Firewise Communities / USA
Community Assessment for
Mohawk Vista

Plumas County, California
November 2014

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Forward

In the fall of 2013, local residents in the northern portion of Mohawk Vista began discussion of becoming more Firesafe in the event of a wildfire. Mohawk Vista consists of individual homes in a mix of conifer forestlands, and lots with undeveloped forestland, making this a textbook example of the Wildland Urban Interface (WUI).

The potential for catastrophic wildland fire has existed in Mohawk Vista since the community was established in 1965. Various efforts have been made over the years to reduce hazards on residential lots with assistance from grants obtained through the Plumas County Fire Safe Council. State laws exist regarding the creation and maintenance of defensible space on all lots with structures. Hazardous Fuel reduction projects are ongoing with mechanical thinning and prescribed burning scheduled on federal lands adjacent to the community. Fire remains a priority safety concern throughout Mohawk Vista. In the past 10 years there have been numerous lightning and person caused fires both within and on lands surrounding this community.

In 2001, in the wake of several years of increasingly devastating WUI fires across the nation, the federal government undertook an effort to identify those areas and communities that were threatened by wildland fire. Mohawk Vista is identified as a "Community at Risk" in the August 2001 Federal Register listing and is included in the Plumas County Fire Safe Council's Community Wildfire Protection Plan.

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 Mohawk Vista 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 as needed.

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

Graeagle Fire Protection District

Ed Ward, Fire Chief

Plumas County Office of Emergency Services

- Sue McCourt, Fire Prevention Specialist

Mohawk Vista Residents

- Gail and Tom Slavik
- Jim Schwilling
- Steve Kreth
- John Sessions
- Carol Bouche
- Don McGann

Plumas County Fire Safe Council

- Nils Lunder
- Chuck Bowman

U.S. Forest Service, Plumas NF

- Don Fregulia, Battalion Chief

2. Definition of the Home Ignition Zone

Mohawk Vista is located in a wildfire environment. Wildfires will happen- the elimination of wildland fire is not an option as lightning accounts for many of the ignitions. The only variables are (a) where the wildfire will occur, (b) when it will occur, and (c) what the relevant conditions will be at that time. It is this last variable that homeowners can influence, and influence very strongly, by their actions before fire appears.

A house burns because of its relationship with its immediate surroundings, an area called the "home ignition zone". To avoid a home ignition, nearby fuels must be reduced or interrupted and combustible materials found on or around the home must be protected or eliminated. Homeowners do have the ability to significantly impact their home ignition zone in either a positive or negative manner. Attention to some relatively simple actions will have a positive impact; inattention, procrastination or denial will have the opposite effect.

This assessment addresses the wildfire-related characteristics of the overall Mohawk Vista Community. It primarily examines the area's exposure to wildfire as it relates to ignition potential. The assessment does not focus on specific homes, but rather on the community as a whole. In so doing, it deals with widely applicable techniques of fuel interruption that alter or eliminate the natural path that a fire might take.

Changing a fuel pathway is a relatively easy-to-accomplish task that homeowners can do, and one that can prevent a tragic structure loss. This is basically a strategy of separating combustible materials from the structure and reducing the volume of vegetation to reduce fire intensity.

The assessment is based on community observations made during the spring and fall of 2014. It addresses the relative ease or difficulty with which home ignitions could occur under severe wildfire conditions, and how those ignitions might be avoided with prudent preventative action. Mohawk Vista residents can reduce their risk of home destruction during a wildfire by taking a few important steps within the home ignition zone, which includes the structure itself and an area extending outward about 100 to 150 feet. By addressing community vulnerabilities in advance, residents will be able to substantially reduce their exposure to loss. Relatively small investments of time and effort will reap large rewards in wildfire safety.

While each home ignition zone is an independent entity, managed by the owner of the individual property, the combined home ignition zones in a development can form either an invitation or a barrier to wildfire. This is further complicated by overlapping home ignition zones found in some Mohawk Vista lots that may result in relatively close proximity to neighboring structures.

Embers produced by burning vegetation or structures on one lot can easily drift onto adjacent lots, and these can lead to new ignitions and spot fires. This is why a community approach is just as important as the need for individual property owners to protect their individual homes. It is also vital to recognize that in the event of a major fire emergency, there simply won't be enough fire trucks and crews to protect all or even a large fraction of the homes in the area. The difference between home loss and survival often comes down to the extent of previous work accomplished in the home ignition zone.

3. Wildland Fire Characteristics that could threaten the area

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

Locally, 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). The Mohawk Vista area is not within a Fire District, therefore, structure fire response is limited according to availability. There are some residents who contract with Graeagle FPD for structure and medical services. The Graeagle FPD generally responds to structure fires and medical aid. Response to a WUI fire in Mohawk Vista would involve the Graeagle FPD, USFS and other mutual-aid resources.

Fire intensity and the rate of spread 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 heavier 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 aspect and the steepness of the slope. However, the configuration of the terrain such as narrow draws, saddles and other topographic features 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.

Mohawk Vista is situated in a forested area bounded by steep terrain and dry southerly slopes. This 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. Historically, Plumas County has had a high incidence of lightning fires. 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 fire 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, thousands 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.

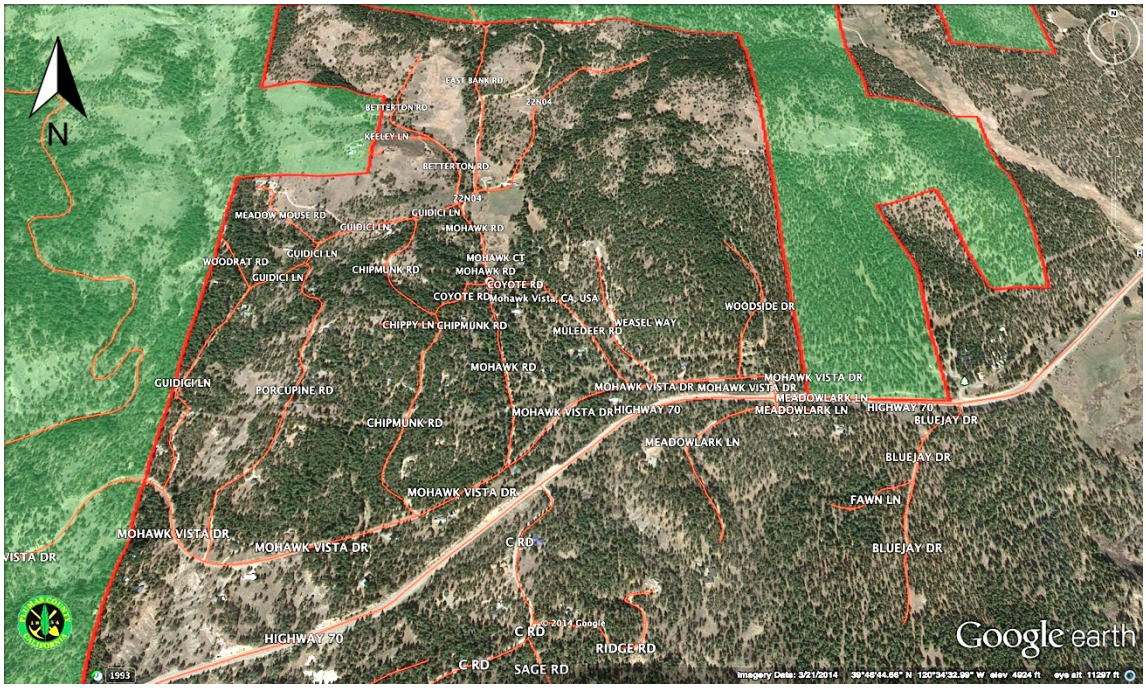
Fire modeling accomplished as part of the 2004 *Plumas County Hazardous Fuel Assessment and Strategy* indicated that fire behavior in the community and adjacent timber would be conducive to passive and active crown fire with some surface fire. Torching trees both increase fire intensity and become excellent generators of embers for spotting. Preventative actions taken on any treated properties in the area have reduced the potential intensity and ember production of an approaching fire. 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, a) would be a major blaze in untreated forestlands southwest of community bringing fire up the drainages, producing large quantities of windblown embers, and b) a lightning strike without precipitation and the rapid onset of downdrafts. Subsequent spot fires, torching trees or burning structures in the interiors of developments could produce additional quantities of embers, contributing to further ignition potential and suppression difficulty.

4. Site Description

This portion of the report describes certain elements of the community of Mohawk Vista as it relates to fire issues.

Mohawk Vista is a subdivision that was recorded by the County of Plumas, California in April, 1965. The development consists of 171 acres containing parcels for 102 housing units. The development in Eastern Plumas County is on Mohawk Vista Road and includes 16 roads north of Highway 70 between Graeagle and Portola, CA. Currently, there are 79 structures with values over $10,000 on record.



Mohawk Vista Community resides above Highway 70- the area in green is Plumas National Forest land
Photo courtesy of Google Earth

4.1 Demographics

The most recent official census of the Mohawk Vista Census Area in 2010 reported a population of 159 individuals in 74 households in Mohawk Vista. There are 102 housing units: 62 are owner occupied and 12 are renters. These numbers represent those who claim residency within the census-designated area, as opposed to those who may have a second home or vacation home here. This difference is further clarified by the census count of 102 total housing units within the development. 74 are "full time" households, indicating that approximately 1/4 of the homes in place at that time were only occupied on a part-time or occasional basis. Of the full time population, 10% were under 18; 11.3% were 24-44 years old; 4.9% were 45-64 and 32% were age 65 or older.
Of note, this census area includes the neighboring Sierra Springs Trailer Park to the east.

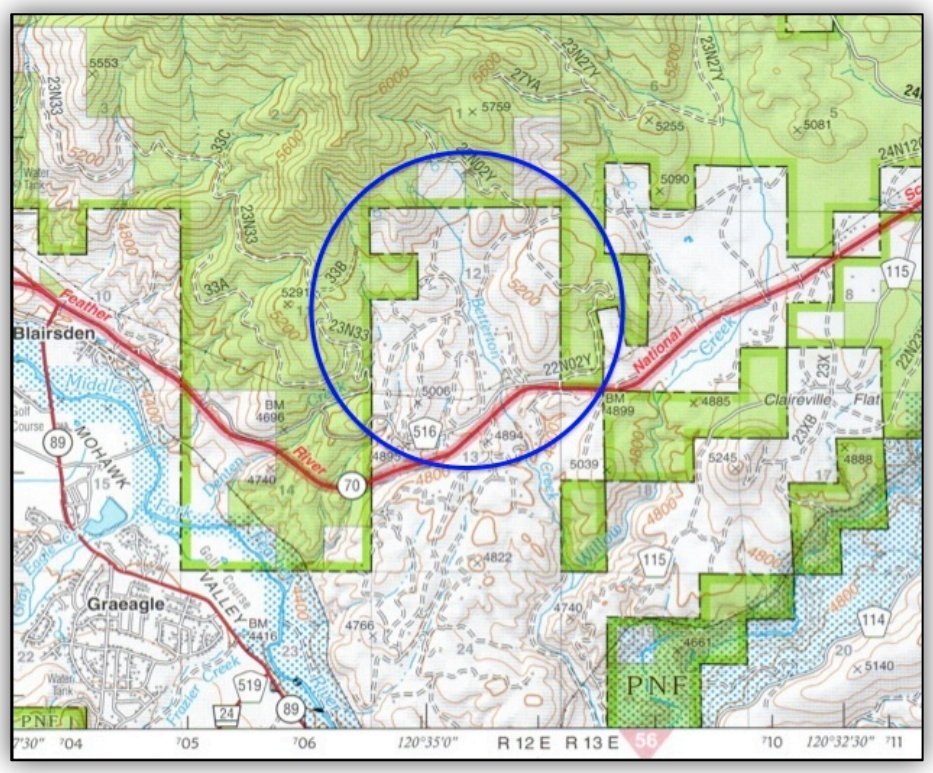
During the winter months, these figures indicate some "snow birds" migrate to warmer climates for periods of up to several months.

4.2 Topography and Vegetation

The topography of the district varies from a low point of 4,400 feet above mean sea level (msl) and rising to 4,700 feet msl at the highest point. Slope steepness ranges from 0 to 45%, with occasional steeper pitches.

The vegetation in the surrounding area is a predominately dense forested land with a brush or litter understory, with mixed untreated land base prone to torching and crowning due to the fuel continuity.

Some forestlands within the community have been treated to reduce fire hazards by various landowners with grants administered by the Plumas Firesafe Council in the past 10 years. Fuel treatments on Plumas National Forest public lands are in process using hand thin projects to the north, east and west of the community. These efforts have helped reduce, in the treated areas, but not completely eliminate the probability of high intensity crown fires around the community, and some are in need of follow-up maintenance.



Mohawk Vista vicinity map

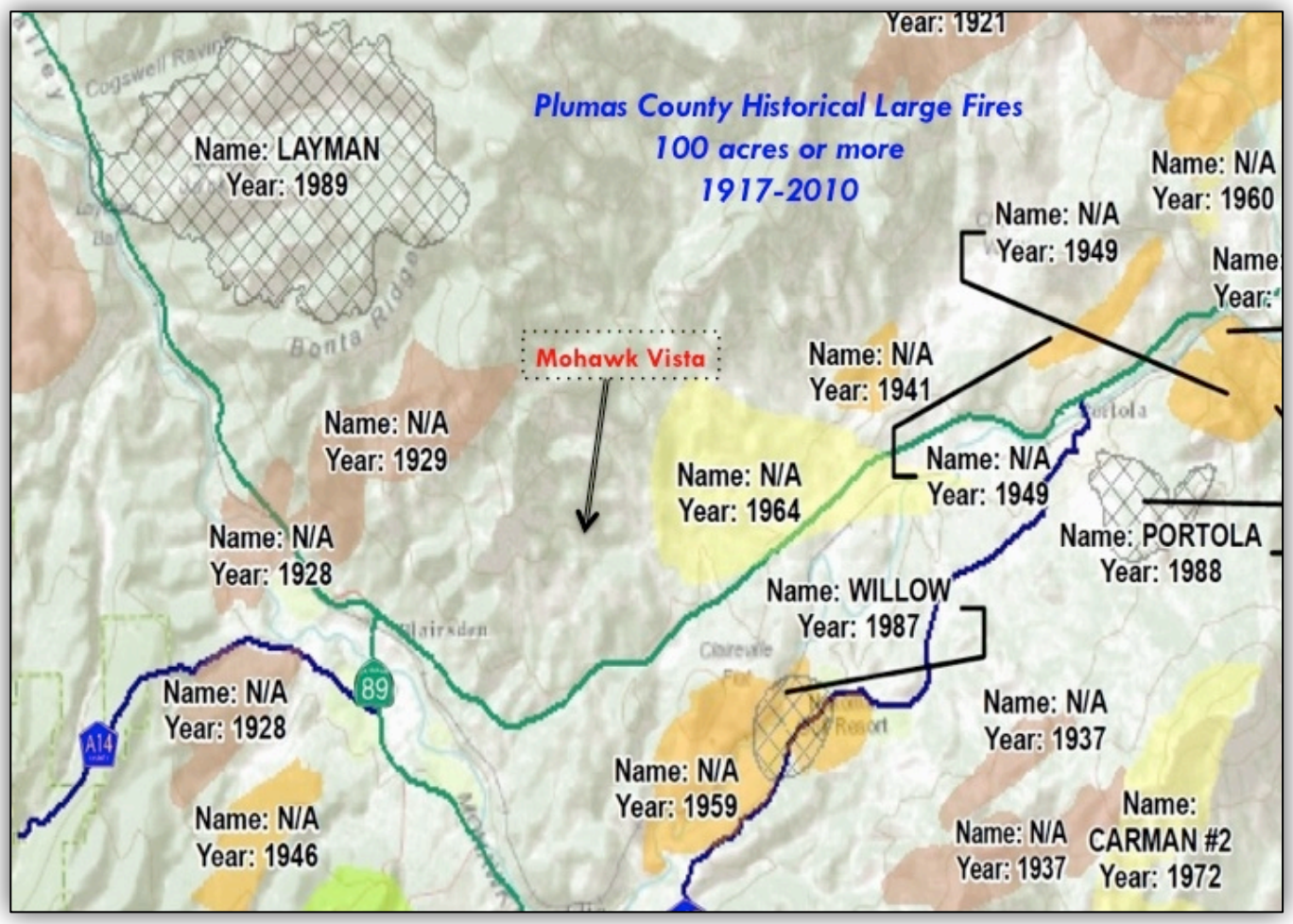
Some parcels on Porcupine Road, along the main Mohawk Vista Road and the upper end of East Bank Road within the community have had Hazardous Fuel Reduction (HFR) activities through the Plumas Firesafe Council.

4.3 Wildfire History

Fires in the area were more frequent prior to European settlement resulting in more open stands of mature trees. Historically, fires burned through the area every 11-15 years, clearing low growing brush and vegetation, consuming forest litter and down dead trees and thinning out seedlings. Today, past forest practices and fire suppression on wildland fires have resulted in more overgrown forests.

Wildland fires in the area usually occur between May and October, a period of time commonly referred to as fire season. In recent years, we have experienced recurring droughts and it is not uncommon for fires to occur nearly year round in the area.

Wildland fires are not a new problem to the Mohawk Vista community. Historical records show numerous person caused and lightning caused wildland fires that within a 2-mile radius of the community. A detailed map of wildfires and their causes in the area can be found in Appendix A.



4.4 Water sources

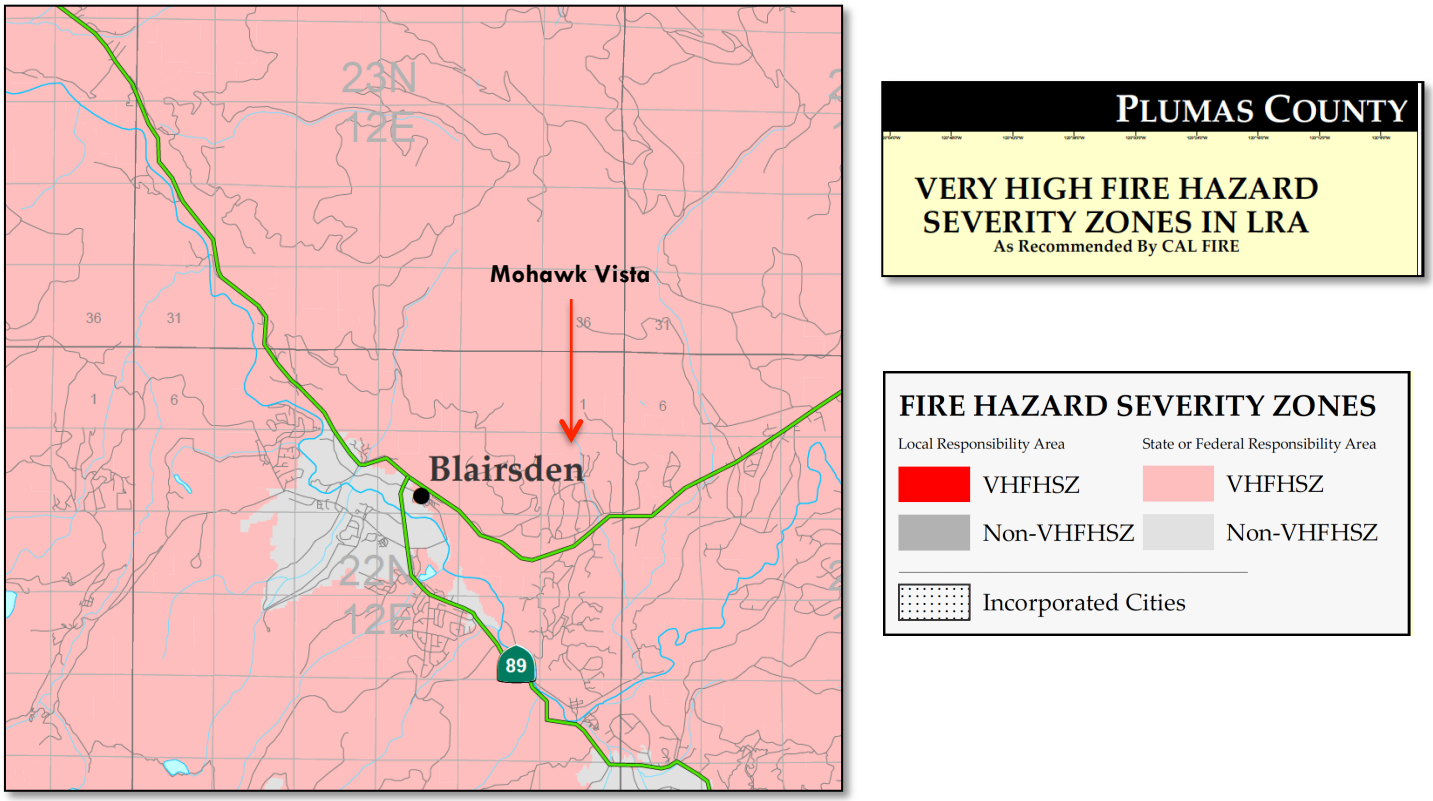
There are no hydrants or reliable water sources located within the community.

4.5 Fire Response

Mohawk Vista is located outside a Fire District. Residents who have contracts for structure fire and medical services through Graeagle FPD receive the benefits of Automatic aid and mutual aid agreements, which are in place with other nearby agencies as required. Such support in the event of a major structural fire would typically come from the similar agencies at, Quincy, Long Valley, Eastern Plumas, and the City of Portola as well as the US Forest Service for wildland protection during fire season.

4.6 CAL FIRE Fire Hazard Severity Zone Rating

Periodically, CAL FIRE reviews and updates its statewide assessment of general fire hazards within and near the State Responsibility Areas (SRAs). This assessment generates fire hazard severity zone ratings (FHSZ). The 2008 CAL FIRE Fire Hazard Severity Zone (FHSZ) map for the region rates all of the Mohawk Vista area as a "Very High" fire hazard area.



4.7 ISO Fire Rating

The Insurance Services Office, Inc. (ISO) is the principal supplier of statistical, actuarial and underwriting information for the property insurance industry. ISO fire insurance ratings serve as an industry standard, a foundation upon which most insurers build their coverage programs. Their ratings are based on several factors including:

- The quality of the fire department
- The water supply and hydrant system
- Communication systems
- Building codes
- Property inspection programs

ISO ratings range from 1 to 10, with 1 being perfect. Since the ISO insurance companies set insurance premium rates, the lower the ISO fire rating, the lower the premium use ratings. Mohawk Vista is located outside of a fire district.
Mohawk Vista has an ISO rating of 10.

5. Assessment Process

A team approach was taken in preparing this assessment of fire hazards and risks at Mohawk Vista. Relevant background data was initially collected and distributed for review by the several team members identified in the introduction to this document. That group then conducted a visual review of the community from a roadside perspective. Observations were noted of both favorable and unfavorable conditions, and are found in subsequent sections. The combined information led to the development of recommendations for mitigation actions through a collaborative process where draft materials were circulated, reviewed, and revised based on inputs from the group and recirculated for follow-up review.

- A key event in the process was the community assessment, which took place September 4, 2014. Team members conducting that inspection were Plumas Fire Safe Council members Nils Lunder and Chuck Bowman; USFS Plumas NF Battalion Chief Don Fregulia; Sue McCourt, Fire Prevention Specialist, Plumas County Office of Emergency Services; Mohawk Vista residents Gail Slavik, Carol Bouche, Jim Schwilling, Steve Kreth, John Sessions and Don McGann.

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. 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.

The three most important considerations to provide a safer community would be:

1. All residents have proper defensible space on their property.
2. All properties should be treated to provide a full 100 feet of defensible space around all structures.
3. Seek treatment and maintenance of all vacant parcels to achieve a fire resilient condition that would prevent continued tree torching and ember production within the community during a wildfire.

Example of untreated lot

Example of recent hazardous fuel reduction treatment

7. Observations and Recommendations

7.1 Positive Community Attributes

- For the most part, overall construction is fire resistant with mostly Class A or B roofs.
- There are a number of excellent examples within the community of a Firewise home and property.
- There have been efforts to reduce the hazardous fuel conditions within the community through hazardous fuel reduction projects with the Plumas Fire Safe Council over the past 10 years.
- Mohawk Vista has a wildfire evacuation map with suggested routes identified.

7.2 Mohawk Vista Road System

All roads in the Mohawk Vista subdivision are privately owned, thus are not county maintained roads. The majority of the roads in Mohawk Vista are dirt. A few landowners have paved portions of access roads to their own properties.

- There is no community road association that maintains the roads; 7 of the 14 roads in the subdivision are dead end roads.
- There are locked gates to access some homes, some with very small turnaround at the gates.
- Other roads are varied with turn around accessibility where they end. Vegetation clearance and turn around space for fire suppression equipment is of concern.
- Concerning two ways in and out of the community, there are seven roads that feed out of the Mohawk Vista Community onto Mohawk Vista Road.
- Most of the roads are signed with non-reflective signs at the bottom of the subdivision. While traveling through the upper portion of the subdivision, there are not signs at all intersections.

Recommendations:

- Maintain and improve road width by brushing and limbing trees. Developing turnarounds and turnouts wherever possible will benefit emergency vehicle access to the area.
- Consider adopting known sign standards in your community. All roads including intersections should be marked preferably with reflective signs at the appropriate height to accommodate average snow depth. Plumas County Road Dept. currently uses white lettering on green background high intensity sheeting with 4" lettering on a 6" sign panel. The California Manual of Traffic Control Devices (MUTCD) states the minimum sign height is 5 feet to the bottom of the first sign panel. In the case with street name signs, they recommend seven feet to accommodate a stop sign if needed. All of their new sign installations are on a 2" square fireproof metal signpost. Road signs that are obstructed by tree and/or shrubbery should be cleared of these or other obstructions.

7.3 Bridges

There are no bridges in Mohawk Vista. There are seasonal creeks that have not posed an issue in the past for limiting access.

7.4 Access to structures

It is important that emergency services personnel have access to residences. Fire engines need to be able to get into the driveway and access all sides of the home in order to provide structure protection. Some homes in the community have items blocking access to the structure.

Recommendations:

- Items preventing access to the structure should be relocated/removed.
- Maintain vegetation clearances and remove lower limbs of trees on access routes to structures.

7.5 Driveways

- Since the community has begun discussions on fire protection issues with Graeagle FPD, many residents have installed reflective address signs. There are still many properties that have their location identified by last name only.

Recommendations:

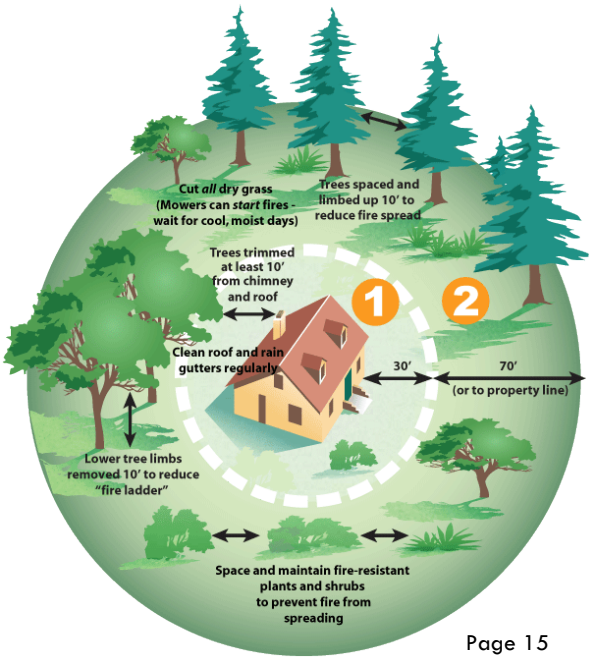
- Consistent house numbering along roads at driveways would be extremely beneficial to responding emergency service providers (visible & reflectorized.). The community may want to consider a "If they can't find you, they can't help you" campaign.
- Driveways should have slopes less than 16% and be cleared of vegetation and depending on length meet other state requirements, so as not to put citizens and emergency personnel at risk.
- Most of the existing structural driveway problems can't be corrected, except for clearance of vegetation. However, the community could pay attention to future development/new home construction with respect to driveways complying with PRC 4290.

Items creating an increase in risk to community safety

Areas identified as a concern or for improvement

7.6 Structures & Defensible Space

- While Defensible Space in the "Lean, Clean, Green Zone" (0-30 feet) was present on many residences, there still exists a need for fine-tuning. There were some homes with grass and forest litter accumulations right up to the structures.
- Many homes lacked adequate treatment in what is referred to as the "Reduced Fuel Zone" (30-100 feet). Clearance of 100 feet around all structures would reduce the acres of untreated fuels, provide additional protection to all homes and improve the survivability of structures within the community.



- Some homes had firewood stored immediately adjacent to the structure, on porches or under decks, or in close proximity to structures.
- Some homes had roofs and gutters with forest litter and needle accumulations.
- There were homes where the highly flammable ornamental vegetation immediately adjacent to structures, decks or along driveways, increase risk of structure ignitions or create additional hazards for emergency responders.
- Some of the decks were skirted by decorative lattice, with vegetation or pine needles right up to it.
- Some homes have wooden fences surrounding the home and attached directly to the residence creating a wick for fire spread from the wildland, to the fence, to the structure.
- A number of residents had large collections of excess human treasures and/or flammable materials stored on their lots, adjacent to structures or under decks. These materials can increase probability of structure ignition and/or create hazards to firefighters attempting to take actions in structure protection.
- Chimney and vent screens- it is recommended that these openings have screens for fire protection.

Recommendations: A number of informational pamphlets on defensible space are available to address these issues identified above in these observations. By understanding fire behavior, residents would have a better understanding of why defensible space is essential and why California has laws (Public Resources Code 4291 see appendix D) requiring clearance to 100 feet.

7.7 Propane tanks and generators

- A number of homes lacked 10' of clearance to mineral soil around propane tanks.

Recommendations:

- *Propane tank regulators:* While not wildfire issues per se`, a number of regulators were next to the tank under trees and have potential to be damaged from falling snow or ice loads. This could cause propane leaks that can cause explosions or structure fires in the winter.
- *Backup generators:* It is recommended that they are known and referenced at the main power box in case of an emergency.

7.8 Water Systems

- There are no hydrants or creeks in the community that could be utilized for drafting in the event of a wildfire.

Recommendations:

- Residents may consider investing in water storage infrastructure. If residents have existing water storage tanks on their property should clearly identify them for fire responders. Residents are encouraged to arrange a meeting with the Graeagle FPD for advice on water infrastructure projects and work to ensure tank fittings are compatible with fire engines.

7.9 Vegetation beyond the home ignition zone

Reduction of fuel volume and ladder fuels

- Vegetation on undeveloped lots within the community is not covered by PRC-4291 but it is a significant concern. These lots are susceptible to ember ignitions with the threat of multiple spot fires occurring within the community in the event of a wildfire.

Recommendations:

- Efforts should be made to educate homeowners and vacant lot owners about the benefits of defensible space.
  - Elimination of "ladder fuels" - fuels bridging the gap between the surface and lower tree limbs.
  - Removal of additional lower branches as needed.
  - General tree thinning to reduce fuel volume and maintain forest health.
  - Thinning or removal of new brush growth.
  - Thinning or removal of new seedlings or saplings.
  - Removal of accumulating surface litter or debris.
  - Removal of debris piles.

Additional Considerations:

Power and Communication Infrastructure

- Mohawk Vista has both transmission and distribution power lines running through the community.

Recommendation:

- Consideration should be given to working with Plumas Sierra Rural Electric Cooperative (PSREC) to avoid power interruptions and wildfire ignitions by supporting their utility tree maintenance programs. PSREC is required by law to maintain specific vegetation clearances away from high voltage power lines including a high voltage power transmission line that transects the community and other high voltage distribution lines commonly found along roadways. Some fuel break potential may be afforded within the transmission right-of-way.
- Residents should be educated about the importance of removing vegetation that could grow into power lines on their property before they become too large for easy removal.
- Pruning trees next to power lines can be dangerous.
- Unqualified tree workers put their lives in jeopardy without specialized training or the proper insulated tools required to work near high voltage power

lines. Hiring an unqualified tree contractor could put a contractor and homeowner at a significant liability risk, should a worker be injured or killed while performing work. There are an overwhelming number of trees that have been topped to avoid coming in contact with the power lines that eventually succumb to this treatment and perish.

- Continual trimming of trees is paid for by ratepayers in the community and therefore they have a vested interest in working with the power company. The committee should look into options of how to work with PSREC and their residents to reduce the wildfire hazard, improve forest health and power reliability. Residents should always contact PSREC if there is any question of tree removal or health of a tree that may come in contact with a power line before removal.

8. Sucessful Firewise Modifications

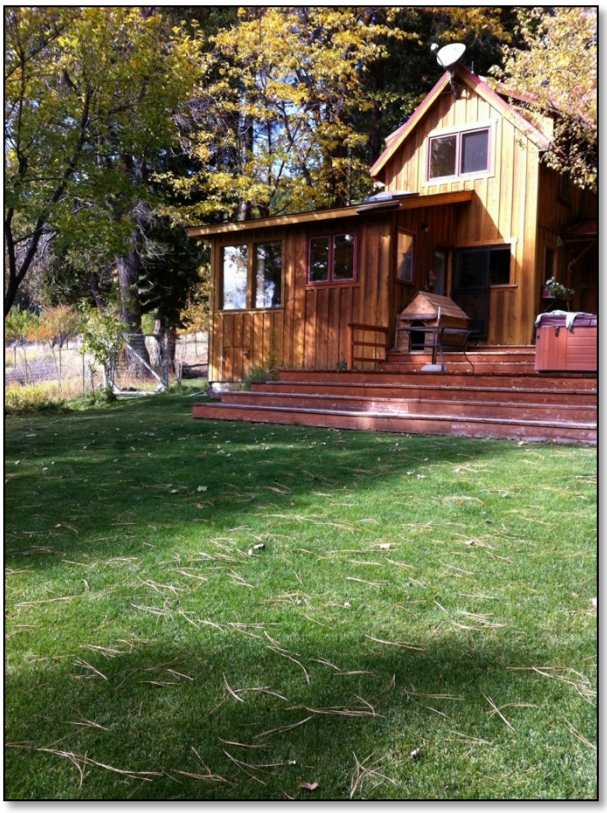
When adequately prepared, a house can likely withstand a wildfire without the intervention of the fire service. Further, a house and its surrounding community can be both Firewise and compatible with the area's ecosystem. The Firewise Communities/USA program is designed to enable communities to achieve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

A homeowner/community must focus attention on the home ignition zone and eliminate the fire's potential relationship with the house. 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 Mohawk Vista and are examples of good Firewise practices.

Vegetation Clearance next to structure with fire resistant siding at the base of home

Areas next to and underneath deck have been cleared of all flammable materials

Trees are limbed between structures on the property to reduce spread of fire



Lawn and irrigated landscape plants provides defensible space for this home

Debris has been cleared from the latticework that encloses the deck

9. Next Steps

This Assessment is a first step in a longer process leading to improved wildfire safety in the community.

Following a review and approval of the contents of the assessment and its recommendations by the Mohawk Vista Firewise Committee, contact the current California Fire Safe Council Firewise representative to submit an application to be a nationally recognized Firewise Community (http://www.cafiresafecouncil.org/contact-us/cfsc-staff/).

Assuming the assessment area seeks to achieve national Firewise Communities/USA recognition status, it will integrate the following standards into its plan of action:

- Sponsor a local Firewise board, task force, committee, commission or department that maintains the Firewise Community program and status.
- 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. (Work done by municipal employees or volunteers, using municipal or other equipment, can be included, as can state/federal grants dedicated to that purpose.)
- Develop and promote a Mohawk Vista Firewise Communities/USA Day each year that is dedicated to a local Firewise project.
- Submit an annual report to Firewise Communities/USA. This report documents continuing participation in the program.

10. Additional Key Points

Threat of embers during a wildfire

Residents need to be conscious of keeping high-intensity fire more than 100 feet from their homes; this means that potential fuel sources should be managed within at least a 100 foot radius of all structures. Property owners should also work to ensure that their structures are prepared for an eventual ember blizzard. It is of utmost importance to avoid fire contact with structures and this includes firebrands. The assessment team recommends the establishment of a 'fire free zone', allowing no fire to burn within ten feet of a house by removing fuels located there. Landowners should do all that they can to ensure that fire is not allowed to come into contact with the structure While wildfire cannot be eliminated from a property, it can be reduced in intensity.

Mohawk Vista homeowners are reminded that street signs, addresses, and road widths do not keep a house from igniting. Proper attention to their home ignition zones does. They should identify the things that will ignite their homes and address those as their highest priority.

Fire Prevention Information Availability

A variety of information sheets, pamphlets, brochures and video materials are available to property owners at Mohawk Vista via the Internet and by contacting the Plumas Fire Safe Council or CAL FIRE. Fire prevention and parcel cleanup information is available on the Firewise Communities/USA website (http://www.firewise.org), the Plumas County Fire Safe Council website (http://www.plumasfiresafe.org), and the California Department of Forestry and Fire Protection (CAL FIRE) website (http://www.fire.ca.gov). Information on Fuel Reduction grants should be addressed to the Plumas Fire Safe Council. The USFS Beckwourth Ranger Station and the Graeagle Fire Protection District also have defensible space materials available at their Fire Station in Graeagle and on their websites (http://www.fs.usda.gov/plumas) and (http://www.graeaglefire.org). Educational Consultations on Defensible Space are available free of charge from the Graeagle Fire Protection District.

Dooryard Debris Burning and Forest Fire Restrictions

Escaped debris burns are the number one cause of person caused wildfires in Plumas County. Burn Permits are required from May 1- Nov. 1. During dry years, burning may be limited or banned. Check with the Beckwourth Ranger District in Blairsden for burn permits. They also are a resource for burn safety information on safe year-round debris burning. Many escaped debris burns occur during the time burn permits are not required.

The adjacent National Forest Lands are subject to certain restrictions, aimed in large part at reducing ignition hazards there during fire season. When Fire Restrictions are enacted, Campfires are prohibited except in designated campgrounds. Motor vehicle travel is restricted to designated roads only; off-road travel is not allowed. During the driest portion of the annual fire season, woodcutting and smoking are severely limited.

11. Prior Documentation

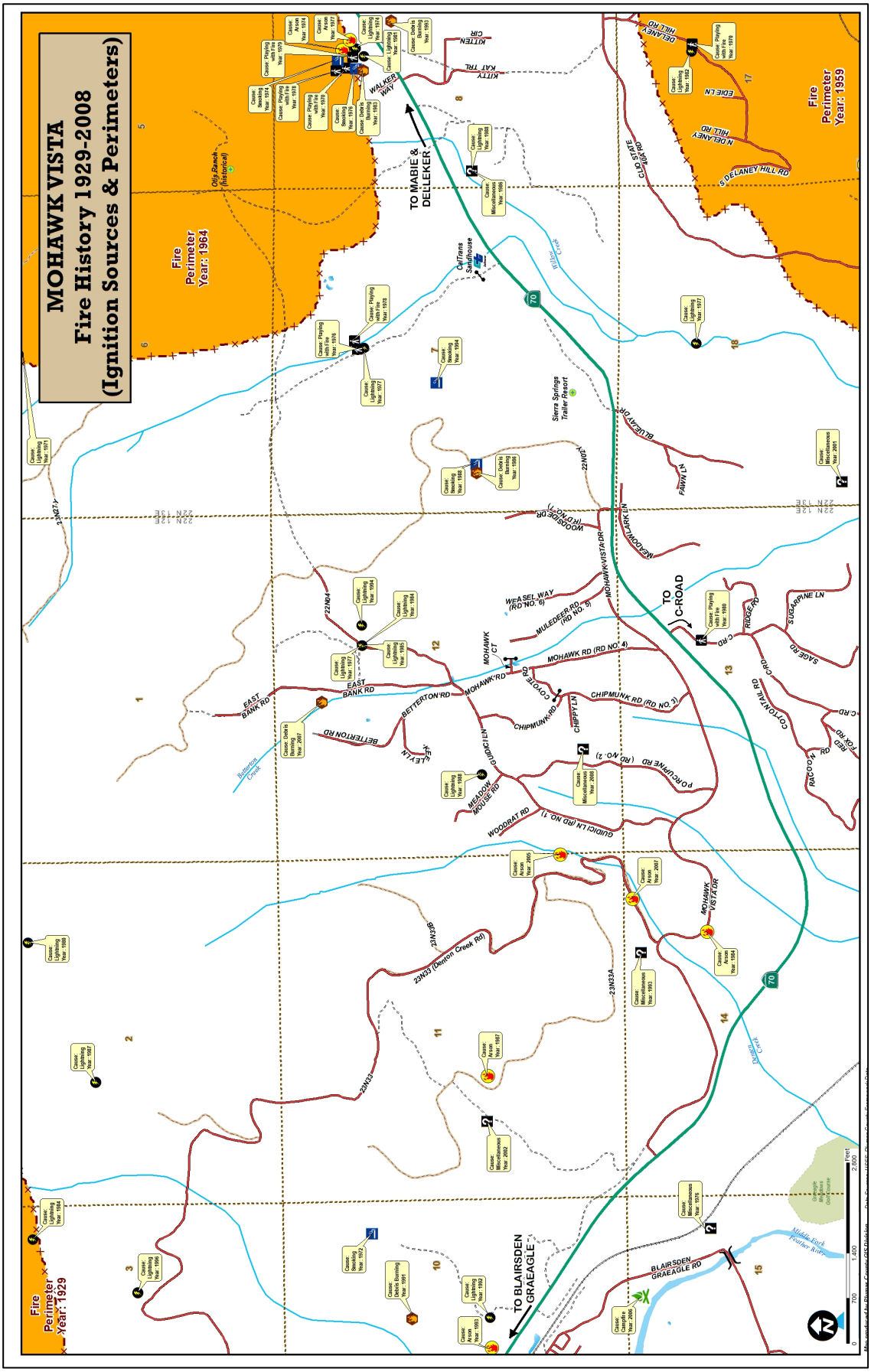
Formal documentation for the area was addressed by the larger Plumas County Fire Safe Council, which published the more comprehensive:

- 2004 *"Plumas County Hazardous Fuel Assessment and Strategy"*
- 2013 *"Plumas County Community Wildfire Protection Plan"* (CWPP).

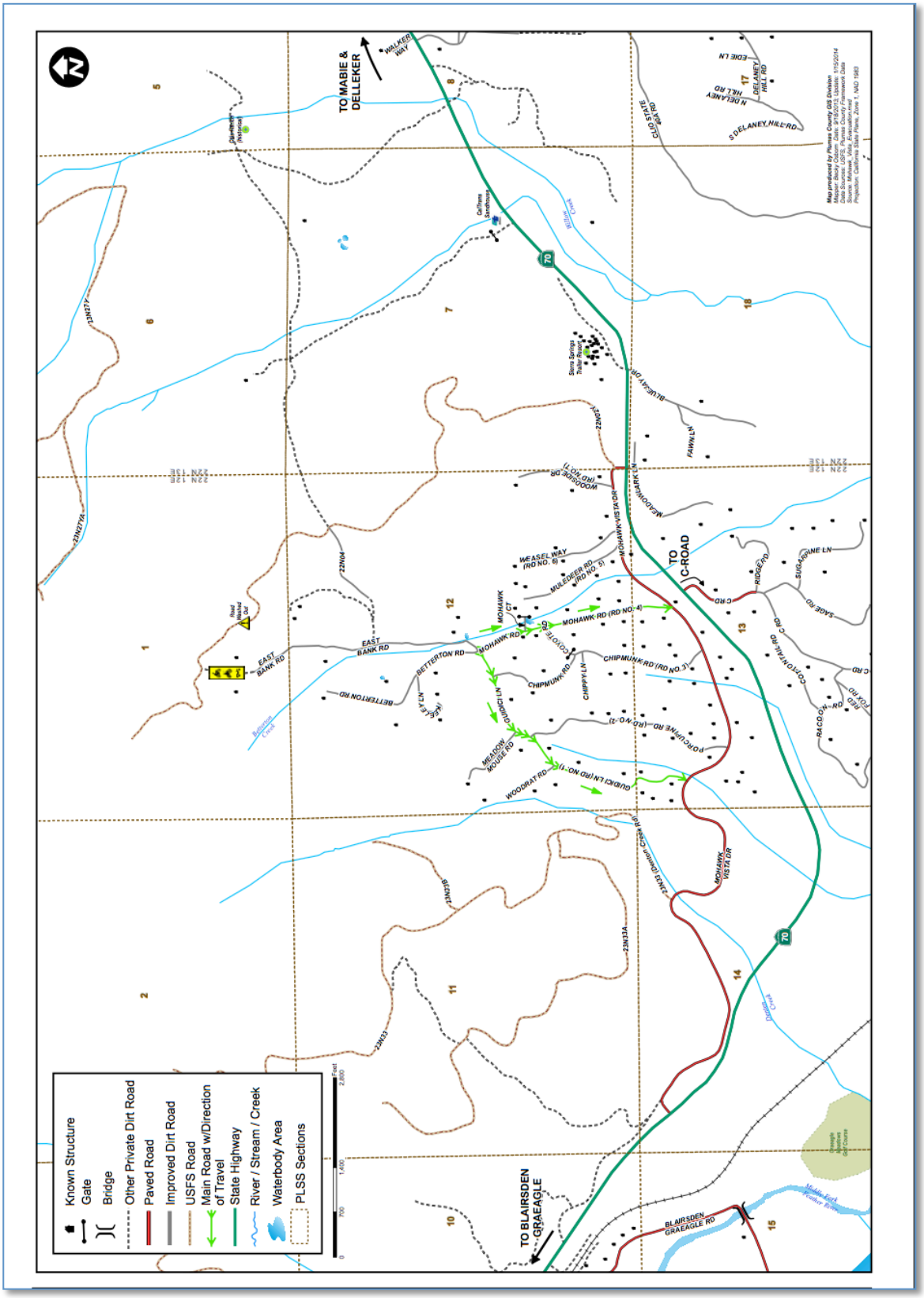
These two documents are available online at the Plumas County Fire Safe Council website (http://www.plumasfiresafe.org).

Appendices

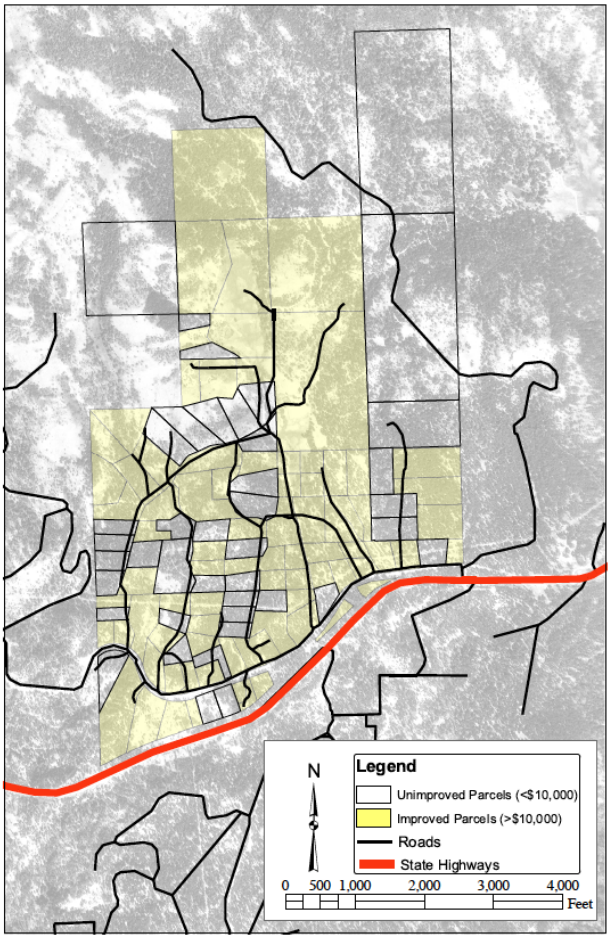
Appendix A Mohawk Vista Wildfire History



Appendix B 2014 Mohawk Vista Suggested Wildfire Evacuation Route Map



Appendix C 2005 Mohawk Vista Community Education and Fuel Reduction Project



Mohawk Vista Community Education & Fuel Reduction Project

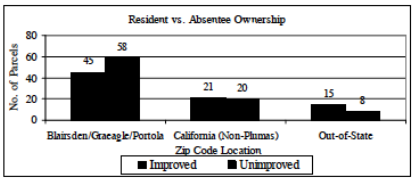
C-Road & Mohawk Vista

Generalized Fire Behavior
Extreme Fire Behavior with Active Crowning

Tactical Considerations:
Poor clearance on many scattered individual structures, dangerous access, alignment of slope, fuels, wind, multiple ignition threats below. Very exposed to large-scale winds. Approximately 430 private parcels falling on both sides of Highway 70. This community has some serious problems which could set it up for a very devastating fire.

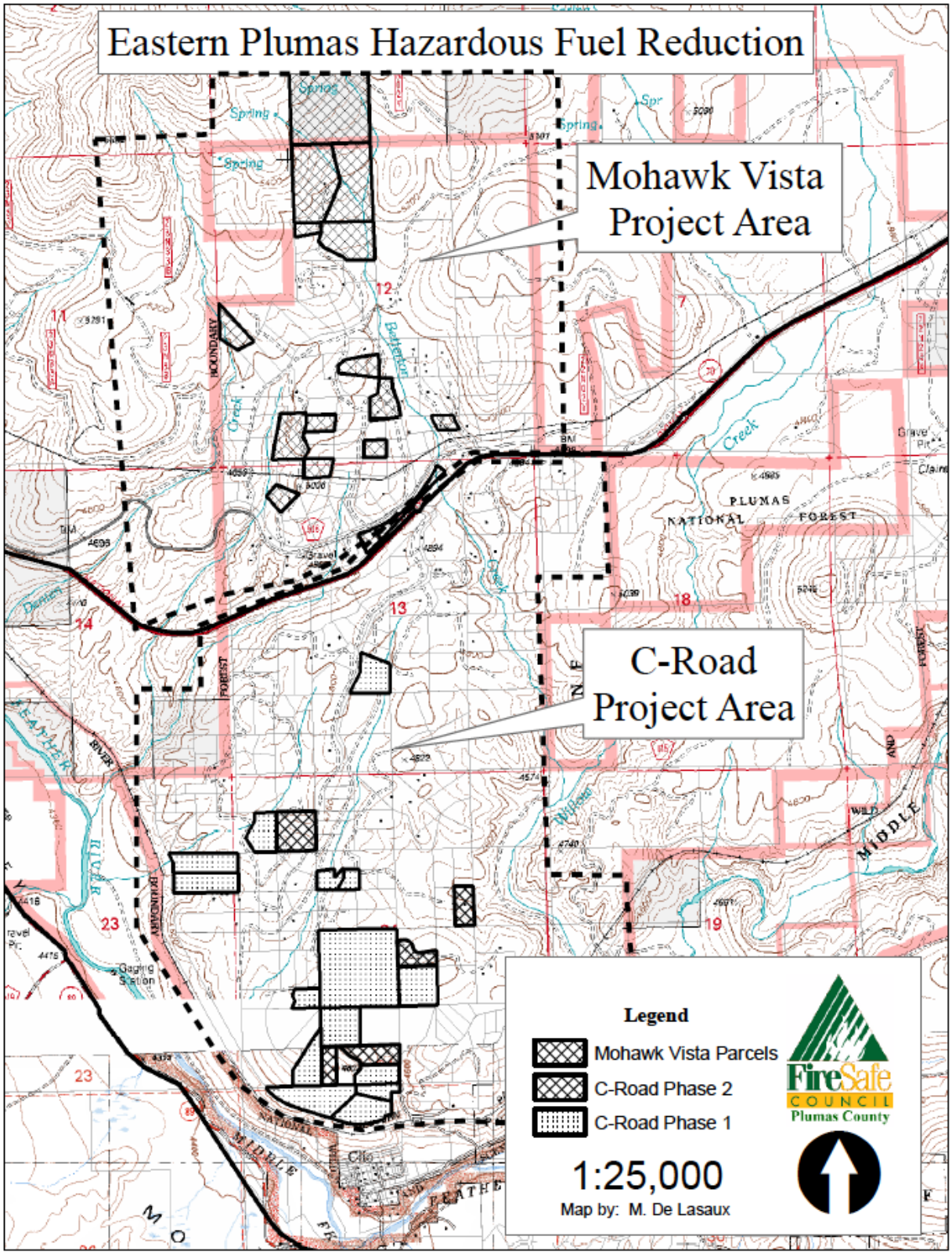
Fuels Comments/Recommendations:
"Dense 2nd growth and heavy surface fuels. Spot fire hazard from fires making uphill runs through community would likely render small fuelbreak thinning projects adjacent to community or along main roads ineffective for halting fire spread. Fuelbreak-style thinning along main road would act to increase firefighter safety, but fuels treatment strategy should emphasize multi-owner area treatment-scale thinning projects, with emphasis on raising crown base height to reduce torching/spotting hazard. Vacant parcels within community are high priority for thinning, emphasizing removal of ladder fuels."
Source: *Callenberger et. al. 2004, Plumas County Fire Hazard Assessment & Strategy*

Parcel Size Class (acres)	No. of Parcels	No. of Acres
1.00 - 1.49	10	17
1.50 - 2.49	28	72
2.50 - 3.49	10	34
3.50 - 4.49	7	31
4.50 - 5.49	7	37
5.50 - 6.49	5	32
6.50 - 7.49	5	37
10	2	20
12	1	12
13	1	13
20	2	42
40	2	83
60	1	61
Total	81	489



Map by: M. De Lasaux, 1/12/05

Appendix D Prior Mohawk Vista Fuels Reduction Projects



Appendix E California State Law

California state law regarding the establishment and maintenance of "defensible space" is found in Public Resources Code (PRC) Section 4291. The actual text of that section, which was updated in 2005, is found below. The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for enforcement of PRC 4291. CAL FIRE has also prepared practical guidelines for implementation of "defensible space" in various kinds of settings; these are summarized in a brochure that is found online at:

http://www.fire.ca.gov/CDFBOFDB/pdfs/Copyof4291finalguidelines9_29_06.pdf

CALIFORNIA PUBLIC RESOURCES CODE SECTION 4291

4291. (a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:

(1) Maintain defensible space no greater than 100 feet from each side of the structure, but not beyond the property line unless allowed by state law, local ordinance, or regulation and as provided in paragraph (2). The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken to minimize erosion.

(2) A greater distance than that required under paragraph (1) may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that such a clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

(3) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under paragraph (1) if a fire expert, designated by the director, provides findings that such a clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.

(4) Remove that portion of any tree that extends within 10 feet of the outlet of a chimney or stovepipe. (5) Maintain any tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood. (6) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

(7) (a) Prior to constructing a new building or structure or rebuilding a building or structure damaged by a fire in an area subject to this section, the construction or rebuilding of which requires a building permit,

the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the certification, upon request, to the insurer providing course of construction insurance coverage for the building or structure. Upon completion of the construction or rebuilding, the owner shall obtain from the local building official, a copy of the final inspection report that demonstrates that the dwelling or structure was constructed in compliance with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the report, upon request, to the property insurance carrier that insures the dwelling or structure.

(b) A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the consent of the owner of the property.

(c) (1) Except as provided in Section 18930 of the Health and Safety Code, the director may adopt regulations exempting a structure with an exterior constructed entirely of nonflammable materials, or, conditioned upon the contents and composition of the structure, the director may vary the requirements respecting the removing or clearing away of flammable vegetation or other combustible growth with respect to the area surrounding those structures.

(2) An exemption or variance under paragraph (1) shall not apply unless and until the occupant of the structure, or if there is not an occupant, the owner of the structure, files with the department, in a form as the director shall prescribe, a written consent to the inspection of the interior and contents of the structure to ascertain whether this section and the regulations adopted under this section are complied with at all times.

(d) The director may authorize the removal of vegetation that is not consistent with the standards of this section. The director may prescribe a procedure for the removal of that vegetation and make the expense a lien upon the building, structure, or grounds, in the same manner that is applicable to a legislative body under Section 51186 of the Government Code.

(e) The Department of Forestry and Fire Protection shall develop, periodically update, and post on its Internet Web site a guidance document on fuels management pursuant to this chapter. Guidance shall include, but not be limited to, regionally appropriate vegetation management suggestions that preserve and restore native species, minimize erosion, minimize water consumption, and permit trees near homes for shade, aesthetics, and habitat; and suggestions to minimize or eliminate the risk of flammability of non-vegetative sources of combustion such as woodpiles, propane tanks, wood decks, and outdoor lawn furniture.

(f) As used in this section, "person" means a private individual, organization, partnership, limited liability company, or corporation.

4291.1. (a) Notwithstanding Section 4021, a violation of Section 4291 is an infraction punishable by a fine of not less than one hundred dollars ($100), nor more than five hundred dollars ($500). If a person is convicted of a second violation of Section 4291 within five years, that person shall be punished by a fine of not less than two hundred fifty dollars ($250), nor more than five hundred dollars ($500). If a person is convicted of a third violation of Section 4291 within five years, that person is guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars ($500). If a person is convicted of a third violation of Section 4291 within five years, the department may perform or contract for the performance of work necessary to comply with Section 4291 and may bill the person convicted for the

costs incurred, in which case the person convicted, upon payment of those costs, shall not be required to pay the fine. If a person convicted of a violation of Section 4291 is granted probation, the court shall impose as a term or condition of probation, in addition to any other term or condition of probation, that the person pay at least the minimum fine prescribed in this section.

(b) If a person convicted of a violation of Section 4291 produces in court verification prior to imposition of a fine by the court, that the condition resulting in the citation no longer exists, the court may reduce the fine imposed for the violation of Section 4291 to fifty dollars ($50).

4291.3. Subject to any other applicable provision of law, a state or local fire official, at his or her discretion, may authorize an owner of property, or his or her agent, to construct a firebreak, or implement appropriate vegetation management techniques, to ensure that defensible space is adequate for the protection of a hospital, adult residential care facility, school, aboveground storage tank, hazardous materials facility, or similar facility on the property. The firebreak may be for a radius of up to 300 feet from the facility, or to the property line, whichever distance is shorter.