

Executive Summary

1) Purpose & Background

A. Purpose

The purpose of this plan is to outline the risks and hazards associated with a wildland fire threat to Plumas County communities, the City of Portola, and to identify potential mitigation measures. The Plumas County Communities Wildland Fire Mitigation Plan is intended to provide documentation of implementing actions designed to reduce risk to homes and communities from wildfire. The emphasis of this plan is to work from the home outward into the forests so that man-made and natural resources survive the eventual intrusion of a wildfire.

This plan is intended to meet the requirements of the Healthy Forest Restoration Act (HFRA) of 2003, make the County eligible for National Fire Plan (NFP) funding assistance, provide information to assist communities in recommending fuel reduction projects on public and (or as well as) private lands, and also serve as the wildfire hazard mitigation portion of Plumas County's Multi-Hazard Mitigation Plan (DMA 2000).

This Community Wildland Fire Mitigation Plan is a collaborative effort by the Plumas County Fire Safe Council, County of Plumas, Plumas County Fire Chiefs Association, California Department of Forestry and Fire Protection, US Forest Service, and community members. This project was funded in part by the United States Department of the Interior, Bureau of Land Management, as part of the National Fire Plan from the Community-Based Wildfire Prevention Grants Program of the Sacramento Regional Foundation.

B. Background

Wildfire Threat - Fire Frequency and History

Wildfire is a frequent and often natural process throughout much of the Sierras. Where fires once frequently and lightly burned the forest floor, they now have become catastrophic stand-replacing events, often threatening communities.

Wildfire Threat - To Communities

While wildland fire is a component of the ecosystem, urbanization of forested lands has placed people, communities, and the natural resources at risk for loss. In Plumas County there have been numerous fires, small and large, that have threatened county residents and communities in the recent past creating both evacuation preparation and, on rare occasions, an actual evacuation.

Wildfire Threat - To Homes

Wildland fire research indicates that the characteristics of home construction and its immediate surroundings determine a home's ignition potential during wildland fires.

Roofing material and the presence of defensible space play key roles in determining whether or not structures will survive. Defensible space can also affect the safety of firefighters.

Wildland Fire Behavior Factors, Influences, and Elements Affecting Property and Resource Damage

Factors that influence wildland fire behavior are: *Fuel*, *Weather*, and *Topography*. Interaction of these three factors affect the direction of travel, how fast a fire spreads, how intensely it burns, and, consequently, how much effort it takes to control.

Fuel is the common denominator between the fire and fire behavior triangles; it is the only element we can manage. Unfortunately, the fuels in and around our communities and outlying developments continue to build up and increase.

Successful fuel management to reduce fire intensity, extent, and, consequently, damage requires efforts be spent on decreasing the volume and increasing the separation of forest fuel available to burn. There is a substantial amount of research on the effectiveness of treating forest fuels to modify fire behavior.

Wildfire Priorities for Resource Commitment

In wildland fire suppression, resources are allocated on a priority basis and usually are: 1) public and firefighter safety; 2) protection of developed resources, such as homes; and 3) protection of land features such as trees, views, and habitats. These priorities of commitment can obligate limited resources to protect structures rather than stop fire growth.

2) Risk

Risk is considered the potential for wildfires to start and threaten communities. Inherent to that is a display of where those communities are, including a buffer around them defined as “Wildland Urban Interface”. Additional information is displayed as to population density, key infrastructures, fire department capabilities, and communities with evacuation plans and assembly areas.

3) Fire Behavior Factors

Fire behavior factors are considered to be the factors which contribute to how fast and intensely a fire burns. They are: *Topography* (slope, aspect, elevation, and features); *Fuel* (type, volume, species, space between layers, surface, ladder & crown fuels, and compactness of the fuelbed); and *Weather* (temperature, humidity, wind, and precipitation). These three factors result in expected fire behavior following an ignition. Fire behavior models are used to predict how fast a fire will burn, how intensely it will burn, and its potential for crowning and spotting.

A key fire behavior output is flame length. Flame length correlations are used in planning for suppression resource capability and can be related to firebrand production, spotting, and resource damage. The Plumas County Fire Safe Council has set a target flame length of 1 to 4 feet in stands where hazardous fuels are treated. While 4 feet is the upper limit, every effort should be made to reduce it to 2 feet, especially closer in to structures and communities.

4) Fire Risk Mitigation Strategies

The goal of this section is to:

- Identify situations and factors which place residences or communities at risk from wildfire, and suggest appropriate mitigation measure(s) to reduce that risk.

The objectives of this section are to:

- Identify mitigation measures by focus area and prioritize by zone. Focus is on public safety, firefighter safety, reducing structure ignitability, and reducing damage to other manmade and natural resources.
- Identify areas where collaborative efforts of local, state, and federal agencies can mitigate risks of structure ignitability and reduce hazardous fuels and wildfire threats to communities.
- Support efforts of Plumas County, the County Fire Warden, County Fire Chiefs, County Fire Safe Councils, CDF, US Forest Service, and other federal agencies to collaboratively implement mitigation measures and obtain funding assistance.

Fire Risk Mitigation Strategies - This section is divided into four areas of focus. Mitigation strategies are prioritized by zone, with the highest priority being the structure ignition zone and working outward to the Extended WUI.

- **Mitigation strategies areas of focus:**
 - A. Information, Education, and Planning
 - B. Reducing Structure Ignitability
 - C. Enhancing Suppression Capabilities and Public Safety
 - D. Hazardous Fuel Reduction
- **Mitigation strategies prioritization by zone:**
 1. Home Ignition Zone: 0-150 feet
 2. Community at Risk Zone: (Plumas County Communities at Risk map)
 3. Adjacent Wildland Urban Interface (WUI) Zone: .5 mile around communities
 4. Extended Wildland Urban Interface (WUI) Zone: 1 mile around adjacent WUI.