

# **Sloat - Cromberg - Camp Layman Firewise Community Assessment Plumas County, CA**



**September 2016**



**Table of Contents**

**1 Introduction ..... 3**

**2) Definition of the Home Ignition Zone..... 4**

**3) Wildland fire characteristics that could threaten the area..... 4**

**4) Site Description..... 7**

**5) Assessment Process ..... 8**

**6) Important considerations..... 8**

**7) Observations and recommendations ..... 10**

7.1 Positive Community Attributes..... 10

7.2 Roads ..... 10

7.3 Gates ..... 11

7.4 Bridges..... 11

7.5 Access to structures ..... 11

7.6 Driveways..... 11

7.7 Structures & Defensible Space ..... 12

7.8 Propane tanks and generators..... 13

7.9 Water Systems..... 13

7.10 Vegetation beyond the home ignition zone..... 13

**Additional Considerations: ..... 15**

**9.) Successful Firewise Modifications ..... 15**

**10) Next steps ..... 17**

## **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 the Sloat, Cromberg and Camp Layman Firewise Committee and 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:

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### **Long Valley Community Services District**

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### **Area Residents**

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### **Plumas Firesafe Council**

Mike Callahan, Chair  
Hannah Hepner, Plumas Firesafe Council Coordinator

### **U.S. Forest Service, Plumas National Forest**

Don Fregulia, Division Chief, Beckwourth Ranger District

## **2) Definition of the Home Ignition Zone**

The communities of Sloat, Cromberg and Camp Layman are 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 above communities. 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 Sloat, Cromberg and Camp Layman. 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. Area 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) Wildland fire characteristics that could threaten the area**

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.
- 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 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, the steeper the slope, the higher the uphill fire spread and intensity.

**Sloat** is situated in a Long Valley with meadows. Homes are scattered in the valley as well as the forested areas adjacent to the meadows. The area receives moderate landscape winds from the Middle Feather River during the summer months.

**Cromberg** is situated in a forested area bounded by moderate to steep slopes and south facing slopes.

**Camp Layman** is located on the Feather River with nearby steep slopes in a canyon

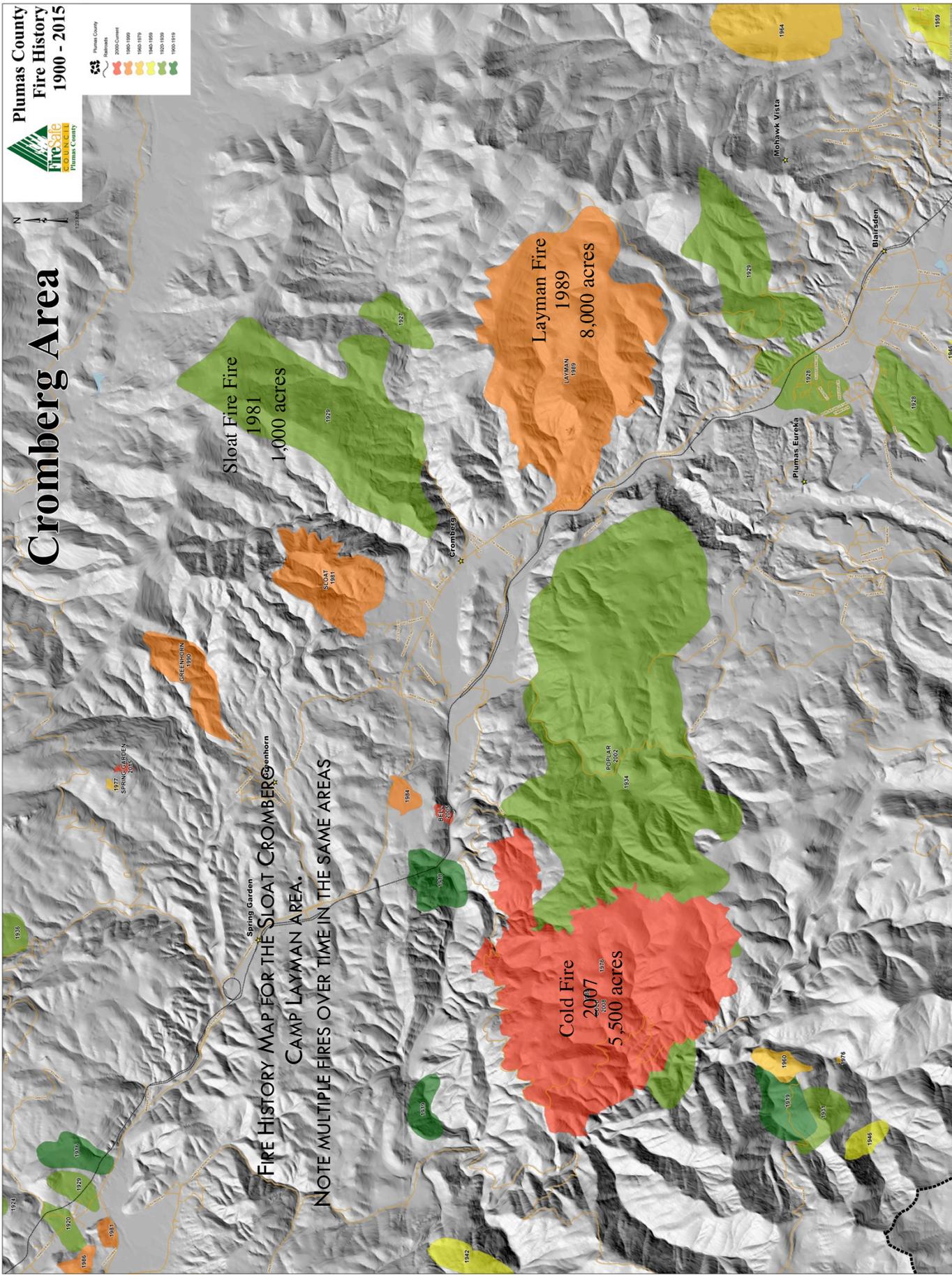
Embers or firebrands are produced from burning needles, leaves, bark, twigs and cones, when natural vegetation burns. Embers tend to be carried aloft by the superheated air of the fire and can then be carried long distances in advance of the actual flame front by even light winds. It is not uncommon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

Expected fire behavior in the community and adjacent timber would be conducive to active surface fires as well as passive and active crown fire. Torching trees both increase fire intensity and become excellent generators of embers for spotting. There are various locations that are experiencing tree mortality due to a bark beetle epidemic that can add challenges to firefighters. 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.

In the last 35 years, there have been three large fires in the Long Valley area. The Sloat fire in 1981 burned the majority of its 1,000 acres in about six hours, under moderate summer conditions. In 1989, the 8,000 acre Layman fire, burning under extreme conditions consumed about 1,000 acres per hour and spotted over a mile. In 2007 the Cold Fire burned 5500 acres.

*Viable scenarios for a severe wildland fire event, a) a structure fire or a fire from another cause spreading in to the untreated forested lands within the community on a windy day b) fast moving wind driven grass fires spreading through ungrazed meadows. 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.*



# Cromberg Area

Plumas County  
Fire History  
1900 - 2015

Plumas County  
Fire Safe  
Plumas County

Legend:  
 2000 Current  
 1990-1999  
 1980-1979  
 1970-1969  
 1960-1959  
 1950-1949  
 1900-1919

Sloat Fire Fire  
1981  
1,000 acres

Layman Fire  
1989  
8,000 acres

Cold Fire  
2007  
5,500 acres

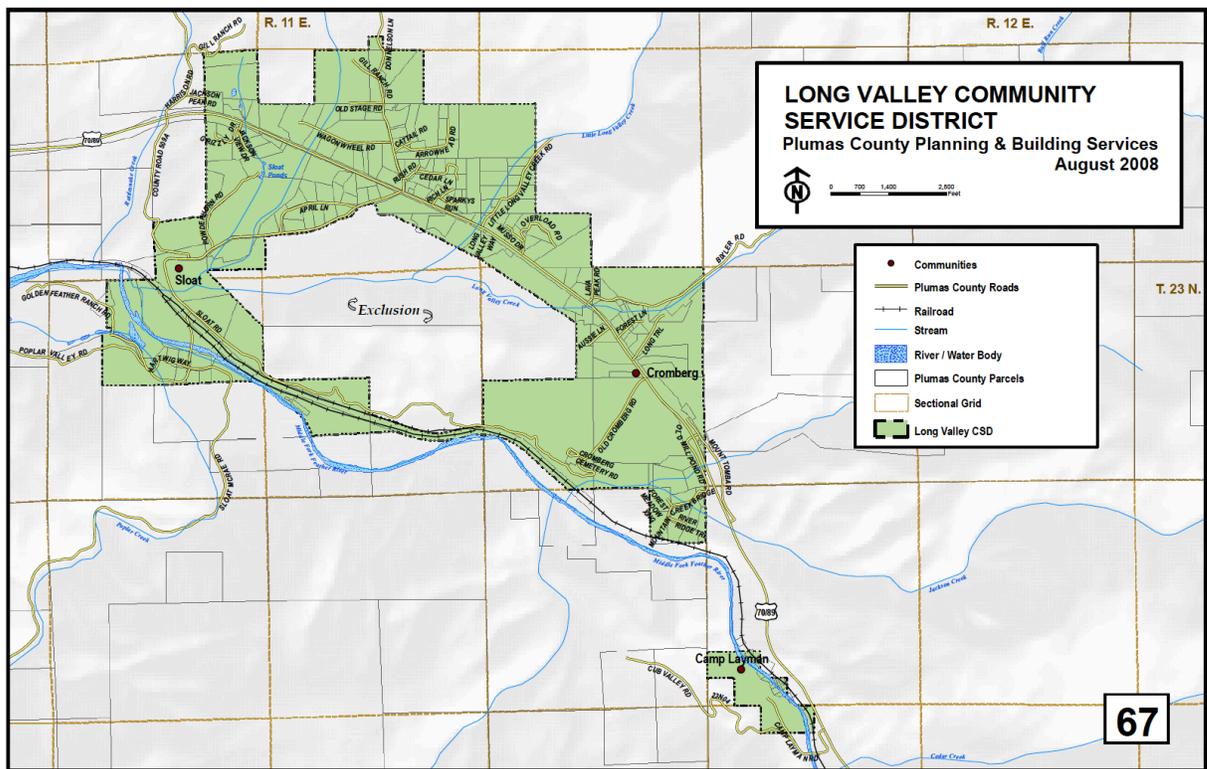
FIRE HISTORY MAP FOR THE SLOAT CROMBERG  
CAMP LAYMAN AREA.

NOTE MULTIPLE FIRES OVER TIME IN THE SAME AREAS

#### 4) Site Description

The Sloat Cromberg and Camp Layman communities are part of the Long Valley Community Services District, located in the south central part of Plumas County. The area contains 2.7 square miles. There is an island in the center of the community called Long Valley, which is zoned agricultural. The census population in 2010 was 261 people living in 121 households. There were 81 families- the median age was 53.3 years old. There were 188 housing units of which 79.3% were owner occupied. 64% of those housing units were occupied. Camp Layman is comprised of summer cabins and the Camp Layman Resort, all of which are located on National Forest land. The homes are under lease and the resort has a Special Use Permit from the Plumas National Forest. The area is at risk for fire from the travel corridors of Highway 70 and Union Pacific railroad traffic. Seasonal visitors enjoy two RV parks, Camp Cromberg, Twenty Mile House, Sierra Sky Lodge and Camp Layman resort. Hunters and other outdoor enthusiasts recreate in the adjoining forest nearby.

Fuel type in the area is Sierra Crest mixed conifer. Many areas have been thinned, however, there is still much to do to reduce the overall community fire hazard. There are pockets of dense forest and brush that have been left under the trees to produce a “fire ladder” that will easily carry fire into the tree tops. Ideal conditions would be 30-100 trees to acre to reduce the threat of a crown fire. Currently some areas have 800-1000 trees per acre.



## **5) Assessment Process**

A team approach was taken in preparing this assessment of fire hazards and risks at Sloat, Cromberg and Camp Layman. Relevant background data was initially collected and discussed by the group 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. The community assessment took place September 1, 2016.

## **6) Important considerations**

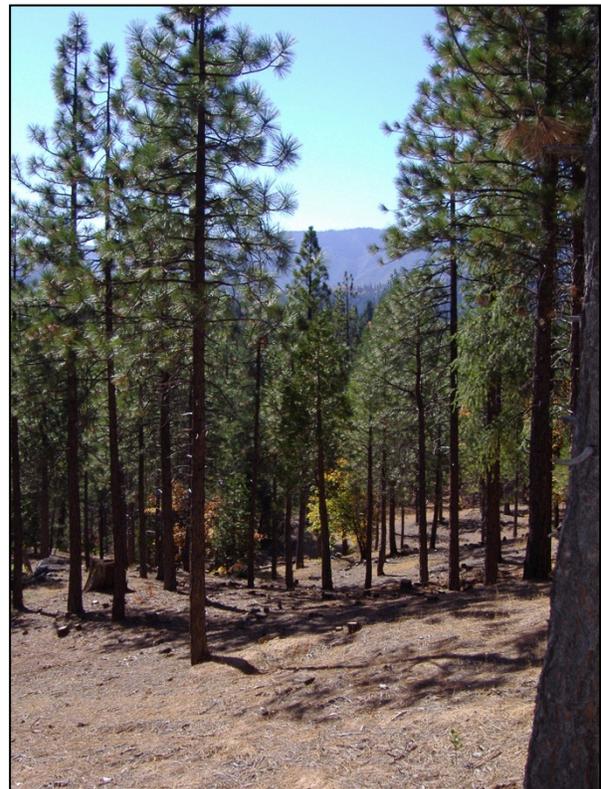
The Firewise Communities/USA program seeks to create a sustainable balance that will allow communities to live safely while maintaining environmental harmony in a Wildland Urban Interface (WUI) setting. Homeowners already balance their decisions about fire protection measures against their desire for 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 should have their “lean, clean, and green zone” from 0-30 feet from their structure.
2. The area from 30’ to 100’ should be maintained as the “reduced fuel zone”.
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 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 15 years. Many property owners have participated in obtaining grants for fuel reduction programs.
- Soper Wheeler and Sierra Pacific, private timber companies, have done many forest management projects adjacent to private lands.
- The U.S. Forest Service has completed hazardous fuels treatment projects at Camp Layman, and sections north of Highway 70 along with the Old Sloat Road area.
- Some residents have reflective address signs
- Camp Layman has a wildfire evacuation map.

### **7.2 Roads**

Main roads in the community are county maintained roads. There are a number of roads that are dirt.

- Roads are varied, some with turnouts and some with turn around accessibility where they end. Vegetation clearance along the road and turn around space for fire suppression equipment is of concern.
- Some roads are signed with non-reflective signs. As you travel down some roads you cannot clearly identify at intersections, which is the road or a driveway.
- Some roads are too narrow to allow structure engines to travel the road. Larger engines and water tenders cannot access some of the roads.



This intersection is an opportunity to place addresses for homes located accessed by both roads.

### **Recommendations:**

- Maintain and improve road width by brushing and limbing trees. Developing turnarounds and turnouts where 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 with road name at the appropriate height to accommodate average snow depth. Plumas County Rod Dept. uses white lettering on green background high intensity sheeting with 4" lettering on a 6" sign panel. Road signs that are obstructed by tree and /or shrubbery should be cleared of these or other obstructions.

### 7.3 Gates

Some residents in the area have locked gates.

- If your home is gated, it is very important that the gate opens inward and be wide enough to accommodate the fire fighting equipment. Experts also recommend that the gate be at least 30 feet off of the main road, so that the equipment can pull off the road to open the gate. If the gate is locked, the lock should not be so strong that firefighters cannot break it in an emergency. Contact the Long Valley Fire Department so they are familiar with your gates emergency opening procedures or information on an emergency key box.



Gate opening inward

### 7.4 Bridges

There are County maintained bridges over the Feather River. There is one private bridge on Little Long Valley Creek accessing Camp Cromberg with a signed limit of 7 tons.

#### **Recommendations:**

- If access to your property is over a bridge, make sure that the bridge meets access requirements. This means the bridge must support 40 tons, handling the weight of the fire apparatus.
- Establish a secondary access into and out of areas with bridges that cannot be safely traveled by fire apparatus.
- Maintain clearance around wooden bridges to insure survivability.

### 7.5 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.

### 7.6 Driveways

- Some 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.

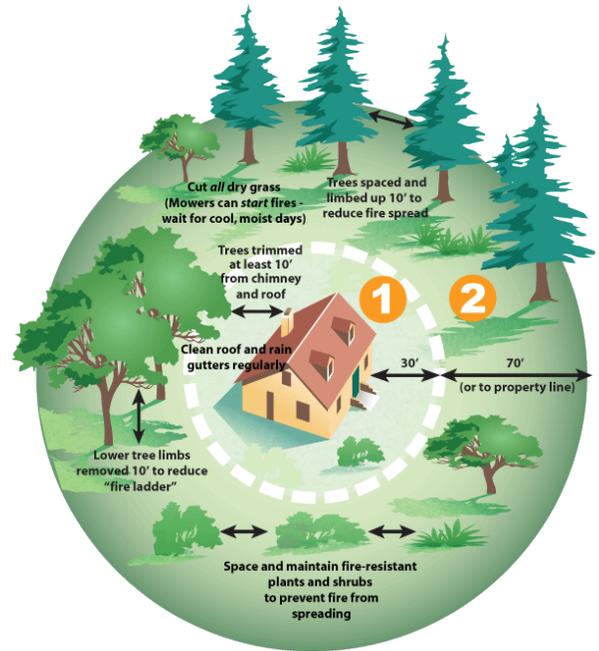
- Driveways should be cleared of vegetation so as not to put citizens and emergency personnel at risk.
- Most of the existing structural driveway problems can’t be corrected, except for clearance of vegetation.

### *Items creating increased risk to community safety*

### **Areas identified as a concern or for improvement**

#### 7.7 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.



Example of good defensible space

- Many areas have next generation small trees growing in need of thinning- these are easy to clip with loppers while they are still small.

**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 requiring clearance to 100 feet).
- Chimney and vent screens- it is recommended that these openings have screens for fire protection.
- Members of the Long Valley Firewise group are available to discuss opportunities to make your home and property safer in the event of a wildfire.

7.8 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, regulators located next to the tank under trees 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.

7.9 Water Systems

- There are no hydrants in the Sloat or Cromberg area. The Middle Feather River and creeks in the community could be utilized for drafting in the event of a wildfire.
- Camp Layman has well marked 1 ½" stand pipes in their community.

**Recommendations:**

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

7.10 Vegetation beyond the home ignition zone

Reduction of fuel volume and ladder fuels

- Vegetation on undeveloped lots within the community is not covered by California Public Resources Code 4291 for 100' of defensible space, 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.

- Due to the drought in Plumas County for the past 5 years, the area has tree mortality.

### 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 will reduce fuel volume and maintain forest health.
- Continue thinning or removal of old dead and new brush growth.
- Thin or remove new seedlings or saplings.
- Remove accumulating surface litter or debris.
- Keep debris piles 100' from structures.



*Today's thicket of trees is tomorrow's mess. Thin dense stands of trees while they are small. Cost and difficulty of removal only increase as they grow.*

- Property owners should pay close attention to their trees on their property to manage for bug kill. Information relating to identification and treatment options can be found at CAL FIRE website: [www.readyforwildfire.org](http://www.readyforwildfire.org).
- These trees pose a threat to other trees in the area by spreading bugs. They may also pose a threat to your home, power lines or road access if not taken care of. CAL FIRE's Forester in Quincy is available for consultation on this issue.



### **Additional Considerations:**

#### **8.) Emergency Preparedness:**

Families should have a plan in the event of a wildfire or any other emergency. Have your family plan and be Ready, Set, Go! Know your evacuation route out of your area, sign up your cell phone with the Plumas County Sheriffs Office Code Red (Plumas Counties reverse 911 program) for cell phone notifications. Have a plan for your animals in case you need to evacuate them for an extended period.

#### **9.) 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 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 the Sloat Cromberg Camp Layman area and are examples of good Firewise practices.



*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. Ensure landscape mulch does not come in contact with wood decks.*



*Firewood is stacked away from the home*



*This historic cabin has well maintained defensible space. Special attention needs to be taken with the non fire resistant siding if a fire is threatening the community.*

### 10) Next steps

After reviewing the contents of this assessment and its recommendations, the Sloat, Cromberg and Camp Layman Firewise Committee in cooperation with the Long Valley Fire Department will determine whether or not it wishes to continue seeking Firewise Communities/USA recognition. The Firewise Communities/USA representative will contact the Firewise Board representative to receive its decision.

If the site assessment and recommendations are accepted and recognition will be sought, the Sloat Cromberg and Camp Layman Firewise Board will create agreed-upon, area-specific solutions to the Firewise recommendations and create an action plan in cooperation with the Long Valley Fire Department.

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.)
- Observe a 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.

Area residents are reminded to be conscious of keeping high-intensity fire more than 100 feet from their homes. It is important for them to avoid fire contact with their structures. 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. It is a bad idea for fire to touch a house during a wildfire. Remember that, while wildfire cannot be eliminated from a property, it can be reduced in intensity.

Homeowners are reminded that street signs, addresses, road widths and fire hydrants 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.

Weather is, of course, of great concern during wildfire season. At such time as fire weather is severe, homeowners should remember not to leave flammable items outside. This includes rattan doormats, flammable patio furniture, firewood stacked next to the house, or other flammables.