

# **Firewise Communities / USA**

## **Community Assessment Report for Gold Mountain**

Plumas County, California

April 25, 2012



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## **1) INTRODUCTION**

The Firewise Communities/USA program is designed to provide an effective management approach for preserving wildland living aesthetics. The program can be tailored for adoption by any community and/or neighborhood association that is committed to ensuring its citizens maximum protection from wildland fire. The following community assessment is intended as a resource to be used by Gold Mountain residents for creating a wildfire safety action plan. The plan developed from the information in this assessment should be implemented in a collaborative manner, and updated and modified annually or as needed.

Principal participants who assisted in the preparation of this assessment are:

### **Plumas County Fire Safe Council**

- Jerry Hurley, Council Coordinator & Advisor to GM Fire Safe Committee

### **City of Portola Volunteer Fire Department**

- Travis Schiavone, Chief

### **California Department of Forestry & Fire Protection (Cal Fire)**

- Jay Neuman, Plumas County Fire Protection

### **Gold Mountain Community Services District (acting as Firewise Board)**

- George Sipel, President
- Mike Callaghan, Vice President
- Rene St. Pierre, Treasurer
- Steve Fuqua, Director
- Butch Niford, Director
- Ivan Gossage, General Manager

### **Gold Mountain Homeowners Association**

- Jim Lafferty, President
- Peter Hanley, Vice President
- Lou Navin, Treasurer
- Jack Carlson, Secretary
- Len Fernandes, Director
- Mark Elliott, General Manager

### **Gold Mountain Firewise Committee**

- Mike Callaghan, Chair
- Steve Fuqua
- Gail McGrath
- John Petrin
- Roger Sprehn, Community Member & Chief, Corte Madera Fire Dept.
- Jeanne Harper
- Craig Simmons
- Mark Elliott

## **2) THE HOME IGNITION ZONE**

Gold Mountain is located in a wildfire environment. Wildfires will happen-- exclusion is not a choice. The variables in a fire scenario are when the fire will occur, and where. This assessment addresses the wildfire-related characteristics of the Gold Mountain community. It examines the area's exposure to wildfire as it relates to ignition potential. The assessment does not focus on specific homes, but examines the community as a whole.

A house burns because of its interrelationship with everything in its surrounding home ignition zone---the house and its immediate surroundings. To avoid a home ignition, a homeowner must eliminate the wildfire's potential relationship with his/her house. This can be accomplished by interrupting the natural path a fire takes. Changing a fire's path by clearing a home ignition zone is an easy-to-accomplish task that can result in avoiding home loss. To accomplish this, flammable items such as dead vegetation must be removed from the area immediately around the structure to prevent flames from contacting it. Also, reducing the volume of live vegetation will affect the intensity of the wildfire as it enters the home ignition zone.

Included in this assessment are observations made while visiting Gold Mountain. The assessment addresses the ease with which home ignitions can occur under severe wildfire conditions and how these ignitions might be avoided within the home ignition zones of affected residents. Gold Mountain residents can reduce their risk of destruction during a wildfire by taking actions within their home ignition zones. This zone principally determines the potential for home ignitions during a wildland fire; it includes a house and its immediate surroundings within 100 to 150 feet.

The result of the assessment is that wildfire behavior will be dominated by the residential characteristics of this area. The good news is that by addressing community vulnerabilities, residents will be able to substantially reduce their exposure to loss. Relatively small investments of time and effort will reap great rewards in wildfire safety.

### **3) DESCRIPTION OF THE SEVERE CASE WILDLAND FIRE CHARACTERISTICS THAT COULD THREATEN THE AREA**

Firefighters generally categorize fires into several basic types. Among those are wildland fires and structure fires, two types that are relevant to this assessment. A wildland fire is one that primarily occurs within and consumes natural vegetation, while a structure fire primarily burns structural materials and building contents. These two fire types converge in the wildland-urban interface (WUI).

Locally in Plumas County, wildland fires are addressed by the U.S. Forest Service (USFS) on National Forest lands and private lands by contractual agreement with California Department of Forestry and Fire Protection (CAL FIRE). Structure fires are generally addressed by the City of Portola Volunteer Fire Department under contract. Portola has mutual aid agreements with the four closest local volunteer fire districts. Response to a WUI fire in Gold Mountain would involve the USFS and City of Portola and the other mutual-aid resources under a unified command.

Fire intensity and spread rate depend on the fuel type and condition (live/dead), the weather conditions prior and during ignition, and the topography. Generally the following relationships hold between the fire behavior and the fuel, weather and topography.

- Fine fuels ignite more easily and spread faster with higher intensities than coarser fuels. For a given fuel, the more there is and the more continuous it is, the faster the fire spreads and the higher the intensities. Fine fuels take a shorter time to burn out than coarser fuels. Fine fuels have the most important impact on fire intensity as measured by flame lengths. Fine fuels are considered the primary carrier of fire in fire modeling.
- The weather conditions affect the moisture content of the dead and live vegetative fuels. Dead fine fuel moisture content is highly dependent on the relative humidity and the degree of sun exposure. The lower the relative humidity and the greater the sun exposure, the lower will be the fuel moisture content. Lower fuel moistures produce higher spread rates and fire intensities.
- Wind speed significantly influences the rate of fire spread and fire intensity. The higher the wind speed, the greater the spread rate and intensity.
- Topography influences fire behavior principally by the aspect and steepness of the slope. However, the configuration of the terrain such as narrow draws, saddles and so forth can influence fire spread and intensity. In general, south and southwest aspects tend to be warmer and drier, and the steeper the slope, the higher the uphill fire spread and intensity.

Gold Mountain is situated in a forested area bounded by steep terrain with the Middle Fork of the Feather River on the northern boundary and dry southerly

slopes to the south. That setting, coupled with prevailing summertime breezes and strong fall pre-frontal winds from the southwest to west, suggests that the most likely spread of a wildland fire would be from the south or west. This is evidenced by two large fires that burned prior to the development. Also, because Plumas County has some of the highest incidence of lightning fires in California, ignitions from a lightning fire can spread in any direction under the influence of downdrafts during thunderstorms.

Embers or firebrands are produced from burning needles, leaves, bark, twigs and cones, when natural vegetation burns. Embers tend to be carried aloft by the superheated air of the blaze and can then be carried long distances in advance of the actual flame front by even light winds. It is not uncommon to find glowing embers a mile ahead of the main fire.

If the conditions are right, millions of embers can be produced in a relatively short time by even a modest wildland blaze. These tend to fly like incendiary snowflakes, eventually settling to the surface and even “drifting” to form small clumps. If they land on a combustible material, they can cause a new ignition even though the main fire is still a long distance away. This is the way that “spot fires” are ignited. This is also the primary threat to residences.

Fire modeling accomplished as part of the 2004 *Plumas County Hazardous Fuel Assessment and Strategy* indicated that fire behavior in the adjacent timber would be conducive to passive and active crown fire with some surface fire. Prior fires have also bore out these modeling estimates. Torching trees both increase fire intensity and become excellent generators of embers for spotting. Thus, the preventative actions taken on those treated lands have reduced the potential intensity and ember production of an approaching fire; but the community can still anticipate a severe “ember attack” during a wildland fire event in untreated stands both adjacent and within the community.

For purposes of this assessment, there are two viable scenarios for a severe wildland fire event in the Gold Mountain community, would be 1) a major blaze in untreated forestlands south or west of the community, producing large quantities of windblown embers, and 2) a lightning strike without precipitation and the rapid onset of downdrafts. In either case, subsequent spot fires, torching trees or burning structures in the interior of development could produce additional quantities of embers, contributing to further ignition potential and suppression difficulty.

#### **4) SITE DESCRIPTION**

##### **Overview**

Gold Mountain is planned development which was permitted by the County of Plumas, California in 1996. The development consists of 1281 acres containing lots for 427 residential units, a golf course, a resort, common spaces, service areas, and as yet unplanned convenience, commercial, and open recreational areas. The development is located in Eastern Plumas County, sections 15, 16, 17, and 22 of Township 22 North, Range 13 East, M.D.B.M.

The subdivision is bisected by County Road A-15 which connects to State Route 70 in Portola to the east and to State Route 89 near Clio to the west. The A-15 roadway provides the community with good two way emergency evacuation routes. All major residential roadways are also designed to loop back to the A-15 in two directions.

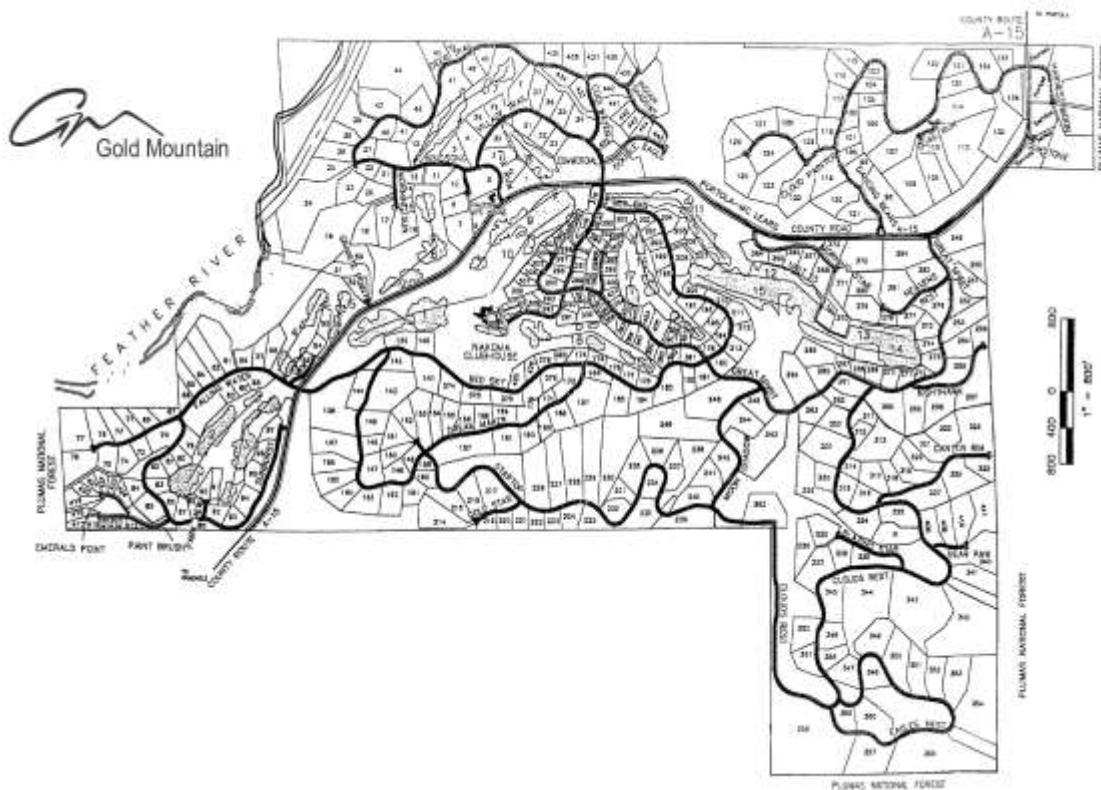
A golf course and resort were completed in 2001.

All residential lots were sold to individual homeowners over the next several years. Currently there are 82 homes developed on these 401 residential lots (approximately 155 residents), and about half of these are used as part time vacation homes. The CC&R's for the Homeowners Association for these residential homes and lots require that all properties be maintained in a fire safe condition and that all homes have a 'class A' fire rated roof. Unfortunately, the County of Plumas, as part of the development permit, did not require the developer to reduce fire fuel loads prior to subdivision as required.

26 additional residential lots were planned for timeshare or condo use. Six of these lots are currently developed with 12 time share 'villas'.

The following chart and plot map show Gold Mountain's current land use:

<b>Gold Mountain Property by Usage</b>	<b>Parcels</b>	<b>Acres</b>
Residential lots – undeveloped	319	705
Residences – developed	82	168
Timeshare Condos – undeveloped	20	22
Timeshare Condos - developed	6	7
Dragon Golf Course	1	155
Nakoma Resort – developed	1	16
Resort Owned Open Recreational	4	70
Resort Owned Commercial	20	8
HOA Open Common Areas	27	124
Service Areas	6	6
<b>Total</b>		<b>1281</b>



## **Neighbors**

The development is bounded by U.S.F.S. land on the northeast (Wild and Scenic Feather River) and part of its southern and eastern borders (Plumas National Forest). A large portion of borders facing south and west is owned by a cooperative timber company (Graeagle Land and Water Co.). Other small boundary portions to the east and north are privately owned homes and undeveloped land.

## **Topography and Vegetation**

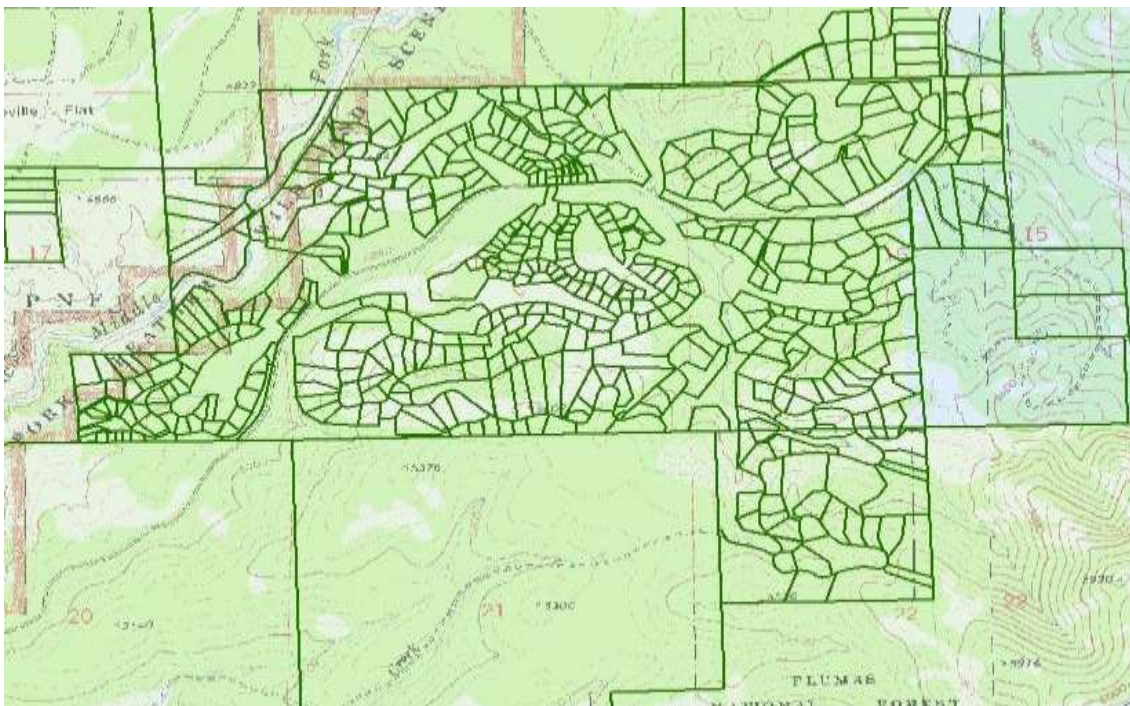
The canyon containing the Middle Fork of the Feather River runs along the northern boundary. It has excessively steep slopes and provides a channeling effect for diurnal winds. The community generally lies on a northwest aspect. Slopes steepness ranges from 0 to 35%, with occasional steeper pitches. Gold Mountain's elevation ranges from 4,600 feet along the river's bluff to 5,400 feet at the southeast corner.

The vegetation in the surrounding area is predominately densely forested land with a brush or litter understory. Much of the land base is prone to torching and crowning due to the fuel continuity. Much of the future development's land base was burned in a wildfire in 1959 creating a mosaic of vegetation.



The forestlands along the southern boundary of Gold Mountain were treated with a fuel break in order to reduce fire hazards. Thinning and understory cleanup actions have occurred on some of the Plumas National Forest public lands. These efforts have helped reduce, in the treated areas, but not completely eliminated the probability of high intensity crown fires around the community.

About 30% of the community land base consists of untreated private home owner lots with heavy fuel loads. These would add to fire suppression difficulty and continue to produce crown fires and more embers. There are a number of features within the community to lessen wildfire impacts. About 40% of the private parcels within the community have had hazardous fuel reduction (HFR) activities. The Gold Mountain Community Services District enforces compliance with California's defensible space law (PRC 4291) on all developed properties. The existing golf course provides numerous green belts.



## **Wildfire History**

Wildland fires usually occur between June and October, a period of time commonly referred to as fire season. However, it is not uncommon for fires to occur as early as April and as late as November.

In the early 20th century, a fire burned the western portion of the area where the community now lies. In 1959 the 'Clio fire' burned through most of the wildland which is now occupied by Gold Mountain.

Between 1970 and 2010, over 200 wildland fires have received initial attack actions by Plumas National Forest fire personnel within a 5-mile radius of Gold Mountain. In 1977 the Willow fire burned 1500 acres along the north side for the

Feather River. Suppression efforts kept it from crossing into the area where the community exists today.

There have been three threatening fires since the community was established and homes constructed. In November 2002, lightning ignited the A-15 fire, which burned 15 acres along county road A-15 about a mile south of the community. This fire initiated evacuation actions and created initial community wide realization of wild fire risks. The GM Fire Safe Committee was formed in March of 2003 partially as a result.

More recently, in July 2011, a vegetation fire was ignited by an automobile on an undeveloped private Gold Mountain lot. This fire was contained to a half acre and extinguished by a unified incident command, headed by local volunteer agencies and assisted by CAL Fire and the USFS. One home was directly threatened but undamaged. In September 2011 a lightning strike ignited a very small fire on a residential lot that was extinguished by resident action and follow up by USFS response.

### **Organizations**

Regarding fire safety, the Gold Mountain Homeowners Association (GM HOA) is responsible for the maintenance of 124 acres of common areas, and the enforcement of CC&R's relative to vegetative clearance on the all residential lots.

The Gold Mountain Community Services District (GM CSD) is responsible for water, sewer and fire prevention and protection services. The GM CSD contracts with the City of Portola Volunteer Fire Department (3.5 miles away) for structural fire protection. The GM CSD is also responsible for providing fire flow and hydrants through its potable water system. Water is also available by from the Nakoma Resort's golf course ponds.

The Gold Mountain Fire Safe Committee (GM FSC) is a joint committee of the above two organizations. The mission of the GM FSC is to support and encourage activities which reduce hazardous fire fuel loads in the community. In all cases the group seeks to preserve the natural beauty of Gold Mountain while taking prudent steps to reduce the risk of devastating wildfire damage. The committee is also responsible for making recommendations to the GM CSD on needed infrastructure improvements and services related to structural fire protection. The committee makes recommendations to the GM HOA and takes action to maintain the community's common areas in a fire resilient condition. The GM FSC does periodic surveys of all structures in the community regarding fire safety and defensible space and makes requests where necessary to CAL Fire for the enforcement of California PRC 4291.

The Gold Mountain community seeks and receives help and advice from the Plumas County - Fire Safe Council, the Beckworth Ranger Station of the USFS, CAL Fire, the City of Portola VFD, as well as other local volunteer fire districts.

## **5) ASSESSMENT PROCESS**

The Gold Mountain Fire Safe Committee organized a team of local residents, and wildland fire authorities to gather data for the assessment of wildfire hazards in and near Gold Mountain. On August 17, 2011 this team toured Gold Mountain with Fire Safe Committee members Mike Callaghan, John Petrin, Craig Simmons, & Gail McGrath. They were joined by Mark Elliott, General Manager GM HOA, and George Sipel, President GM CSD. Jerry Hurley, Plumas Fire Safe Council Coordinator, Jay Neuman, CAL Fire Plumas County Fire Protection, and Jerry Sipes, Director of Plumas County Office of Emergency Services participated and recorded their assessments.

The background document on which this assessment is based is the March 2003 report by Jerry Hurley "Wildfire Mitigation Recommendations for the Gold Mountain Homeowners Association". This was produced in the wake of the 'A-15 fire' in November of 2002. It gave an overview of wildfire threats to Gold Mountain and detailed 45 recommendations for the mitigation of these threats. During the ensuing eight years, progress has been made towards the resolution suggested by many of these recommendations - but much work still needs to be done. Several of the same key mitigation recommendations made in 2003 were still observed during the 2011 firewise assessment process.

This assessment team met and toured the Gold Mountain community in order to observe the threats mentioned in this 2003 report, as well as other wildfire threats that they observed. The observations and recommendations of this exercise are reported below in Section 7.

## **6) IMPORTANT CONSIDERATIONS**

The Firewise Communities/USA program seeks to create a sustainable balance that will allow communities to live safely while maintaining environmental harmony in a WUI setting. Gold Mountain homeowners already balance their decisions about fire protection measures against their desire for certain flammable components on their properties. It is important for them to understand the implications of the choices they are making. These choices directly relate to the ignitability of their home ignition zones during a wildfire.

### **1. As a community Gold Mountain should continue hazardous fire fuel reduction in common areas, undeveloped resort owned properties, and all undeveloped residential parcels.**

85% of Gold Mountain's land mass is undeveloped forested land. The original developer did some cosmetic fire fuel reduction in the late 1990's, but fuel reduction was not performed to any set of standards on its entire 1281 acres.

The risk posed from fire ignitions within or near Gold Mountain spreading rapidly via embers spotting new fires on untreated forested land is very high in many areas. *"The community of Gold Mountain is most at risk due to the large number of undeveloped lots that create large pockets of untreated fuels."* (See Jerry Hurley's 'Gold Mountain Community Firewise Assessment' in appendix C). About half of the 318 undeveloped homeowner lots for the most part remain untreated. Many of these lot owners seem basically uninterested in fire safety. Many other owners of undeveloped lots have completed HFR projects on their properties, either by themselves or through contractors.

Much fire fuel treatment of the community's undeveloped open forested areas has been accomplished during the past 10 years. In 2010 and 2011 the new resort owner, with some support by the GM HOA and GM CSD, undertook fuel treatment in areas around the golf course. This project, mostly brush and tree limb removal, has greatly expanded the utility of the golf course fairways as fire breaks. Ongoing since 2003, the GM HOA and GM CSD have annually planned and executed hazardous fuel reduction projects in undeveloped common and resort areas using volunteers, employees, or contractors.

Much remains to be done both in terms of community and individual property owner involvement. Fuel reduction in untreated forested areas will undoubtedly be a permanent, ongoing process for the community.

## **2. Homeowners must continue to create and maintain defensible space in the ignition zones around their Gold Mountain homes.**

15 % of Gold Mountain's land mass contains structures, mostly single family residences. The homes on these properties, when left attached to the existing untreated landscape present a very large additional fire fuel source that would spread of wild fires.

Starting in 2006 the GM Fire Safe Committee started mandatory defensible space and fire safety surveys that included all homes and other structures within Gold Mountain. The initial focus of these surveys was to help educate homeowners. The committee's goal has been to help each homeowner better understand and meet the spirit of the current California statute 4291 pertaining to "defensible space". It is critical that the homeowners can visualize what defensible space will look like on their property as well as the fire risks involved in non-compliance. Partially as a result of this effort, homeowner understanding and participation in defensible space projects on their properties has grown during the past 6 years.

## **3 Over time the frequency of wildfire ignitions will grow in Gold Mountain and surrounding areas.**

Wild fire ignitions occur as a result of both natural as well as man made sources. Natural ignitions, predominately lightning, historically accounts for 60% of wildfires in Plumas County. Records show that Plumas averages the highest incidence of lightning fires in California.

As the population of Gold Mountain and surrounding areas grow, so will the frequency of human caused fires. These ignition sources include, smoking, debris burning (CC&R's do not allow GM homeowners to burn), off road vehicles, smoking, railroad (there is one in Gold Mountain), arson, playing with fire, as well as many recreational and construction activities. Over time, the more people the more ignitions.

Residents need continuing education on safety when dealing with activities that may become fire sources. The community should utilize fire safety messages in signage, newsletters, and other communications to keep awareness of fire danger high. No smoking signs have been installed on trails, but other public areas should be considered. All residents should have a working knowledge of what activities invite fire ignition.

Visitors - construction crews, golfers and villa guests should all be made aware that fire danger is high and that fire safety depends on them. Clear rules concerning outdoor grills, smoking, tool usage, ect, need to be made repetitively at all levels.

## **7) OBSERVATIONS AND RECOMMENDATIONS**

Below are a consolidated list of 19 observations and recommendations made during the assessment of wildfire hazards on August 17, 2011 (see section 5 of this report). They are grouped into five focus areas: fire fuel conditions, ignition prevention and fire safety awareness, emergency response and access, community organization for emergency support issues, and fire flow and water systems. In most cases these observations were made by multiple observers.

### **Fire Fuel Conditions**

1. The Nakoma lodge roof is made wood and has accumulations of pine needles. Construction debris adjacent to west end of Nakoma needs to be removed. Decayed shipping crates in 'rock storage area' require removal.  
**Recommendation:** Remove pine needles, construction debris and crates.
2. A Large HFR burn pile currently exists below the Nakoma lodge.  
**Recommendation:** The pile has since been burned,. Continue to guard against future use of this location as an green dump.
3. Some of the 'villa' timeshare condos and rental units are lacking 30 and 100 foot defensible space maintenance and are lacking clearance around exposed decks.  
**Recommendation:** Complete defensible space work initiated in 2011.
4. Some private homes have insufficient defensible space and fire safety problems.  
**Recommendation:** Continue the established defensible space survey process to completion. Enlist CAL Fire enforcement on homes with continuing high risk.
5. Homeowners have the choice of above ground or under ground propane tanks. Those above ground are required to have a screen. Some propane screens were observed lacking vegetation clearance. Wood screens around some residential propane tanks require brush clearance.  
**Recommendation:** Continue to inspect to assure that both the screens and tanks have vegetation clearances during fire safety surveys. Underground propane tanks are safer and should be recommended for new construction.
6. Many vacant homeowner lots, as well as some common areas and undeveloped resort owned properties remain untreated for fire fuels and represent a high risk for the spread of vegetation fires.  
**Recommendation:** Identify and rate the fire danger on all undeveloped lots. Continue to work with landowners and build consensus that treatment is needed. Provide homeowners with resources to contractors, curbside chipping, and other programs to help them complete HFR on their lots. Continue to manage annual HFR projects to complete the treatment on common areas and resort properties.

## **Ignition Prevention and Fire Awareness Education Issues**

7. Visitors may lack awareness of fire dangers.

**Recommendation:** Work with golf course and condo management to use educational posters and signage focusing on campfires (never allowed), outdoor cooking, fireworks, and smoking. Post these in rental condos, golf shop, golf carts, and on golf course.

8. Current and new homeowners need continuing reminders on fire prevention and safety.

**Recommendation:** Continue to educate homeowners of the necessity and value of reducing hazardous fuel conditions and encourage them to treat their property. Use time allotted at the GM HOA annual meeting for this purpose. Include fire safety and evacuation information in new owner welcome packets and pre-design meeting information packets for new home builders.

## **Emergency Response and Access**

9. House numbers are displayed on stone markers which can become covered by snow and or lack address markers displayed on the homes. The house numbers are difficult to read especially in the dark.

**Recommendation:** Determine and implement a supplemental solution that will be effective both at night and in the presence of snow buildup.

10. Response times for responders from Portola and Graeagle are fairly long.

**Recommendation:** Look for opportunities to reduce travel time for fire suppression assets.

11. Many of Gold Mountain's 25 dead-end private roads terminate with sub-standard turn arounds for use by emergency responder vehicles.

**Recommendation:** Look for opportunities to correct the dead-end roads that don't presently have the required 60' length for a hammerhead "T". Some may be able to achieve the necessary length with the inclusion of existing driveways that can handle the weight, to achieve the "same practical effect". Post "No Turnaround" or "No Outlet" signs, as applicable, at the entry to these streets. Post signage for 'No Parking' in and near the end of dead end street turnarounds.

12. Some driveways are too steep for safe use by emergency responders especially in icy conditions. Some driveways lack turnouts as required by California code. Driveway access issues still exist on a few undeveloped lots.

**Recommendation:** Tag these lots so that DRC will ensure that these issues are addressed as they are developed.

13. Emergency responders lack information on how to keep entry gates from automatically closing.

**Recommendation:** Train both fire response organizations and local residents on where the power switches are so that gates will be turned off in the open position.

## **Community Organization for Emergency Support Issues**

14. There are currently no phones in 'villas' that can be used to communicate with 'villa' residents in a fire emergency.

**Recommendation:** Train all resort personnel to communicate with villa residents in case of fire. Add phones if possible or an alarm system..

15. Only the GM HOA manager can remotely raise gates – needs backup and cross training.

**Recommendation:** Train multiple local residents to be able to perform this task in an emergency should the GM HPA manager be absent.

16. Organize volunteers to act as guides during fire emergencies. Provide better maps of streets, homes, and fire flow sources.

**Recommendation:** Train resident volunteers to be prepared to give direction. Create and distribute to all fire and medical responders an updated Gold Mountain map showing locations and addresses of homes, full time or part time residents, hydrants, ponds, gates, and gate codes.

### **Fire Flow – Hydrants, Ponds and Water Systems:**

17. Some parts of the community need additional hydrants and increased water delivery and / or storage specifically for structural fire suppression. Requirement is for minimum of 6" supply lines throughout.

**Recommendation:** There are currently 17 hydrants in the GM community. More are being added each year. The GM CSD needs to continue to seek opportunities to add hydrants in all neighborhoods with developed homes and to improve the systems capacity to supply water to them. Other options such as adding water tanks in strategic locations for fire suppression purposes need to be explored..

18. Some hydrants lack off road parking for water tenders.

**Recommendation:** Develop gravel pads adjacent to all hydrants which will allow them to pull off of roadways and allow passing by other vehicles.

19. Hydrants and standpipes are sometimes hard to spot, especially at night. Electric utility boxes are currently marked with reflective blue markers, the color which is normally used to mark hydrants..

**Recommendation:** Install distinctive reflective markers to all hydrants.



## **8) SUCCESSFUL FIREWISE MODIFICATIONS**

When adequately prepared, a house can likely withstand a wildfire without the intervention of the fire service. Further, a house and its surrounding community can be both Firewise and compatible with the area's ecosystem. The Firewise Communities/USA program is designed to enable communities to achieve a high level of protection against WUI fire loss while simultaneously maintaining an esthetic and sustainable ecosystem balance.

A community and its homeowners need to focus attention on the home ignition zone and eliminate the fire's potential pathways to its structure. This can be accomplished by disconnecting the house from high and/or low-intensity fire that could occur around it. The following photographs were taken in Gold Mountain and are examples of good Firewise practices.

### **Community Defensible Space Enforcement**

Since 2006 the GM Fire Safe Committee has surveyed the home ignition zones of all of the 88 homes and time share condos within the community, using a 'Gold Mountain Defensible Space & Wildland Fire Safety Checklist' (see appendix A). For the most part, these surveys were done in the presence of the homeowners. The expectation is that this will help homeowners see the benefits of compliance with California's PRC 4291 defensible space law from the point of view of their own home. These benefits include both fire safety and esthetic landscaping enhancement of their property.



**GM Home with Defensible Space Zone**

At the start of 2012, 64 of Gold Mountain's 89 lots with structures (including 82 residences) have passed all areas of the Defensible Space & Wildland Fire

Safety Checklist. Several have been surveyed multiple times. Residents who fail one or both of the 0 to 30 foot or 30 to 100 foot sections of the checklist are given a consultation on how to achieve a safer home ignition zone. Their homes are reviewed again after 60 days. Those failing to deal with hazardous problems are referred to CAL Fire's local prevention officer for review and enforcement per the GM CSD Policy to Promote Home Defensible Space (see appendix B)

### **Community Hazardous Fuel Reduction on Common Areas**

Annually the GM Homeowners Association budgets approximately \$15,000 towards fuel reduction projects and maintenance on its 124 acres of common areas. The GM CSD budgets approximately \$10,000 of its fire budget for hazardous fuel reduction projects. These are usually joint projects always done on open forested areas without structures. Some of these areas have trails which are maintained by a separate GM HOA budget.



**Area marked for 2012 mastication project**



**Common area with HFR completed - 2009**

### **Fuel Break on South and West Boundary**

This project was carried out by Plumas County Fire Safe Council on private, industrial forestlands abutting (to the South and West) the Gold Mountain subdivision. The treated parcel area is composed of second growth forests covering steep slopes in most areas. The project was initiated by the Gold Mountain Homeowners Association and the Gold Mountain Community Services District in August of 2008 and was successfully completed by September of 2010. The Plumas Fire Safe Council ably administered and advised the community at every step through completion. 187 acres received fuels treatment under this project. The project was primarily funded by a grant from the California Fire Safe Council (\$86,750), the Plumas County Board of Supervisors (Title III funds spent in 2004-2006 for site and environmental analyses) and by the GM HOA and GM CSD (\$38,700).

The GM HOA and GM CSD budget \$5,000 annually for the specific purpose of the eventual cost of maintenance of the fuel break as understory grows back in.



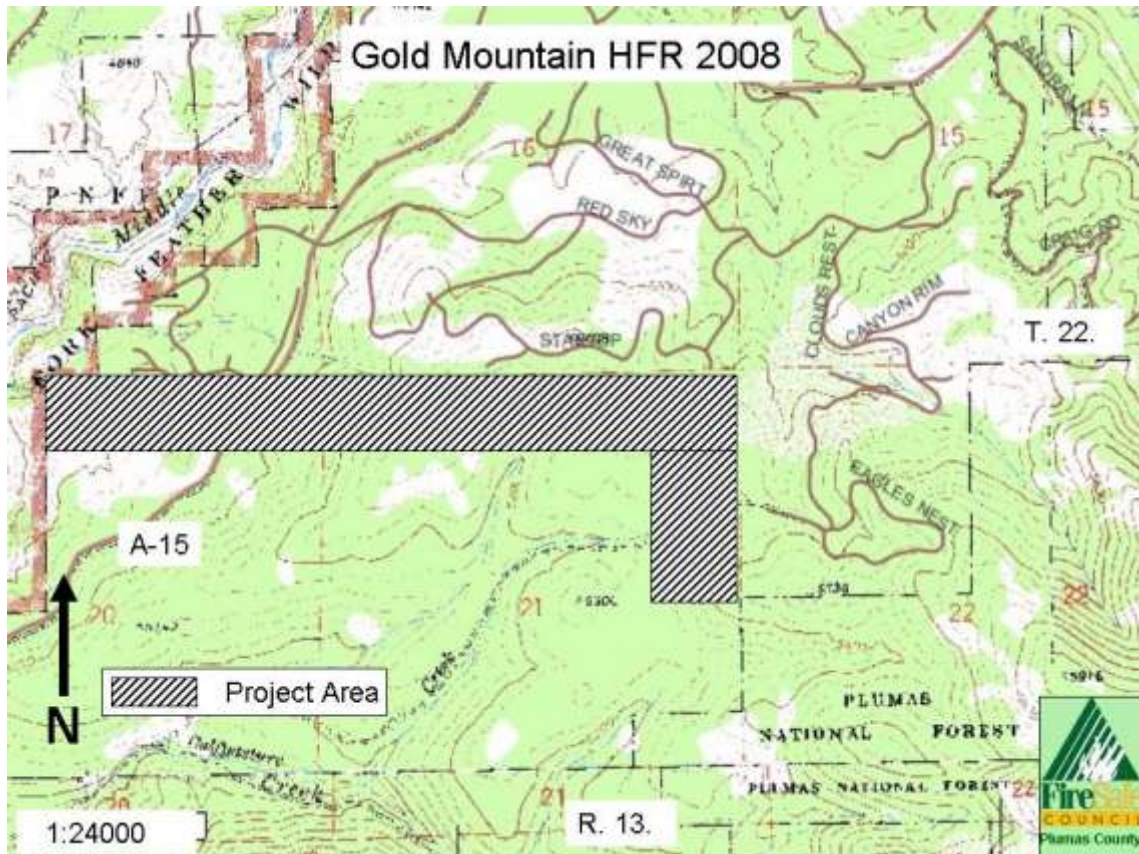
**Typical forest 'before' fuel break project**



**Typical 'after' fuel break project**



**Educational signage on fuel break project**



**Fuel Break Project Area**

## **9) NEXT STEPS**

After reviewing the contents of this assessment and its recommendations, the Board of Directors of the Gold Mountain Community Services District, acting as its Firewise Board, in cooperation with the City of Portola Volunteer Fire Department has determined that it wishes to seek Firewise Communities/USA recognition.

The Firewise Communities/USA representative will contact the Firewise Board representative to receive its decision.

The Gold Mountain Firewise Committee (formally GM Fire Safe Committee) will create agreed-upon, area-specific solutions to the Firewise Communities / USA assessment's recommendations and will create annually an action plan in cooperation with the City of Portola Volunteer Fire Department, and the Plumas County Fire Safe Council. The Board of the Gold Mountain CSD will review and adopt these action plans annually.

The Gold Mountain Community seeks to achieve national Firewise Communities/USA recognition status. To maintain on-going focus on this goal the community will integrate the following standards into its plan of action:

- Incorporate Firewise Communities/USA responsibilities into its existing Community Services District Board, and its Fire Safe Committee which shall be renamed Firewise Committee.
- Enlist a WUI specialist to complete an assessment and create a plan from which it identifies agreed-upon, achievable local solutions.
- Invest a minimum of \$2.00 annually per capita in its Firewise Communities / USA program.
- Observe a Firewise Communities/USA Day each Memorial Day weekend in conjunction with the GM HOA Annual Meeting that is dedicated to a local Firewise project or educational program.
- Submit an annual report to Firewise Communities/USA. This report documents continuing participation in the program.

**APPENDIX A**

**Gold Mountain Defensible Space & Wildland Fire Safety Checklist**      Page 1

Owners:		Date	
Address:			
Phone:	Home		Other
Consultant(s):			

**Defensible Space Requirements - per California Public Resources Code 4291**

**(a) 0-30 Feet - Defensible Space Zone (Lean-Clean- Green Zone)**

Maintain around and adjacent to such building or structure a firebreak made by removing and clearing away, for a distance of not less than 30 feet on each side thereof or to the property line, whichever is nearer. This does not apply to single specimens of trees, ornamental shrubbery, or similar plants which are used as ground cover, if they do not form a means of rapidly transmitting fire from the native growth to any building or structure.

**0-30 foot zone adequately meets this condition?**    YES \_\_\_\_\_    NO \_\_\_\_\_

*No continuous flammable vegetation*

**Comments:**

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**(b) 30-100 Feet – Reduced Fuel Zone**

Within the 30 feet to 100 ft. zone (Reduced Fuel Zone) from each structure (or to the property line, whichever is nearer to the structure), provide a fuelbreak by disrupting the vertical and/or horizontal continuity of flammable and combustible vegetation with the goal of reducing fire intensity, inhibiting fire in the crowns of trees, reducing the rate of fire spread, and providing a safer environment for fire-fighters to suppress wildfire, and reducing the threat of initiating or sustaining a crown fire or a stand replacing fire which would adversely alter the aesthetics of Gold Mountain.

**30-100 foot zone adequately meets this condition?**    YES \_\_\_\_\_    NO \_\_\_\_\_

*Surface Fuels – Treated to an acceptable level*  
*Ladder Fuels – Sufficiently removed or spaced*  
*Horizontal Plant Separation – Acceptable*  
*Vertical Separation – Acceptable*

**Comments:**

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**California PRC 4291 - additional clearance requirements:**

(c) Remove that portion of any tree which extends within ten feet of the outlet of any chimney or stovepipe.

YES \_\_\_\_\_ NO \_\_\_\_\_

(d) Maintain any tree adjacent to or overhanging any building free of dead or dying wood.

YES \_\_\_\_\_ NO \_\_\_\_\_

(e) Maintain the roof, valleys, and gutters of any structure free of leaves, needles, or other dead vegetation

YES \_\_\_\_\_ NO \_\_\_\_\_

(f) Provide and maintain at all times a screen over the outlet of every chimney or stovepipe that is attachment to any fireplace stove or other device that burns any solid or liquid fuel. The screen shall be constructed of nonflammable material and openings of not more than one-half inch in size.

YES \_\_\_\_\_ NO \_\_\_\_\_

**Items discussed with homeowners for making their homes more fire safe.**

*Home Ignition Factors- "It's the Little Things"  
Embers are the leading cause of home ignitions*

- A. Firewood stacked well away from the structure. YES \_\_\_\_\_ NO \_\_\_\_\_
- B. Adequate vegetative clearance around propane tanks. N/A\_\_\_\_\_ YES \_\_\_\_\_ NO \_\_\_\_\_
- C. Soffit vents screened (steel mesh) & in good condition. YES \_\_\_\_\_ NO \_\_\_\_\_
- D. Crawl space vents screened (steel mesh) & in good condition YES \_\_\_\_\_ NO \_\_\_\_\_
- E. No flammable vegetation or materials stored under deck. YES \_\_\_\_\_ NO \_\_\_\_\_
- F. No flammable materials next to the structure or on decks. YES \_\_\_\_\_ NO \_\_\_\_\_
- G. Driveway Minimum 15 foot vertical clearance of vegetation. YES \_\_\_\_\_ NO \_\_\_\_\_
- H. Driveway gates are safe. N/A\_\_\_\_\_ YES \_\_\_\_\_ NO \_\_\_\_\_

**Comments:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Survey copy delivered to homeowner: \_\_\_\_\_ at time of survey \_\_\_\_\_ via mail



## APPENDIX B

### **Gold Mountain Community Services District Policy**

**POLICY TITLE:** Policy to Promote Home Defensible Space Compliance

**POLICY NUMBER:** 1070

**1070.1** The Board of Directors of the Gold Mountain Community Services District desires that all property owners be aware of the extreme dangers of wildland fires in the area in which we live; education is a first step in achieving this understanding; for homeowners on developed lots, education includes knowing and understanding homeowner responsibilities under California State Law – Public Resources Code 4291 – Defensible Space and the actions that they must take to ensure individual compliance. The Gold Mountain Community Services District further desires to take those affirmative steps to ensure and encourage all property owners participate in making the Gold Mountain Community a more fire safe community.

The intent of California Public Resource Code 4291 includes minimizing the threat of wildfires for all California homeowners. Anyone who owns a home in Gold Mountain has a substantial investment that is put at risk unless reasonable precautions are taken to deter the spread of a wildfire within the development. Such an outcome can only be realized with the full cooperation of all GM homeowners. It is with this goal in mind that the GM FSC continues its effort to educate homeowners of their responsibilities under this Code.

**1070.2** As a first step in the education of homeowner responsibilities under Public Resources Code 4291, the following actions are outlined:

**1070.2.1** At the beginning of the 2007 fire season, and continuing thereafter as needed, the Gold Mountain Fire Safe Committee (GM FSC) will continue to notify all Gold Mountain homeowners by mail that they will be contacted to schedule a review of their home relative to wildland fire safety and compliance with the 'Gold Mountain Fuel Reduction Guidelines' and Public Resources Code 4291;

**1070.2.2** All homeowners will continue to be contacted by phone by a volunteer representing the GM FSC to be scheduled for this review. These reviews will ideally be conducted in mid to late summer after seasonal plants and grasses have grown. All home owners will be encouraged to be present in order to fully learn and benefit from this review. However, it is not required that they be present.

**1070.2.3** During the review, a team of at least two professionally trained volunteers will make a written evaluation of each home using the attached 'Gold Mountain Defensible Space & Wildland Fire Safe Checklist'. There will be no expense either to the homeowner or to the GM CSD. Owners of newly constructed homes will also be contacted and scheduled for a review to take place no later than the first fire season or after landscaping has been reviewed by the GM DRC, whichever comes first.

**1070.2.4** After each review is completed, the homeowner will be given or mailed a confidential copy of the completed checklist indicating any fuel reduction deficiencies to be acted on in order to be consistent with state law. **The GM FSC's main goal is to help each homeowner better understand and meet the spirit of the current California statute pertaining to "defensible space" (also known as Public Resources Code 4291).**

**1070.2.5** Within this process any deficiencies that are considered by the GM FSC to pose a serious hazard to fire safety will normally be re-inspected for improvement within 60 days of the original checklist being mailed. If, after a second inspection the GM FSC feels that a serious condition continues to exist, the GM FSC will request a meeting with the homeowner to discuss the problem, a potential resolution, and an equitable timeline agreeable to the homeowner.

**1070.2.6** It is expected that this effort will help familiarize all homeowners with defensible space statute compliance, home wildland fire safety, and hazardous fuel reduction. It is hoped that this familiarity would create momentum towards further community-wide efforts. Any resulting improvements made by homeowners in defensible space or fire safety to their properties would help protect their property value and be beneficial to themselves, their neighbors, and to the community at large.

### **1070.3**

It is the practice of GM FSC to make reasonable efforts to personally contact each homeowner to schedule a Defensible Space Survey. In the event GM FSC efforts of personal contact or mailed correspondence are met with no response or non-compliance, a “certified” form letter will be sent to the homeowner requesting the homeowner contact the GM FSC member within 10 days. The form letter will advise the homeowner that GM FSC will schedule and perform the inspection on a specified date and time if the homeowner does not respond to the certified letter. This inspection will occur with or without the homeowner’s presence. GM FSC recognizes that the homeowner’s presence is critical to the success of the Defensible Space program, but, **for the sake of home protection for all GM residents**, is nevertheless prepared to move forward if **the specific homeowner is unable or chooses not to be present**.

#### **1070.3.1**

After each inspection is completed and the property has passed all aspects of the survey, the homeowner will be provided a copy of the confidential defensible space checklist. Additionally, GM FSC will mail a form letter of appreciation and reminder that Defensible Space is an ongoing maintenance requirement.

#### **1070.3.2**

After each inspection is completed and the property failed to pass any aspect of the survey, a re-inspection shall normally be scheduled to occur within 60 days of the homeowner being provided a copy of the confidential defensible space checklist. The 60 day schedule may be shortened by mutual agreement of the homeowner and GM FSC. The 60 day schedule may be extended by GM FSC if the scope of the work to be done exceeds that time table or due to the time of year, i.e. on-set of winter. The GM FSC will discuss the deficiencies with the homeowner in an effort to provide a clear understanding of defensible space requirements under California Public Resource Code 4291. As a reminder, the homeowner will be notified by mail using a form letter of the date and time of the re-inspection.

#### **1070.3.3**

In cases requiring re-inspection, the GM FSC will provide the homeowner a completed confidential defensible space checklist noting any changes in the status of any previously documented hazard(s).

If all of the previously documented hazards have been satisfactorily abated, the GM FSC will provide the homeowner with the confidential defensible space checklist documenting that the property has passed all aspects of the re-inspection. Additionally, the GM FSC will send the homeowner a form letter thanking them for their participation and co-operation and reminding them of the on-going maintenance requirements relative to defensible space re: PRC 4291.

In the event the previously documented hazards have not been satisfactorily abated, the GM FSC will provide the homeowner a copy of the confidential defensible space checklist with specific notations as to the reasons for failing to meet the minimum requirements of California Public Resource Code 4291. If the GM FSC concludes that the interaction with the homeowner has reached an impasse it will make recommendations to the GM CSD for further appropriate action to be taken to bring the subject property into compliance of PRC 4291. The property owner will be sent a form letter reflecting that the GM CSD was notified.

#### **1070.3.4**

Homeowners should be aware that they always have the option of making arrangements with Portola Fire Chief Bob Stone or Cal Fire for inspection of their property. This will result in an official assessment of the homeowners' compliance/non-compliance with PRC 4291. Upon completion of such an assessment the property owner shall forward a copy of this document to the GM FSC to obviate the need for a visit by a GM FSC inspection team. In the event the property does not pass the fire authority inspection, GM FSC will work with the fire authority to ensure follow-up action is taken as outlined in this policy.

#### **1070.3.5**

Defensible space fuel reduction is an on-going issue and needs to be monitored annually by homeowners. It is the goal of the GM FSC to conduct follow-up property visits every three years but such visits may be done more frequently in the case of a potential new violation.

In the event hazardous fuel removal suggestions are ignored it is the policy of the GM FSC to:

1. Send a Certified Letter and a copy of this policy citing steps that must be taken to effect compliance.
2. If there is no response to the certified letter within 10 days the GM CSD may initiate action to remove the hazard(s) and bill the property owner reflecting all costs incurred by the GM CSD.

## APPENDIX C

# Plumas County Fire Safe Council



August 25, 2011

To: Mike Callaghan

Subject: Gold Mountain Community Firewise Assessment Review

On Wednesday August 17, 2011, I assisted the Gold Mountain Community Firewise application committee in a review of general community wildfire threats and hazards as part of their community assessment process in applying to become a recognized Firewise Community. I participated in this review with Jay Neuman, Cal Fire Prevention Captain, Jerry Sipe, Plumas County OES Coordinator, Mike Callaghan, George Sipel, Craig Simmons, John Petrin, Gail McGrath & Mark Elliott of the Firewise application project team.

Following a wildfire threat to the community in 2002, I developed a wildfire mitigation plan for them. The plan, completed in and presented in 2003, identified risks and hazards and had 45 recommendations. Since that time, the Gold Mountain CSD & HOA have worked diligently to implement many of the recommended action items and the community has made significant progress in preparing for the next wildfire.

Actions include:

- Gold Mountain (GM) community members are active in the Plumas County Fire Safe Council, have developed a community Fire Safe Committee and have participated in Firewise Planning workshops.
- Gold Mountain's FSC (GM FSC) received training in assessing the HIZ and provide homeowner consultations to insure all structures in the community comply with, PRC 4291, California's Defensible Space Law.
- GM FSC provides wildfire mitigation information as part of their annual homeowner meetings and have sponsored field trips to educate home & property owners on the benefits of hazardous fuel reduction.
- The Gold Mountain CSD & HOA, with assistance from the Plumas County Fire Safe Council (PC FSC) and the adjacent landowner, Graeagle Land & Water Company, completed a fuelbreak along the southern boundary of the community from the river to the ridge top.
- The Gold Mountain CSD & HOA, has been reducing hazardous fuels within their common areas and along the county road.
- The Gold Mountain CSD continues to improve their water system including storage and hydrants.
- The Gold Mountain HOA has upgraded their community gates to insure better ingress and egress in the event of an emergency or evacuation.

- The Gold Mountain CSD & HOA have purchased a “quick attack” wildfire suppression vehicle.
- The Gold Mountain HOA encourages the use of fire resistant plants and has developed a plant list comparing relative flammability.

Following are positive attributes of the community:

- ❖ Due to GM FSC’s HIZ consultation program there is significant compliance with California’s defensible space law.
- ❖ The community is under contract from the City of Portola for fire protection. Current response times are high and the community continues to explore options for improved services.
- ❖ All roads are paved and well signed with reflectorized street names. All homes have a reflectorized house number on the street.
- ❖ Most of the roaded access is designed for 2 way in and out.
- ❖ Fire hydrants are available in the commercial and condo areas. Hydrants are being added in the residential area as the community grows. There are a number of ponds within the community available for water tender drafting or helicopters to use in the suppression of fires.
- ❖ Gold mountain ‘s CC& R’s prohibit open burning. They provide a roadside chipping program to their residents to assist in the disposal of green waste created from the creation and maintenance of defensible space or lot cleanup.
- ❖ All public utilities are underground.

Because of the topography, slopes, meadows, and community fuel treatment efforts to date, there is some chance that a fire could run into the communities from surrounding forest vegetation. But the greater risk is a large fire in the surrounding hills raining embers into the community. Those embers would create spot fires, cause torching of the pockets of excessive fuels in undeveloped lots and a fire would be perpetuated from within by spotting and torching. **The community of Gold Mountain is most at risk due to the large number of undeveloped lots that create large pockets of untreated fuels.**

Following are recommendations for the community to improve its wildfire preparedness:

#### **Ignition Prevention:**

1. Visitors to Gold Mountain come from across the country. They may or may not be aware of the risks and threat of wildfires in our area. Consider working with golf course and condo management on making visitors to the golf course or villas more aware of the risk of wildfire. Messages at check-in, brochures, posters, placards or other forms of display material may be useful to help convey the message. Possible placement may include in the villas or carts, T-boxes or along roads or cart paths. Message focus would likely be about smoking, campfires, BBQ ashes, fireworks or off-roading.
2. Continue to provide fire prevention messages along the community trail system.

#### **Emergency Response:**

1. Emergency response time from the City of Portola, contracted with Gold Mountain, for fire protection are fairly long. Continue to explore opportunities to decrease emergency response times.

**Access:**

1. While every structure has an assigned house number and signpost with reflectorized number, along the road, it may be beneficial to include the house number on the structure for emergencies in the winter when the road markers may be covered with snow.
2. Look for opportunities to correct the “Dead End” roads that don’t presently have the required 60’ length for a Hammerhead “T”. Some may be able to achieve the necessary length with the inclusion of driveways that can handle the weight, to achieve the “same practical effect”. Consider “No Turnaround” or “No Outlet” signs at the start of dead end streets.
3. A number of the driveways constructed fail to meet (PRC 4290) requirements for a Fire Safe Driveway, lacking either adequate turnouts or turnarounds or having excessive slopes. While fixing existing problems is unlikely, efforts should focus on looking for ways to correct the problem in future home construction.
4. There are a couple driveway gates in the community and there should be a system in place to insure they can be opened by emergency services personnel.

**Defensible Space:**

1. While the GM FSC has provided excellent leadership in preparing the HIZ of residents, there is some room for improvement around the villas, clubhouse & restaurant. The present roof of the clubhouse/restaurant is problematic, should embers rain into the community. A number of the villas had flammable vegetation immediately adjacent to the structure.
2. Homeowners have the choice of aboveground or underground propane tanks. Those above ground are required to have a screen. Some propane screens were observed lacking vegetation clearance. Continue to insure that both the screens and tanks have vegetation clearances.

**Water Systems:**

1. While hydrants are present in the commercial areas, there is a deficit of water availability for fire suppression in the residential areas. The present system lacks both hydrants and system capacity due to piping reductions at the pumping stations. Continue to seek opportunities to improve the number of hydrant and standpipe locations and improve the system capacity to handle them. Another option may be adding water storage tanks for fire suppression purposes.
2. Hydrant & standpipe locations in some cases were difficult to see, especially hydrants around the sales office, clubhouse/restaurant and on Double Eagle. There are a couple standpipes for filling water tenders from the ponds, but their locations were unmarked and the pipes difficult to see unless you knew they were there. Continue to seek opportunities to improve the markings of hydrant and standpipe locations.
3. A number of hydrants along the roads are well off the road and would likely require a water tender to park on the roadbed restricting access. There may be opportunities to develop gravel pads adjacent to them to allow easier passing of other vehicles.
4. There is a conflict in the use of blue reflectors used in the community. Presently the power company uses a blue reflector, normally used to identify water sources, as the color for marking their utility boxes. This problem has also been identified

in other communities. Consider working with the local power company to see if the blue reflector issue can be mutually resolved to improve identification of hydrants and standpipe locations.

**Hazardous Fuel Conditions:**

1. As previously stated the Gold Mountain CSD & HOA have worked aggressively to insure compliance with defensible space and reduced hazardous fuel conditions by creating a fuelbreak along the southern edge of the community, treating a number of the common areas, as well as a number of private property owners who have also taken steps to treat their properties. However, due to the large number of undeveloped lots with highly flammable natural vegetation there is a high risk of high intensity wildfire within the community. Efforts should continue in educating lot owners on the importance and value of reducing hazardous fuel conditions and encourage them to treat their property. Treating vacant lots within the community can have a number of positive effects like making the lot fire resilient, retaining the natural aesthetics of the community and ensuring 100 feet of defensible space around every structure. The recent wildfire within the community may provide an incentive for some to take action.

Mike, I appreciated the opportunity to assist you and your committee in a review of community wildfire hazards as part of a community assessment in applying to become a recognized Firewise Community. I applaud the community's prior efforts and look forward to continuing to work with you in the future to implement your Firewise Plan.

Respectfully,  
/s/JERRY HURLEY

Jerry Hurley  
PC FSC Coordinator

CC: Jay Neuman  
Jerry Sipe