owner of the neighboring property and the road has fallen into disrepair. Our goal is to work with this neighbor to make the road accessible to emergency equipment.

Education
Additionally, ULFRC's Healthy Forest Committee will continue to educate and inform the membership of progress in meeting the goals and the requirements for ongoing maintenance. Communication is accomplished through annual meetings, summer picnics, work parties and newsletters.

We will partner with the Pikes Peak Historical Society and the United States Forest Service to locate culturally-scarred trees and mitigate around them. By mapping the Prayer, Medicine, Message and Burial trees we'll work at preserving these living relics of the past.

Maintenance
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. As projects are completed, they will be listed for maintenance inspection and retreatment as needed.

ULFRC will continue to pursue grant funding to support additional mitigation efforts on both private lots and common ground.

Conclusion
The CWPP cannot compel any homeowner to take action. The key to success or failure in reducing fuels hazards and increasing community safety is in the hands of the homeowners. They are the ones that will benefit most from survivable space thinning and fuels reduction projects. Owners need to see the importance of fuels reduction and thinning as this is the key to the health of their forest. This plan will be published on the CSFS website so that it will be available to all residents. The plan is intended to guide Ute Lakes Fishing and Recreation Club mitigation efforts for a period of ten years, but it will not be a static document. As part of the work planning process the goals and objectives will be evaluated and amended as necessary.

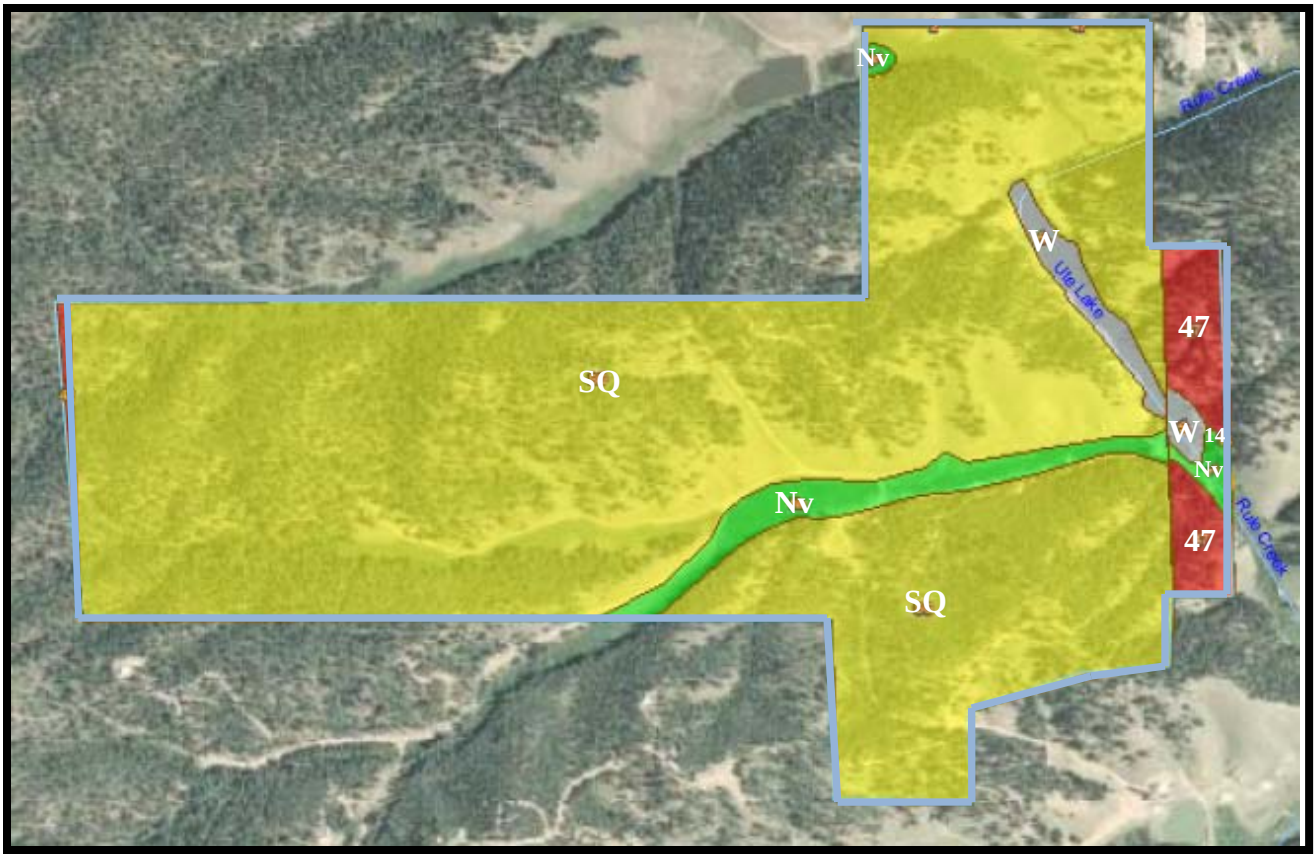
Appendices

Appendix A: Priorities

Ute Lakes Fishing and Recreation Club CWPP Priorities 2011-2016

Education	Maintain contact with all residents to provide current information regarding upcoming projects and opportunities.	Use annual picnic and work parties to educate, train & inform.
		Invite guest speakers to community events.
		Post seasonal tips in website and newsletter.
Risk Reduction	Fuel Reduction	Thinning and removal of ladder fuels on priority areas to decrease fuel hazards on common land.
	Structure Survivable Space	Assistance to owners
		Provide opportunity for slash removal to burn pile or schedule annual onsite chipping days.
	Community Safety	Develop & implement a phone tree plan for emergency notification.
		Develop evacuation plan for members including those with special needs
		Pursue agreement for emergency egress with adjacent property owner
	Preservation	Map Ute Culture trees for protection and preservation.
		wetlands and drainages
Maintenance and leadership	Funding	Pursue grants to assist in implementation of projects.
		Set aside a portion of community funds to provide grant match.
	Collaborative Partnerships	Pursue cross-boundary projects with USFS
		Explore becoming a “Firewise Community”
		Approach neighboring subdivisions to discuss collaborative cross-boundary projects.
	Develop a risk control plan for common areas and road easements.	Use risk control plan to annually inspect for fire hazards, weeds, insects and disease risks.
		Schedule maintenance projects as necessary

Ute Lakes Soils Data



USDA Natural Resources Conservation Service

Potential Damage by Fire

Area of Interest

Soils Map Units

Ratings

High

Moderate

Low

Not rated or not available

Rating	Acres in AOI	Percent of AOI
Moderate	244.1	90.2%
Low	11.1	4.1%
High	10.5	3.9%
Null or Not Rated	4.8	1.8%
Totals for Area of Interest	270.6	100.0%

Haul Roads, Log Landings, and Soil Rutting on Forestland

This table can help forestland owners or managers plan the use of soils for wood crops. Interpretive ratings are given for the soils according to the limitations that affect various aspects of forestland management. The ratings are both verbal and numerical.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

For *limitations affecting construction of haul roads and log landings,* the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings. *Well suited* indicates that the soil has features that are favorable for log landings and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for log landings. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for log landings. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of forestland equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service, National forestry manual.

Haul Roads, Log Landings, and Soil Rutting on Forestland– Pike National Forest, Eastern Part, Colorado, Parts of Douglas, El Paso, Jefferson, and Teller Counties							
Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2—Aquolls, 1 to 10 percent slopes							
Aquolls	90	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
		Sandiness	0.50	Wetness	0.50		
				Slope	0.50		
14—Garber very gravelly coarse sandy loam, 15 to 40 percent slopes							
Garber	85	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
		Sandiness	0.50	Sandiness	0.50		
42—Sphinx gravelly coarse sandy loam, 15 to 40 percent slopes							
Sphinx	65	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
47—Sphinx, warm-Rock outcrop complex, 15 to 80 percent slopes							
Sphinx, warm	60	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
Rock outcrop	25	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00		
				Stickiness; high plasticity index	0.50		
Nv—Rosane taxadjunct loam, 0 to 3 percent slopes							
Rosane	90	Moderate		Poorly suited		Severe	
		Flooding	0.50	Wetness	1.00	Low strength	1.00
		Low strength	0.50	Flooding	0.50		
		Sandiness	0.50	Low strength	0.50		
SG—Catamount-Guffey complex, 15 to 40 percent slopes							
Catamount	60	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
Guffey	30	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
		Sandiness	0.50	Sandiness	0.50		
W—Water							
Water	95	Not rated		Not rated		Not rated	

Appendix C: Contacts For More information:

Colorado State Forest Service, Woodland Park Office
113 South Boundary St., PO Box 9024
Woodland Park, CO 80866
phone: 719-687-2921

Divide Fire Protection District
103 County road 51
Divide, CO 80814-9143
Phone: 719-687-8773 *non emergency only*

US Forest Service, Pike District
601 S. Weber Ave.
Colorado Springs, CO 80903
phone: 719-636-1602

Websites For More Information:

"Creating Wildfire Defensible Zones": www.csfs.colostate.edu/pdfs/6302.pdf
"Firewise Construction" : www.csfs.colostate.edu/pdfs/construction_booklet.pdf
"Forest Home Fire Safety": www.csfs.colostate.edu/pdfs/6304.pdf
"Firewise Plant Materials": www.csfs.colostate.edu/pdfs/6305.pdf
"Fuel Break Standards for Forested Subdivisions & Communities": www.csfs.colostate.edu.
Other Information: www.csfs.colostate.edu (*use search box at upper right)*
Ute Cultural Trees: www.pikespeakhsmuseum.org/Museum/Main/Headings/Ute