

Lincoln County Community Wildfire Prevention Plan (CWPP)



**Adopted 2003
Updated June 2005
Updated June 2013**

Resolution

WHEREAS, in the interest of protecting the public health and safety of Lincoln County residents; and

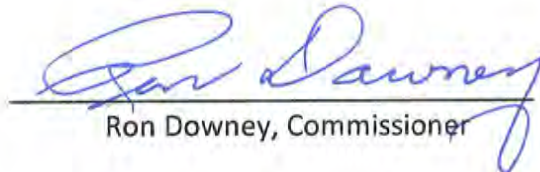
WHEREAS, in the interest of controlling future public expenditures with respect to fighting wildland fire; and

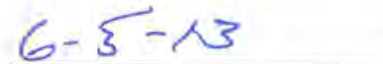
WHEREAS, it is incumbent upon Lincoln County and its resident to make every effort to reduce risks to persons, property and resources from wildland fire; and

THEREFORE, BE IT RESOLVED, that this Community Wildfire Protection Plan has been developed and is hereby adopted to position fire protection agencies, county leaders, rural communities, county residents, forestland owners and managers to be better prepared to protect Lincoln County residents and its natural resources from the potentially devastating impacts of wildfire.

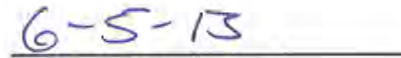

Anthony J. Berget, Commissioner


Date


Ron Downey, Commissioner


Date


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EXECUTIVE SUMMARY

Lincoln County is situated within a heavily forested landscape dominated by USFS ownership with sufficient precipitation to develop an abundance of fuels for wildfires. As a result, Lincoln County has a very high wildfire risk. Fire suppression efforts over the past 100 years and more recent housing development activity in and near forested lands has created a hazardous fire condition and expanded the Wildland Urban Interface (WUI). Lincoln County is only surpassed by Flathead County in terms of wildfire risk based on the number of homes in and the size of the WUI¹. The county is tied with Missoula County for first place for *potential* wildfire risk in the WUI, i.e., undeveloped acres, in the state². Such a ranking illustrates the seriousness of our problem and urgent need for preparedness.

Wildfire preparedness depends on a multitude of factors including: personal responsibility, education, public land management cooperation, fire and emergency response and government assistance. Improvements are being made in all of these areas, but much more is needed, particularly regarding the creation of defensible and survivable space around communities and individual homes. In addition, due to the USFS ownership of 72% of the land within Lincoln County, their engagement in forest management activities is imperative to help reduce the threat within the WUI.

Unemployment in Lincoln County consistently hovers between 16 and 18 percent and median income levels are much below state averages. The importance of these facts is that they present an obstacle for many people who live in the WUI to reduce their fuel hazard even when they desire to do so. Lincoln County has been particularly successful in securing fuel reduction grants in the past to assist those communities and homeowners in need. One of the most important and effective tools has been “cost-share” grants for fuel reduction work, which provide incentives to homeowners to reduce their risk from wildfire.

The intent of this plan is to document the accomplishments of the county *Firewise* program, the effectiveness of the program and the future direction needed. The plan is intended to be dynamic and flexible in regard to looking at opportunities to improve the wildfire preparedness of the county.

¹ *Montana Wildfire Cost Study, Technical Report*. Headwaters Economics, August 8, 2008.

² Ibid.

1. INTRODUCTION

The first Lincoln County CWPP was prepared in 2003 with a revision completed in 2005. The 2005 Revision was driven largely by the enactment of the Healthy Forest Restoration Act in 2003. This act sought to more clearly define the Wildland Urban Interface (WUI) and to better identify the process used to select forest fuel mitigation projects. Since the last update, there have been numerous accomplishments as well as some notable failures and newly identified risks, all of which are detailed in the ensuing pages.

Wildland fires are a part of the natural ecological cycle of forest ecosystems. However, over the past 100 years this natural cycle has been disrupted by fire suppression in the low to middle elevation forests. The majority of these forests are rated in a high to moderate range of departure from natural fire occurrence. The WUI is commonly described as the zone where structures and other human development meet and intermingle with undeveloped wildland and vegetative fuels. These geographic areas or zones of ever increasing risk potential pose a threat to human life and property.

2. COMMUNITY SETTING AND BACKGROUND

Lincoln County encompasses 3,613 generally forested square miles situated in the northwest corner of Montana. The terrain is fairly rugged with the Cabinet Range to the south and the Selkirk Range to the west. Elevations vary from 1800' near Troy (the lowest point in Montana) to 8700' in the Cabinet Range. A central geological feature of the county is the Kootenai River, which flows south out of British Columbia near Eureka and exits the county below Troy.

Due to the influence of the Pacific weather system the climate is mild and moist compared to the rest of the state. Many of the same tree and plant species found in the Pacific Northwest are found in portions of Lincoln County.

Average annual precipitation varies from 18" to 25" near Libby and Troy to only 14" in the Tobacco Valley near Eureka. The vegetation found in this northern part of the county is more representative of areas in eastern Montana. Higher average annual precipitation amounts are found in higher elevations. Some of these areas have precipitation amounts of over 70" a year. The wettest months are November through January and the driest are June through September.

Based on the 2010 census, the population of Lincoln County is 19,670. This reflects a very slow 4.4 percent growth rate over the past decade. Nearly 20% of the population is over 65 years old – significantly higher than the state as a whole where those over 65 represent 14% of the population.

Kootenai National Forest lands are the primary resource base of Lincoln County. The county land base consists of 79 percent public lands, with the remaining 21 percent of the land divided

between industrial (14 percent) and individual (7 percent) ownership. The County has been dependent on the extraction of mineral and harvesting of timber. While it still supports one of the highest timber harvest levels in the state, the total volume has been substantially reduced and will likely see further declines.

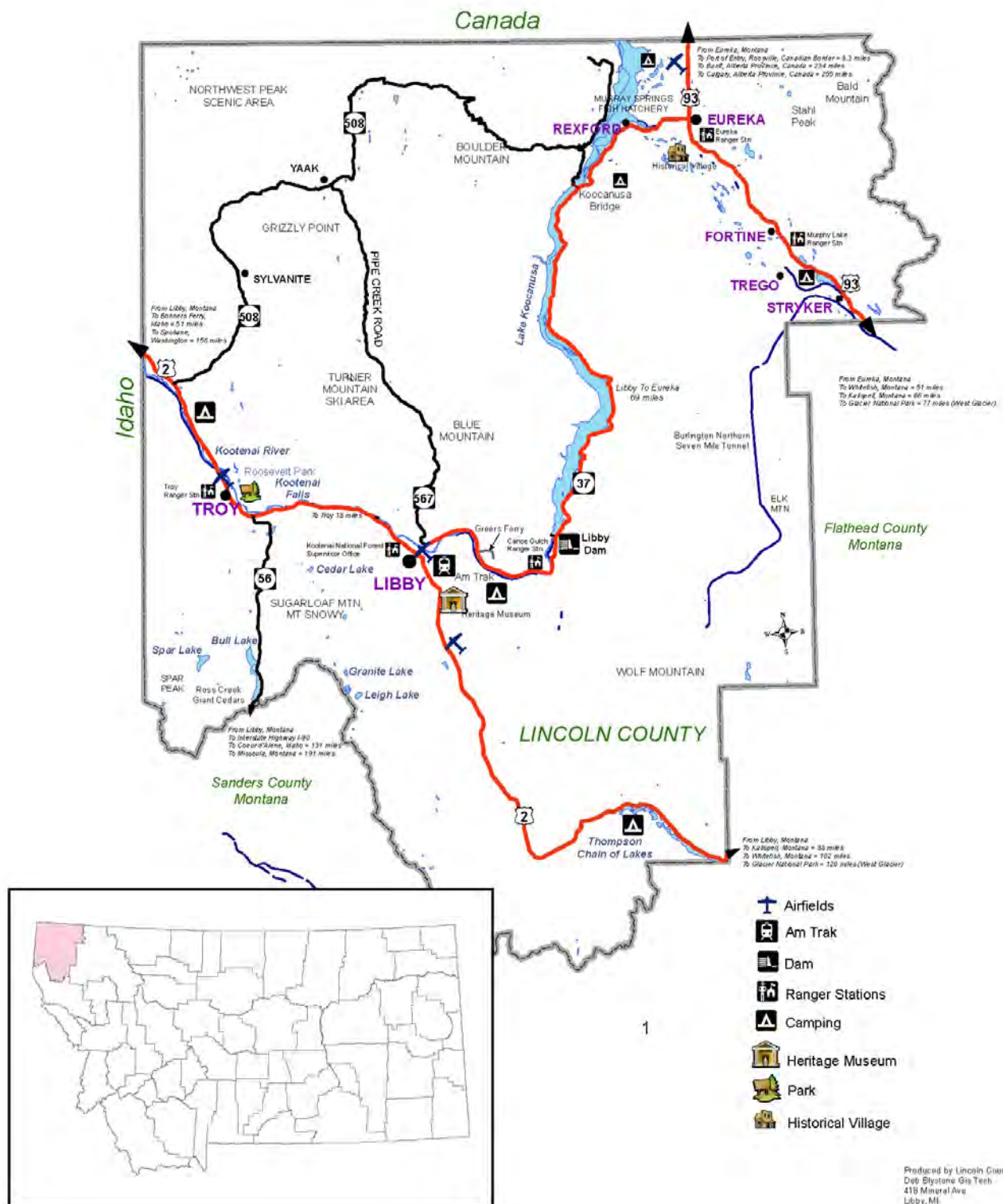
Since 2005 there has been a significant change in the economics and growth of the community. Much of this change can be attributed to the general downturn in the national economy since 2008. Whereas the county's forest industry was once the largest in the State, that industry has now been further reduced by the closure of Plum Creek Timber Co.'s Ksanka Mill in Fortine, leaving no major sawmill in the county. This mill employed 100.

Locally, Idaho Forest Group's stud mill in Moyie Springs, Idaho has expanded, becoming one of the major purchasers in the county. The Stoltze Mill in Columbia Falls and the Plum Creek Timber Co.'s operations remaining in the Flathead Valley are the other major log purchasers in the county. There are several small but bright spots in the county's timber industry, including the Chapel Cedar Mill in Troy, Lucky E-G Post and Pole in Libby and the Eureka Pellet Mill in Eureka. All of these facilities are finding niche markets, which is a sign of the changing nature of the industry.

Much of the blame for the sad state of the timber industry has been placed on the steady decline of wood products from the Kootenai National Forest. However, that is only part of the problem, because major changes are taking place in the worldwide market resulting in increasing competition in the forest products market. The housing crash has now compounded that problem. The local pulp market has also been affected since the Smurfit Stone Mill closed in Frenchtown. The economical removal of the non-sawlog component of a timber sale or fuel reduction project has been critical in the past in reducing our slash and fuels hazard. All of these implications are causing a major problem in economically dealing with the increase in fuels in the WUI. Many of our past fuels reduction projects could pay for themselves, but that has not been the case in recent years, though the 2013 uptick in the housing market has translated to a modest increase in activity in the timber market.

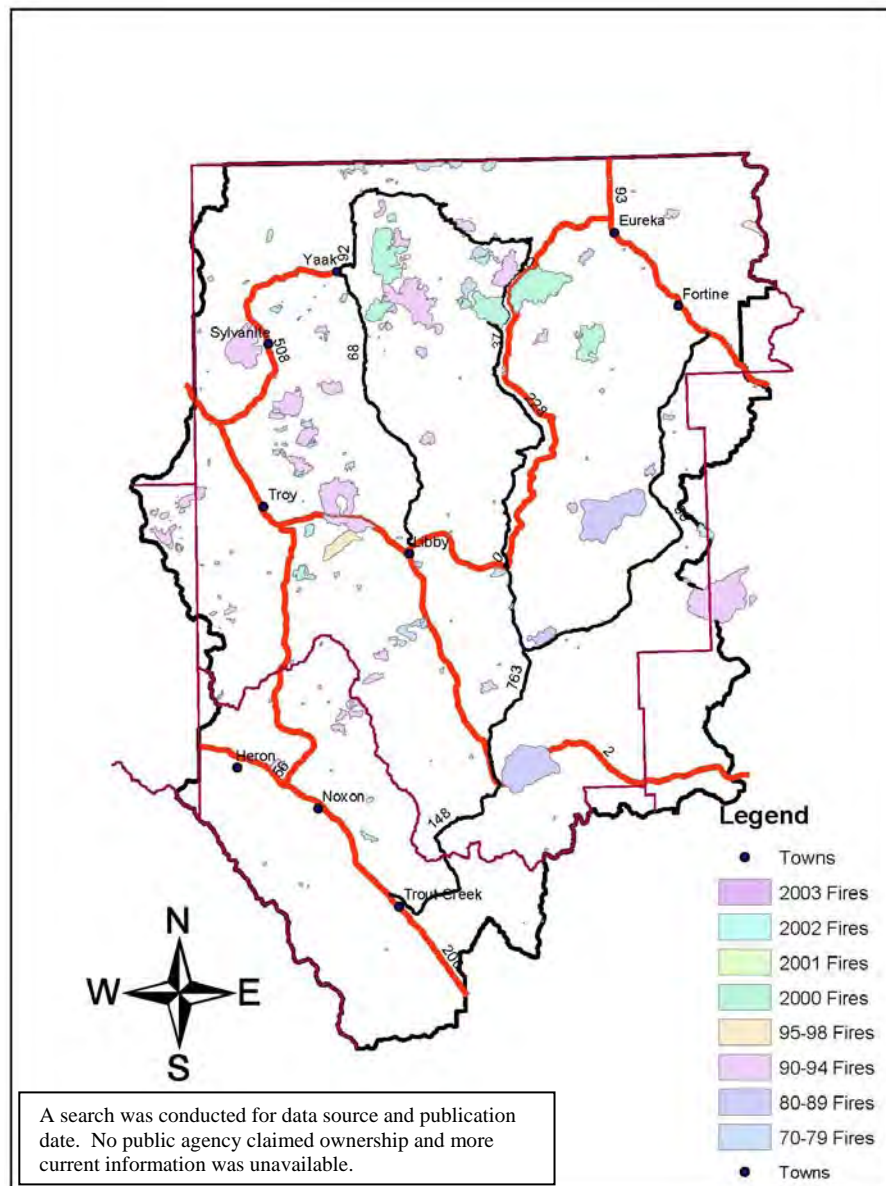
A recent setback to Libby's forest products market has been the ban on purchasing logs by Plum Creek Timber Co. and Stoltze Land & Lumber Co from within 20 miles of the former WR Grace Vermiculite Mine. This is because of their fear of liability arising from the possibility of airborne asbestos fibers in the log bark.

In 2005 the county was undergoing a rapid increase in the amount of new subdivision development in the WUI. Since about 2009 that growth has nearly stopped, which from a fire hazard standpoint has been a positive effect.



3. RECENT FIRE HISTORY

The 1994 and 2000 fire seasons were particularly severe with over 60,000 acres burned in 1994 and over 45,000 in 2000 (see map below). Since then the fire seasons have been relatively normal from a size and severity standpoint. These fires were the result of drought and accumulation of hazardous fuels. Large, uncharacteristic fires can be expected to continue given current conditions. The 2000 fire season did not result in the loss of lives or homes, but the potential was definitely present. Homeowners in the Pinkham Creek area were advised to evacuate when fires made a dangerously close run near many homes. Although residents were well aware of the potential hazard from fires, there had not been a corresponding reduction of hazardous fuels around home sites



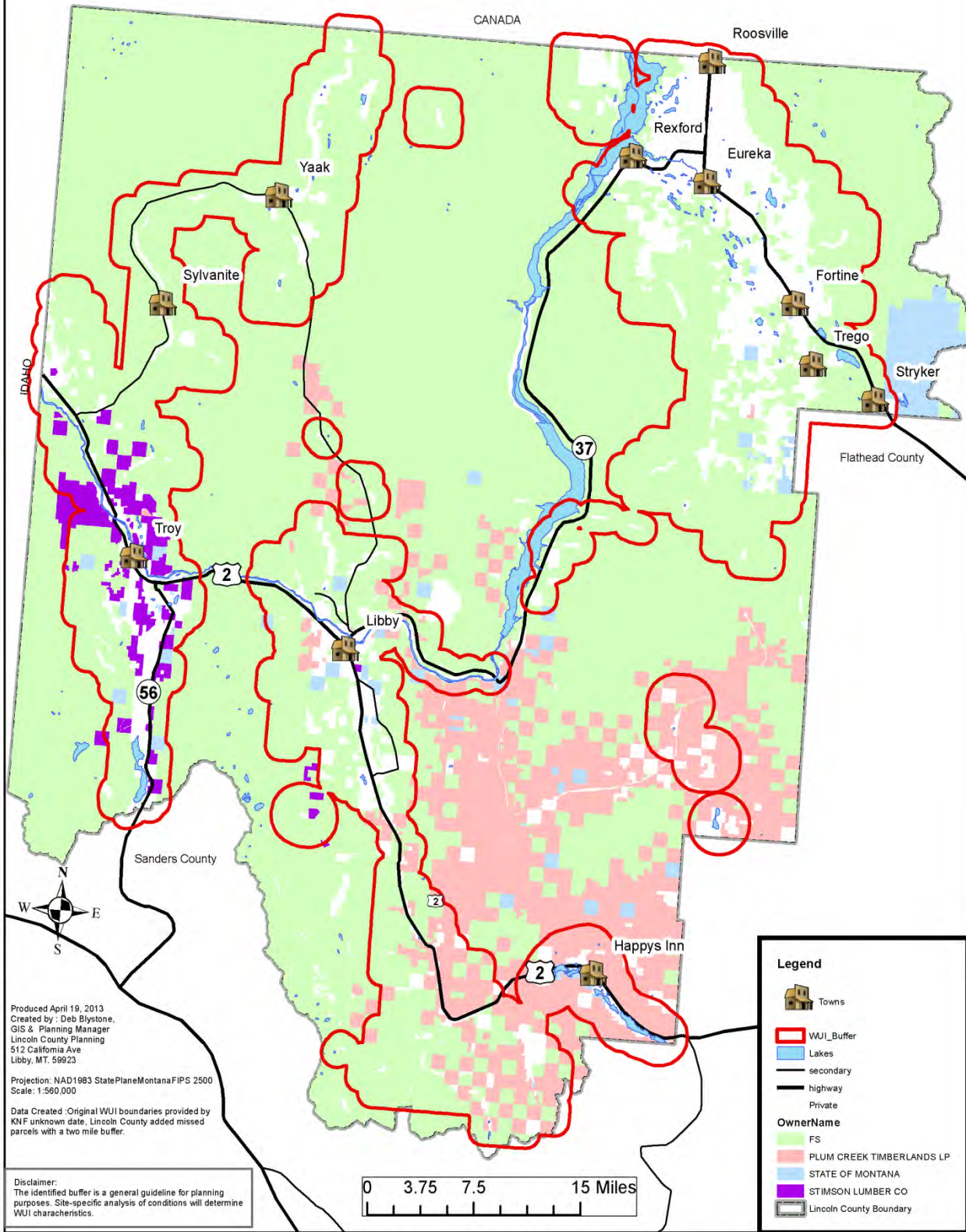
4. DEFINING THE WUI AND ASSESSING WILDFIRE RISK

The WUI is commonly described as the zone where structures and other human development meet and intermingle with undeveloped wildland and vegetative fuels. The WUI zone poses tremendous risks to life, property, and infrastructure in associated communities and is one of the most dangerous and complicated situations firefighters face.

The WUI boundary extends 2 miles beyond clusters of private, non-corporate land with known structures (see Map). The Lincoln County FireSafe Council has also recommended that the WUI be extended onto federal lands where the private lands abut federal lands. The US Forest Service involvement with the Lincoln County FireSafe Council will help them recognize priorities for fuel reduction projects on their lands. A reduction of the fuels hazard on National Forest lands can result in slowing or stopping a fire before it spreads onto private lands. Fuel reduction on private lands can also work in reverse by stopping or slowing the spread of a fire onto the National Forest.



Lincoln County WUI-2013



a. Identifying Risk Conditions

Low intensity surface fires historically kept ground vegetation from becoming ladder fuels. But much of Lincoln County has experienced a change in this vegetation due to fire suppression efforts over the past 100 years. As a result, there are more “ladder” and ground fuels (e.g. litter mat, down woody materials) that contribute to high intensity fire. This has increased the risk, hazard and threat to a growing population within the WUI.

Using industry standards for condition classes, Lincoln County CWPP assessment process identified four conditions within the WUI. They are: Interface Community, Intermix Community, Occluded Interface Community and Rural Interface Community. A description of each condition follows.

The areas that attract individuals to build homes in the WUI are low to moderate in elevation. These are the areas that are generally moderate to high in departure from the natural fire occurrence. The WUI areas in Lincoln County identified as the highest priority for treatment are primarily in the *Interface* and *Intermix Communities*.

Lincoln County also identifies the following areas as WUI:

- 1) Municipal watersheds, including the infrastructure necessary to deliver the water and the areas that contribute water flow within the watershed.
- 2) Evacuation routes that provide safe ingress/egress to communities identified as a “at-risk community” in the Healthy Forests Restoration Act of 2003. These were originally identified in the Federal Register, Volume 66 as Troy, Libby, Eureka, Yaak, Trego, Fortine, Rexford and Stryker. In addition we include routes that access any Interface or Intermix Communities.

Interface Condition The Interface Community exists where structures directly abut wildland fuels. There is a clear line of demarcation between wildland fuels and residential, business, and public structures. Wildland fuels do not generally continue into the developed area. The development density for an interface community is usually three or more structures per acre, with shared municipal services. Fire protection is generally provided by a local fire department with the responsibility to protect the structure from both an interior fire and an advancing wildland fire.

In Lincoln County, interface condition is common in portions of the communities of Troy, Libby, Rexford, Yaak, Fortine and Trego. It is also a common condition in county subdivisions such as Barnaby Lake, Pine Bay, Em Kayan Village, Crystal Lake and Wilderness Plateau.

Intermix Condition The Intermix Community exists where structures are scattered throughout a wildland area. There is no clear line of demarcation. Wildland fuels are

continuous outside of and within the developed area. The development density in an intermix community ranges from structures very close together to one structure per forty acres. Local fire departments or districts normally provide life and property protection and may also have wildland fire protection responsibilities

Intermix conditions in Lincoln County include areas close to Eureka, Libby, Troy, Rexford, Fortine and Trego. Subdivisions such as Whispering Pines, Tetrault Lake, Swede Mountain, Fairview Heights, Lower Quartz Creek, Rawlings Tract and Yaak Shores, Angel Island and Glen Lake fall into this category. Intermix conditions also exist in the Bull Lake and Farm-to-Market Road areas near Libby. Lincoln County further defines the Intermix condition as having a development density of at least ten homes in a cluster with none on parcels larger than ten acres.

Occluded Condition The Occluded Community normally exists within a city where structures abut an island of wildland fuels (park or open space). There is a clear line of demarcation between structures and wildland fuels. The development density for an occluded community is usually similar to those found in the interface community, but the occluded area is usually less than 1,000 acres in size. Fire protection is normally provided by local fire departments.

This is not a common condition in Lincoln County, but occluded conditions are found in Libby with Pioneer Park, J. Neils Park, Libby Public School lands, USFS property at Skidale and private lands located on the geologic terrace surrounding Libby.

Rural Condition The Rural Interface Community exists where scattered small clusters of structures (ranches, farms, resort, summer cabins) are exposed to wildland fuels. There may be miles between these clusters. Much of Lincoln County will fall into a rural condition.

b. Fire Risk

Risks are assigned based on identified values and patterns or trends where fires are more likely to occur or more likely to burn at a higher intensity. The past history of recorded fires, the ignition patterns, weather, topography, aspect and vegetation are all very important factors when determining the risk of a forest fire. Important tools available in Lincoln County, that are critical to evaluating this risk, include ignition maps, vegetative condition class maps and crown fire spread maps. To confirm the analytical data, actual site visits are necessary.

The intensity of a wildfire is dependent on the likeliness of an ignition in combination with the amount and complexity of the vegetative fuels and weather conditions. The majority of the WUI areas in the county have very similar vegetative configurations. Most of the large trees have been removed through logging over the past 70 years. The remaining trees tend to be younger and smaller, but more importantly they are often species such as Douglas fir that are more tolerant of shade. The result is a forest stand that is often composed of mixed ages, sizes and a preponderance of tolerant species. These stands consequently have many ladder fuels

that can easily move a ground fire into a more destructive crown fire.

Fire History Fire history maps are available in Lincoln County and are a tool that allows fire managers to quickly see where past fires have occurred. As an example, the 1910 burn was a stand replacement burn that affected several areas in the county. While these maps give important information on the fuels based on how long ago a fire burned, they are not always accurate indicators of the intensity of the burn or the fuels remaining today.

Fire Ignitions Fire ignitions give fire managers clues as to where there is a greater chance for fire starts. These ignitions vary greatly and can either result from natural or human causes. Some areas receive more lightning activity due to frequent storms or magnetic attraction. Human starts are normally related to the occurrence of dwellings, roads and recreational activities.

Crown Fire Potential Crown fire potential is a measure of the susceptibility of a low impact ground fire moving into the crowns of the overstory and becoming much more intense.

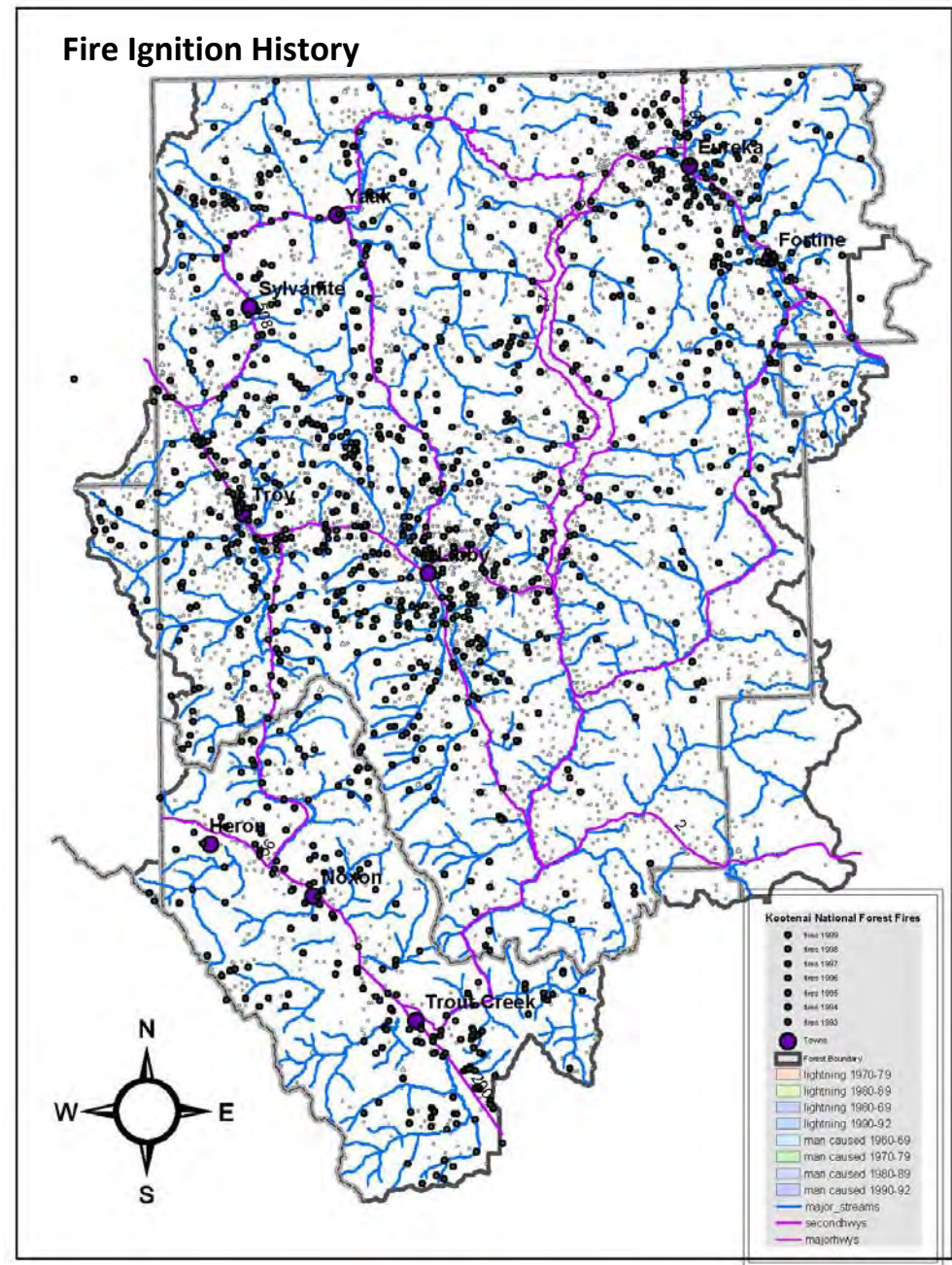


Crown fires normally have the most impact in the WUI. Unless there is a strong wind pushing the fire through the crowns of the larger trees, the usual way a crown fire develops is when there are many small trees in the understory (ladder fuels) that allow the fire to spread from the ground to the crowns. This process usually consists of embers spotting ahead of the fire front, lighting the small trees and then moving into the crowns.

Fire Regime An important factor in identifying the potential range of forest conditions that can occur on a landscape is an understanding of the influence of historical disturbance regimes on vegetation structure, species composition and spatial distribution. Some of the common disturbance regimes within North America include fire, insects, disease, hurricanes, blow down and flooding. Within any given landscape, several different historic disturbance regimes may have operated to influence vegetation in this manner. For this CWPP two primary historical disturbance regimes influencing species composition and structure were the short-interval fire regime (avg. <25 years) and the mixed severity fire regime (avg. >25 years) with intermediate fire return intervals creating forest patches displaying either short or long-term fire effects. Fire was the primary disturbance agent in this landscape directly influencing large-scale changes in forest species composition, structure and spatial distribution. Insects and disease are also an important component of the disturbance agents as well and their activities often contribute to the occurrence and severity of fire. Consequently, fire was the predominant driving force of large scale disturbance on the landscape.

Human-induced changes and their impact have functionally suppressed, eliminated or

changed many of the historical disturbance regimes throughout the west. Fire suppression in Lincoln County has been effective in suppressing fires and changing the historical structure of many forest stands.



Short Interval Fire Regime The short-interval fire regime is predominantly characterized by relatively frequent, non-lethal, low to moderate intensity fires that burn along the ground and remain within the understory. The fire frequency generally averaged between five and twenty-five years influencing both the species composition and vegetation structure within these forests. Fire tolerant species like ponderosa pine and western larch were able to regenerate in the disturbed areas and because of their fire resistant characteristics were able to dominate the overstory. These stands were less likely to move through a typical succession progression of age classes. Instead, fire maintained a multi-age structure, characterized by saplings to old growth trees.

Mixed Severity Fire Regime Within the CWPP region, a mixed severity fire regime also occurred. Depending on site conditions or position on the landscape, both non-lethal and lethal fires could occur within a mosaic of diverse stand conditions. This is typically common through the transitional portion of the environmental gradient where the lower elevation, drier sites are dominated by non-lethal fire regimes and the high elevation, and moister sites are dominated by the lethal fire regime. Consequently, where a transitional site occurs primarily adjacent to the low elevation types, it is predominantly influenced by a short-interval fire regime. Where it occurs primarily adjacent to the high elevation types, it is predominantly influenced by a long-interval fire regime. Topographic features, time of the burn and other factors can influence the occurrence of a “mixed” fire regime as well.

Long Interval Fire Regime The long-interval fire regime is characterized by an infrequent, lethal, high intensity fire that consumes both the understory and overstory as it moves across the landscape. Although these fire regimes are not normally found in the WUI they are the condition that is mainly found at higher elevations. Stand replacing fire regimes result in a short term, catastrophic effect on stand conditions, in contrast to the persistent, yet less obvious effects of the short-interval fire regime. The result of this impact is to set the stand back to an early succession stage and release plant species stimulated by severe fire events. Then the stand proceeds along an undisturbed succession trajectory for many years, depending on the ecological site.

Fire Regime Condition Class is defined in terms of departure from the historic fire regime, as determined by the number of missed fire return intervals. In the mid to low dryer elevation areas, where fires tend to burn more frequently, Fire Regime Condition Class maps indicate that most of the WUI areas in the Short Interval Fire Regime in Lincoln County are two to three intervals from normal departure. In the middle to higher elevation areas containing some Mixed Severity Fire Regimes, but primarily Long Interval Fire Regimes, fires naturally burn at longer intervals. Most of these areas are still in a Condition Class 1 or 2.

There are three Condition Classes that categorize the current condition with respect to each of the three Fire Regime Groups. The relative risk of fire caused losses of key components that define the vegetation system increases for each respective higher numbered Condition Class. In other words, normal fire intervals would maintain a certain range of vegetative

conditions over time. However, if that fire interval were extended to a much longer time interval the burning conditions might result in an entirely different vegetative condition. Condition Class 1 represents little or no risk and Condition Class 3 would normally be considered high risk (See Table 1).



A search was conducted for data source and publication date. No public agency claimed ownership.

Table 1. Fire Regime Condition Class

Condition Class	Description	Potential Risks
1	Within the natural (historical) range of variability of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.	<p>Fire behavior, effects, and other associated disturbances are similar to those that occurred prior to fire exclusion (suppression) and other types of management that do not mimic the natural fire regime and associated vegetation and fuel characteristics.</p> <p>Composition and structure of vegetation and fuels are similar to the natural (historical) regime</p> <p>Risk of loss of key ecosystem components (e.g. native species, large trees, and soil) is low.</p>
2	Moderate departure from the natural (historical) regime of vegetative characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbance.	<p>Fire behavior, effects and other associated disturbances are moderately departed (more or less severe).</p> <p>Composition and structure of vegetation and fuel are moderately altered.</p> <p>Uncharacteristic conditions range from low to moderate.</p> <p>Risk of loss of key ecosystem components is moderate.</p>
3	High departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.	<p>Fire behavior, effects, and other associated disturbances are highly departed (more or less severe).</p> <p>Composition and structure of vegetation and fuel are highly altered.</p> <p>Uncharacteristic conditions range from moderate to high.</p> <p>Risk of loss of key ecosystem components is high.</p>

c. Structural Fuel Hazards

House structures have been assessed throughout the county for their ability to withstand a forest fire. These assessments varied from actual detailed assessments with the landowner to visual observations by trained individuals. Many *Firewise* aspects of home construction have improved over time such as the use of flame resistant composite siding and roofing materials. Most of the roofs observed are now constructed of flame resistant composite materials. However, siding materials are highly variable; with most siding not being flame resistant. Lincoln County like most all Montana counties has elected to attempt educating homeowners on *Firewise* techniques in home construction rather than mandating standards.

A major problem for many of the homes that have been assessed or observed is that even homes that are basically *Firewise* in their construction have other problems that can result in a fire loss. These problems are usually fairly minor (e.g. needles in the gutter, dead grass next to the foundation) and can be easily corrected through



Firewise education. The major problem with existing homes is the close proximity of forest fuels.

There are opportunities to improve home construction using *Firewise* techniques in the future. Fire proof type materials including the roofing and siding are obvious. Other built-in designs such as residential sprinkling systems and low emission rated glass will help. Recent improvements in fire barrier foams and gels are also relatively low cost methods to protect homes. Making foams and gels available at the local area may be a worthy short term objective for some homeowners with unsafe conditions around their homes.

d. Social Values

Social values often reflect the quality of life. They may include aesthetics, home and property, air quality, view, livelihood, cultural and historical sites and features. Although these factors are important throughout the county, we examined those social elements that are considered critical around the WUI. Understandingly, the home and property are considered the most important social value by these residents, but aesthetics and views adjacent to their homes are highly valued as well. Ironically, these values are often reflected in the reluctance of many WUI residents to appreciate the vegetative changes and increasing fire hazard that has occurred over time. Therefore, they are often unwilling to implement the changes needed around their

property that will perpetuate the very values they treasure. Some homeowner's personal values, such as the need for privacy and oftentimes a misguided understanding of the "natural" forest, makes them unwilling to implement the changes needed around their property. Firewise education and implementation will mitigate many of these dangerous conditions.

e. Values at Risk

The obvious intent of fire protection is to protect the values at risk. A successful fire management program would be one that reduces the risks associated with values that are important to communities, people and the natural resources. Although it is often difficult to quantify and qualify these values, inevitably these values become important in the selection of hazardous fuels treatment or suppression efforts.

Some of the values at risk in Lincoln County are:

- Public Safety
- Property, Improvements and Facilities *
- Air Quality
- Historical and Cultural
- Water Quality and Municipal Watersheds
- Ecosystem Health
- Aesthetics
- Firefighter Safety
- Community Impacts-Economic & Social
- Recreation
- Timber
- Soils
- Wildlife

**According to the US Census Bureau's 2007-2011 American Community Survey, the median home value for owner-occupied homes in Lincoln County was \$162,900. Although these unit values are not used to prioritize fuel mitigation treatments in this plan, they can be used to roughly determine replacement values. When these values are combined with the number of residences by fire district (see map) a more definitive value can be determined for prioritizing suppression response during a large fire occurrence.*

Lincoln County experienced major wildfires in 1994 and 2000. These wildfires resulted in immediate threats to the community which included

Homes and Infrastructure The first thought during any major wildfire is the threat to homes, structures, fences, power lines, communication sites or other infrastructure. Treatments in the immediate area around structures to reduce fire intensity can drastically improve the chances of their survival. These measures however, do little to protect other values at risk, some of which may be equally or more important from a neighborhood or community standpoint.

Public Fear Wildfires can induce fear, concern and panic. This will result in increased calls to dispatch centers and result in a reduction in the ability to service other emergency calls. In addition, access roads may become clogged as people flee the scene, attempt to return home to protect their property or remove other family members or pets.

A good example of this situation was the Parmenter Fire, just West of Libby in 2007, which

could have been a real disaster. This 100 acre fire gave local authorities a good preview of public reaction when you have a wildfire threatening the community.



Parmenter Creek Fire, near Libby, 2007

Public Health There is great concern in Lincoln County and in particular the town of Libby, over any prolonged heavy smoke from a wildfire. The community of Libby has an unusually high incidence of asbestosis, a result of the past operation of a vermiculite mine and the associated processing plant. Any major wildfire with heavy smoke accumulation would no doubt exacerbate the problem and result in a dramatic increase in doctor visits and hospital admissions.

A more recent concern in Libby is the potential of amphibole asbestos fibers from smoke resulting from a wildfire in the area of the old vermiculite mine. Tree bark sampling has indicated the presence of these fibers, but exactly what this hazard constitutes is presently unknown. Currently fire fighters working in the affected area (an former vermiculite mine north of town) must wear breathing apparatus.

Firefighter Safety It is a well-known fact that wildland firefighters are at risk during any conflagration. In 1997, the *Tridata Study: Wildland Firefighter Safety Awareness Study* identified the number one recommendation to improve the safety of firefighters was to “implement a large-scale, long-range fuel management program”. Fuel reduction projects around residences and clusters of residences would help save homes, but these efforts will do little for firefighter safety or the general safety of the public unless larger scale fuel projects are implemented. These larger scale treatments will be difficult to implement on private lands but, hopefully, will be implemented in the WUI areas identified on public lands.

Financial Major wildfires can have a tremendous financial impact in any communities. Local businesses frequently suffer major losses, particularly when wildfires occur during the peak tourist season.

Transportation Fires can disrupt travel corridors. This may involve motor vehicles, rail and air transportation. After fire effects can also impact vehicle travel from debris flows crossing roadways.

Recreation Opportunities to enjoy outdoor recreation activities can be severely reduced by wildfire. Areas can be closed to the public because of an active fire or fire danger. After fire effects are often associated with popular recreation sites or general areas being blackened and no longer attractive to the public.

Environmental An intense wildfire can result in a number of environmental concerns. Wildlife and plants may be affected. Threatened and endangered species may have their habitat impacted. Wildfire may result in an increase of insect and disease activity.

Watersheds may also be damaged, such as the Flower Creek Reservoir, which is the sole source of water for the community of Libby. The major problem in this situation would be that the system cannot handle the ash particulate which would end up in the water.

Scenic Picturesque views of the forested landscape are an important reason people live in and visit Lincoln County. Wildfires impact the aesthetics of an area which can further impact individual landowner property values.

Emotional / Spiritual Many individuals and groups have bonds to a particular site or area. Damage, real or perceived, to these areas can cause mental or even physical pain.

Public Confidence / Support During or following a major wildfire event, public review of officials and programs routinely occurs. Confidence in individuals, institutions, and activities may be questioned. This is often an emotional time and objectivity is difficult.

5. PRIORITIZING FUELS REDUCTION PROJECTS

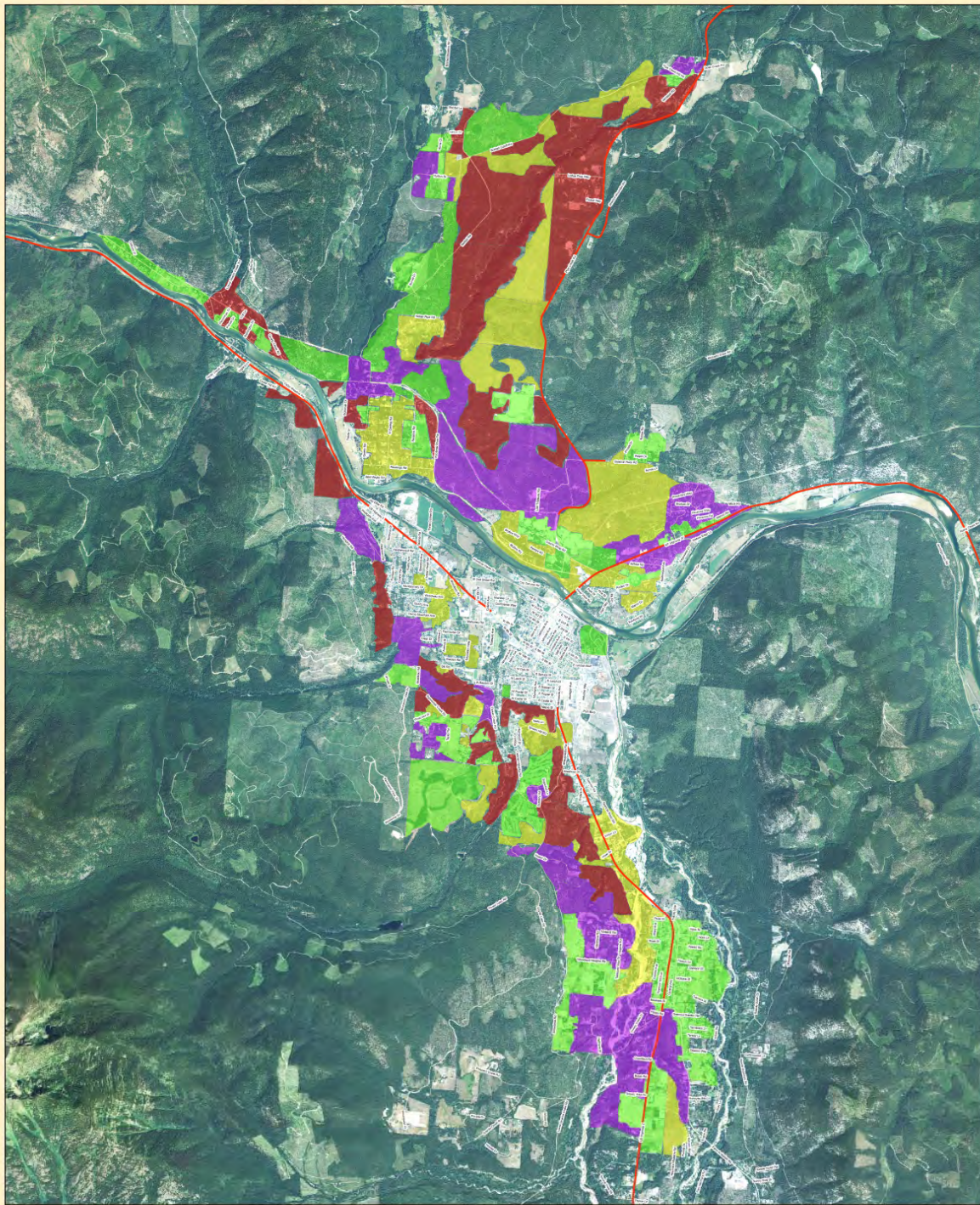
As identified in the 2005 CWPP the Healthy Forest Restoration Act of 2003 sought to have CWPPs more clearly define the WUI and better identify the process used to select fire and fuel mitigation projects that might qualify for a federal cost share grant.

The 2005 CWPP did have a clearly defined WUI boundary identified on our map. It also did a better job of identifying the different classification in the WUI's based on the location and density of residences. These descriptions included Interface, Intermix, Occluded and Rural Conditions. Treatments therefore might vary based on the Condition in which the property was located. Fuel breaks and treatment around the home would be appropriate for an Intermix Condition, but in Rural Conditions only a treatment around the home would be appropriate.

What was not included in defining the WUI situation were factors including slope, wind direction and expected velocity, aspect and contributing fuels. Communities such as Libby have a strong influence from winds coming from the South and Southwest out of the Cabinet Mountains. Consequently, treatments should recognize this influence by creating fuel breaks on the South and Southwest sides of town. The recent risk rating of the WUI around Libby

identifies those particular areas where fuel breaks might be most effective. In addition, a fire fuels risk assessment was conducted for the West Kootenai (see Maps below). Further risk ratings will be continued in the other County communities that have been identified as “At Risk”. Over time we should be able to decide where the definitive WUI boundary might be expanded or decreased based on expected spread rates.

A fire spread analysis using the Behave Model is a tool, developed by multiple public agencies that can also better define areas that need treatment. This long established model uses fuels, topography and weather conditions to predict fire behavior. A fire spread analysis was conducted by for Libby in 2008 by professional fire behavior specialists, Stiger, Infanger and Hvizdak, using actual worse case weather conditions showed that a fire arbitrarily started South of Flower Point would be able to spread into the city of Libby within six hours. Planned treatments on State of Montana lands and Forest Service parcels will help slow that spread down and allow for control in strategic places. This tool has also been used in the Troy area, again showing the vulnerability of Troy should a fire ever start in extreme conditions in the Callahan Drainage.



Legend

- Low Risk Area
- Moderate Risk Area
- Moderate High Risk Area
- High Risk Area

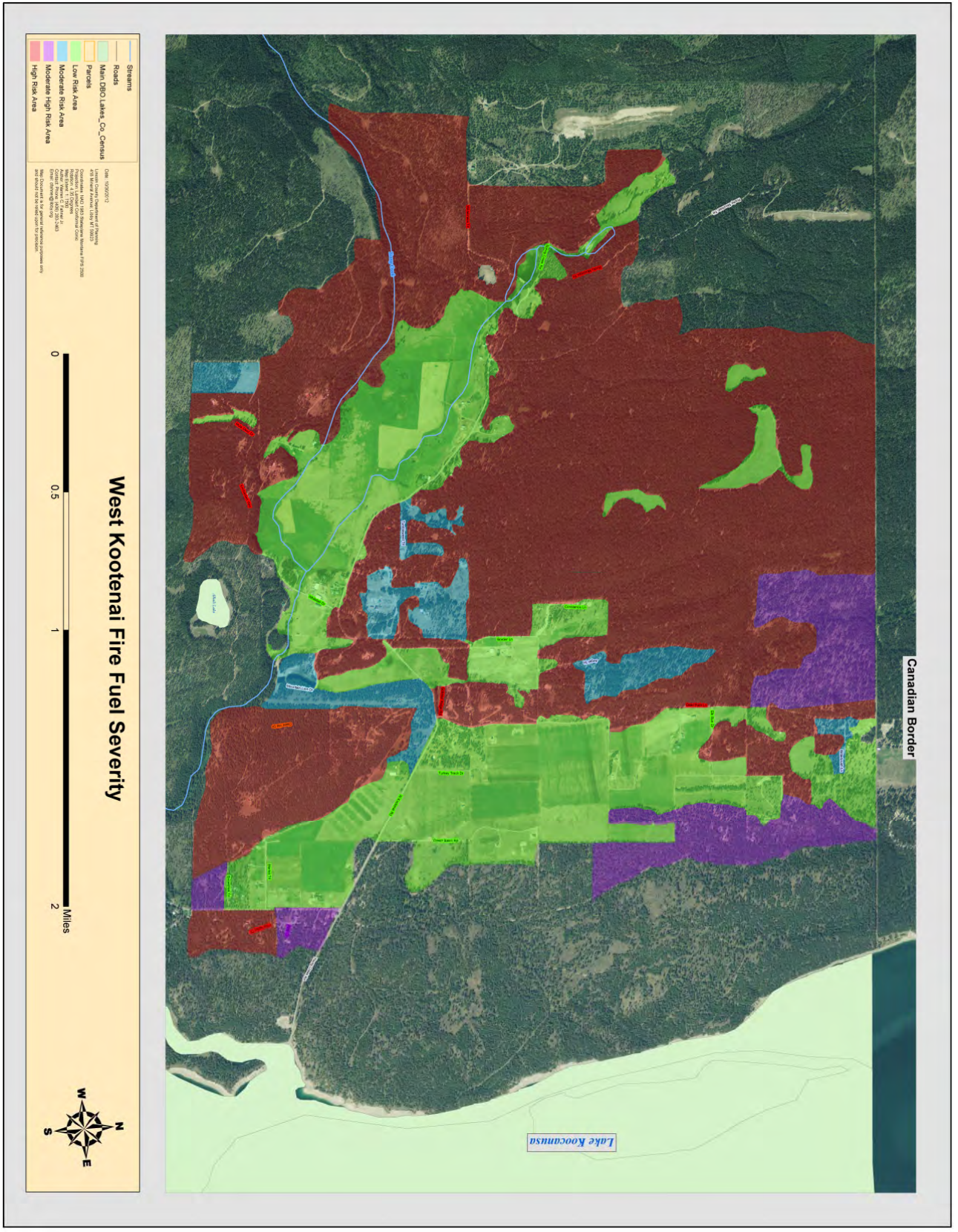
Date: August 30, 2012
 Libby County Department of Planning
 400 Second Avenue, Suite 300
 Libby, Montana 59901
 Prepared by: Jennifer C. Foster, GIS Analyst
 Revision: 4.01 (Original)
 Map Scale: 1" = 1.25 Miles
 Author: Jennifer C. Foster
 Contact: Phone: (406) 233-1441
 Email: jcfoster@libby.org

Map documents are for general reference purposes only
 and should not be relied upon for precision.

Libby Area Fire Severity

0 0.5 1 2 3 4 Miles





Planned Treatments

Although there will be exceptions, normally a standard fuels mitigation treatment will fall within one of the previously identified WUI conditions. The Lincoln County CWPP attempts to classify its planned treatments accordingly.

Interface Condition In areas where structures abut wildland fuels the general mitigation action planned will be to promote the creation of a fuels treatment area within 250 feet of the structures. This treatment area may be widened depending on the fuels, slope and wind direction. The treatment of homes adjacent or near these wildland fuels should emphasize *Firewise* techniques that create defensible space around the home and encourage fire resistant building materials.

Intermix Condition Where structures are scattered throughout a wildland area the general rule for treatment will be to:

- Look for opportunities to create fuel breaks based on slope, fuels and wind direction.
- Treat the fuels within 250' of a home by reducing the ladder fuels and thinning the overstory to the point that a crown fire is unlikely.
- Create defensible space within 100 feet of the home following the Montana Department of Natural Resources and Conservation (DNRC) recommended guidelines. This would include spacing crowns 10 feet apart; pruning up to 15 feet or one third the height of the tree; and removing ladder fuels.
- Remove vegetation adjacent to roads to allow safe fire engines access and adequate escape routes for homeowners.

Occluded Condition Where structures abut an island of wildland fuel within a town or community; every attempt should be made to treat all the fuels in the island. If this is not possible, homes and structures should follow *Firewise* recommendations to create defensible space around the home and utilize fire resistant building materials.

Rural Condition Rural areas will generally not be able to create fuel breaks. However, they should attempt to

- Treat the fuels within 250 feet of their homes by removing ladder fuels and thinning the overstory to reduce the chance of a crown fire
- Create defensible space within 100 feet of their homes by following Montana DNRC recommended guidelines. This would include spacing crowns 10 feet apart, pruning up to 15 feet or one third the height of the tree and removing ladder fuels.
- Remove vegetation adjacent to roads to allow safe access by fire engines and adequate escape routes by homeowners

The 2005 CWPP attempted to use a weighted scoring process in rating the risk communities face in order to prioritize fuel reduction treatments. In theory this was a good idea, but most all of the communities we looked had somewhat comparable fire risks. What it really came down to was who was willing to cooperate in a grant program. Some communities with a high risk simply did not want to reduce their hazardous fuels. Time and education will hopefully change that attitude.

6. COMMUNITY WILDFIRE PREVENTION PROGRAMS

a. Fuels Treatment Grants for Private Land

Federal cost share grants have been an integral part of the county's approach toward reducing the wildfire hazard within the WUI. Since 2003 \$1,205, 000 in grant money has been expended on fuel reduction projects with an estimated additional \$301,250 contributed by the homeowners through in-kind work or contractor services. This amounts to treatment of 1618³ acres either with direct fuels reduction work around residences or through fuel-breaks adjacent to residences in the WUI. These treatments have made a tremendous difference in many areas around the county.

Past federal cost share grants can be categorized into two types: 1) Western States; or 2) Community Protection Program (Stevens Bill). The Western States Grants are the most common and can be applied to most any private parcel in need of treatment. They are normally structured to pay 50% of the estimated cost of the project with the landowner required to cover the remaining 50% in either contributed cash or labor.



Examples of Fuels Reduction Work, 2013

The Community Protection Program grants are specific to private lands within the WUI that might be threatened by a planned burn on nearby federal lands. These grants typically pay 75%

³ See Appendix 1

of the estimated cost of the project with landowner only required to cover the remaining 25% in either contributed cash or labor. The difference between Western States and Community Protection Program Grants is significant as the Community Protection Grants are a much easier for homeowners/landowners to afford. However, in both cases, the homeowner has the option of performing the fuels reduction work themselves, or hiring a contractor. In addition merchantable products removed contribute to the homeowner's portion of the cost share. Past grants were administered by Northwest Resource Conservation and Development (RC&D). However, this organization is no longer in existence and all grants will be administered by the Flathead Economic Policy Center (FEPC) of Columbia Falls.

b. Lincoln County FireSafe Council

The Lincoln County FireSafe Council has a diverse group of participants representing varying interest groups in the county. Our goal is to improve the wildfire preparedness of our county. Our Council was originally formed in 2001 as the Lincoln County Fire Steering Committee. In 2010 we chose to become a chapter of FireSafe Montana. FireSafe Montana is a private, non-profit organization coordinating and supporting a statewide coalition of diverse interests working together to help Montanans make their homes, neighborhoods and communities fire safe.

Our Council has functioned quite effectively as a platform for sharing information, improving coordination and fostering cooperation between a diverse group of interests with similar or overlapping goals. The Council has also served as an excellent platform for implementing new and innovative ideas. Ideas originating from the council include FireWise permitting restrictions on new county sub-divisions, treatment of the Flower Creek Municipal Watershed and numerous FireWise educational projects.

Geographically it has been difficult to get regular representation from the North end of the county. We have recently made arrangements to have the Trego/Fortine/Stryker Fire Chief represent this area. As expected, the DNRC, Forest Service, Libby Rural Fire District (RFD) and the County Forester are regular members. Other interests have varied over time and included realtors, Plum Creek Timber Co., Flathead Electric, environmentalists, Northwest RC&D, Provider Pals, insurance agents, interested citizens, Lincoln County (Planner, Emergency Services, Sheriff, Environmental Health), Libby City Council, Lincoln County Conservation District and varying fire department representatives.

Today's regular members include: DNRC, Forest Service, Lincoln County Forester, Libby RFD, Trego/Fortine/Stryker RFD, Libby Superintendent of Schools, Yaak Valley Forest Council, Lincoln County Conservation District and Provider Pals.

c. FireWise Community Program

The FireWise Community Program is a national program that encourages citizen involvement in wildfire vulnerable communities in the event of a wildfire. Not only does the program seek to

better prepare the residents for a wildfire through education, fuel reduction and suppression efforts, but to maintain those FireWise conditions. In theory a community needs to be self reliant and not dependent on a constant hand out. This program operates most efficiently when you have an organization such as a homeowners association. Many of Lincoln County's subdivisions do not have any such organization, which makes this program difficult to apply. It has also been shown that each community needs a "champion" who will help make the program a success.

The FireWise Community Program has had some mixed success in the county. Em Kayan Village, a community of 55+ homes, was the first to become an official FireWise Community. The Forest Service began a major fuels reduction project on their lands that surrounded much of the community in 2003-04. Following that project the Libby RFD did FireWise assessments with the homeowners. Soon after a grant was made available to the homeowners and they embraced the opportunity to clean up their properties. Becoming a FireWise Community was a natural continuation of those efforts. Their efforts have been a real success story and their homeowner association is committed to the program.

The Chain of Lakes area was the next area to sign up and initially the residents in this large and spread out community seemed enthusiastic. There is a homeowners association, but most of the homes would best be described as in a Rural Condition versus a Interface Condition like Em Kayan Village. Em Kayan Village has homes set much closer together than the Chain of Lakes. A large grant was also made available for fuels work and there was fairly good participation in that. However, in recent years it appears that their plan is not being implemented. The homeowners association meets once a year and they usually get a FireWise message from the county or DNRC, but so far the association has not pushed the program to which they agreed.

The Libby FireWise Community was recognized in 2009. There are an estimated 6,000-8,000 people living in the FireWise community, which extends 5-8 miles from the City itself. This makes it one of the largest areas participating in the country. To start with there was a designated Libby FireWise Community steering committee, but that responsibility has since been taken over by the Lincoln FireSafe Council, because most of the participants were on the same committee. It appears that the FireSafe Council can make this work if there are strong ties to the Libby City Council and Libby RFD.

There have been a number of encouraging activities happening in the Libby FireWise Community. Most all of the more than 200 acres of county parkland have had fuel reduction work. In 2010 fuel reduction projects were completed on City properties by the Armory, Middle School and High School. In 2011 grant funds were used to do a fuel reduction project on 15 acres of city property near the Pets for Life facility. Other activities include full fire department engagement, educational programs in the schools and a planned 2012 fire simulation exercise. The fire department has completed an inventory of city fire risks, access and water sources in much of their area of responsibility. The county has recently completed a fire fuels risk assessment for the WUI area around Libby.

Projects that are currently being prepared in the community with assistance from the county forester include logging/fuels treatment on the county ownership adjacent to the Edgewater II Sub-division and the cable logging/fuels treatment in approximately 20 acres adjacent to Cedar Street and Hwy 2 South. The 131 acres of National Forest (Skidale) adjacent to the Libby Elementary School is being proposed for a fuels reduction project by the county forester and the Libby RFD. A *Firewise* treatment of this parcel would be a real accomplishment for the community.

d. Education

FireWise education starts with the children and the classroom. The Forest Service has led these efforts in the past and now we see additional efforts taking place by other groups. Provider Pals, a local non-profit educational organization, has been engaged by the county to take the FireWise message to the children of Lincoln County. In 2012 Provider Pals worked with the Libby Campus of Flathead Community College provided a one week FireWise camp for Lincoln County school students and a one week camp for county teachers. The teacher's camp provided teachers with continuing education credits while giving them a valuable lesson that hopefully gets back to the students.

FireWise assessments completed by wildfire experts serve as a major educational tool when working with homeowners. County fire departments, RC&D, DNRC and the county forester conducted 955⁴ FireWise assessments where site inspections with homeowners revealed the wildfire risks. In instances where homeowners were unavailable or the property was vacant, these assessments were recorded for future reference. This very important educational tool is relatively inexpensive and is most likely the most effective method of educating homeowners.



University of Montana School of Drama and Dance perform "Fire Speaks to the Land" for Elementary School students, 2012

In 2012 FireWise assessment training was provided to 9 of the county fire departments. In 2011 and 2012 FireWise assessment training was given to over 80 Libby Middle School eight grade students at an actual residence as a part of a two day FireWise course. As a part of their homework the students were required to do a FireWise assessment with their parents on their own home. This effort was successful and will continue in 2013 there will be a significant effort by most of our county fire departments to complete additional assessments.

⁴ Ibid.

The Libby Superintendent of Schools is an engaged member of our FireSafe Council and he is looking at ways to incorporate the FireWise message into the school's curriculum. He brings a unique perspective to our group and has been an avid supporter of our program. Countywide we are seeing the fire departments broaden their message in their school presentations from structural fire protection and evacuation to also include the FireWise message.

Currently a "FireWise Trailer", modeled on the successful Bitterroot FireWise Trailer is under construction and will be used in 2013. This trailer is being designed exclusively as an educational tool that can be used at county wide events including the Troy Fourth of July celebration, Libby Logger Days, Eureka County Fair, etc. The staffed trailer will provide handouts, show videos and other promotional FireWise materials.

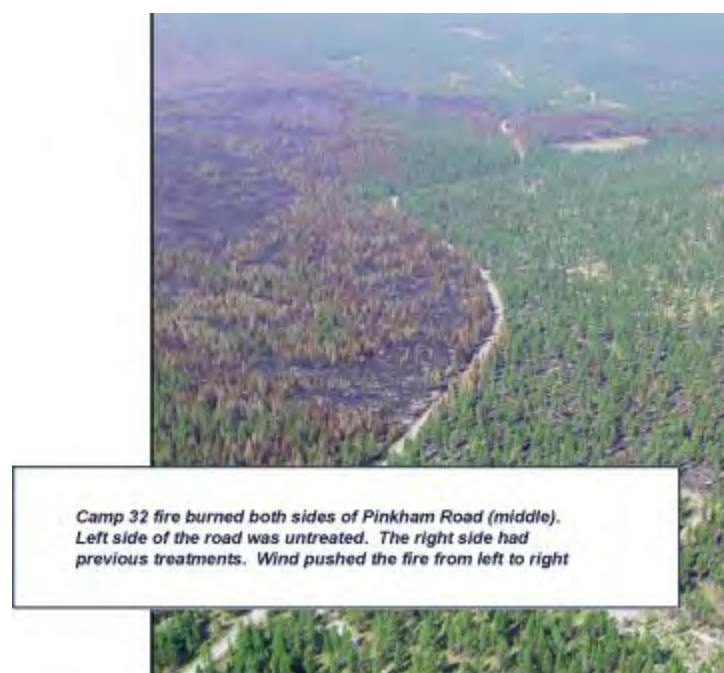
In 2012 a new Lincoln County FireWise website was launched. The new site is much more accessible and relevant than the previous one, and provides current information on air quality and burn permits.

e. Kootenai National Forest Stakeholder Coalition

The Kootenai National Forest has played a major role in helping reduce the fire risk to our communities in recent years. Significant fuel reduction projects have occurred adjacent to Libby, Fortine and the McCormick areas.

Several members of the FireSafe Council, including the county forester, have been actively

involved with the Kootenai National Forest Stakeholder Coalition (KNFSC) since 2007. This diverse group of interests seeks to find consensus on Forest projects in order to limit the number of appeals and litigation, which have delayed or stopped many projects. The county forester seeks to represent the county's interests in reducing the wildfire risk to our citizens while helping to provide jobs in the logging and milling sectors.



For the most part the WUI projects have been well supported by the coalition members. Those WUI projects or projects with a WUI component that have been approved by the coalition and accomplished

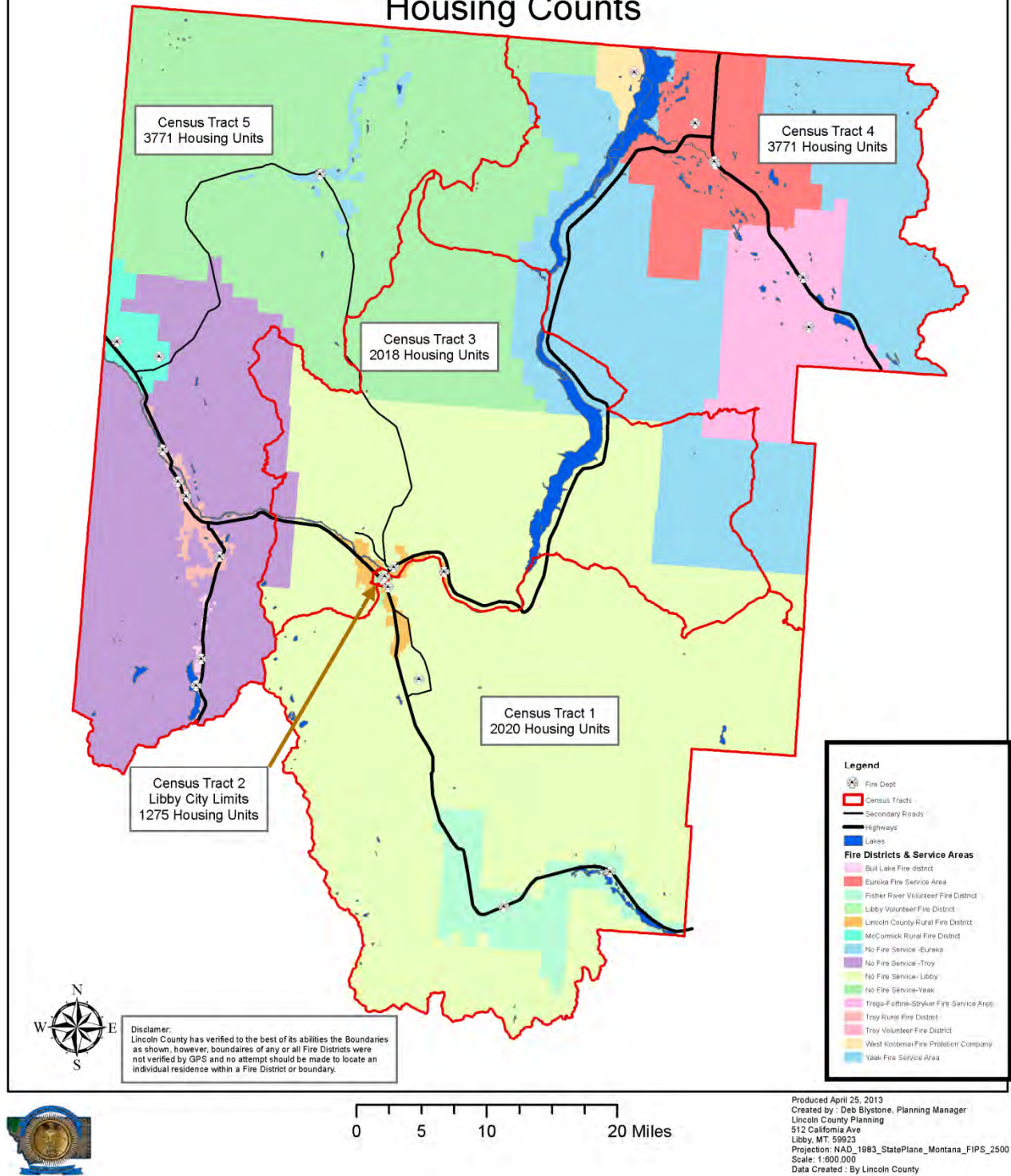
include the Kootenai North 1&2, Meadows, Rocky Pines, Camp 32 and Brush Creek Salvage. Sparring Bulls has been approved, but not offered. Ongoing efforts include South Fork Yaak, Flower Creek, Skidale and East Reservoir.

f. Fire Suppression

Lincoln County is fortunate to be protected by very capable and dedicated fire suppression organizations. These organizations include the US Forest Service, DNRC and nine volunteer fire departments. The Lincoln County Fire Coop is the coordinating group for fire suppression and in addition to the fire suppression organizations includes Lincoln County Emergency Management, the sheriff's department and the Lincoln County Forester. The 2011 Lincoln County Interagency Management Operating Procedures serve as an Operating Guide among all federal, state, and local government agencies in Lincoln County with wildland fire protection responsibilities. Although at times there can be some overlap between the Lincoln County FireSafe Council and the Fire Coop these lines of responsibility have not been a problem. These Operating Procedures are attached and made a part of the Lincoln County Community Wildfire Protection Plan. Currently, the Fire Coop is developing a county evacuation plan.



Lincoln County Fire Districts & Service Areas Housing Counts



7. EVALUATION OF 2005 CWPP OBJECTIVES

The last set of goals and objectives were completed in the 2005 CWPP. This segment of the update will attempt to evaluate the effectiveness of these Goals and Objectives and set new ones for the future.

Goal-*Emphasize prevention of Wildland Urban Interface (WUI) fires using a proactive cooperative approach with incentive measures.*

Objective-

Support alternative methods to burning when reducing fuel hazards (e.g. chipping, commercial timber harvesting, making firewood available).

Result-

- The grant program was able to offer cost incentives for the removal of biomass in lieu of burning. For the most part, the sawlog and pulp market helped remove unwanted slash and biomass.
- Fuel reduction work, including chipping, was accomplished on seven acres of county lands interspersed in the Pine Bay subdivision southwest of Eureka.
- In Libby we were able to offer free chipping of slash piles in order to reduce burning. This was successful where applied, but the interest in the community was somewhat disappointing.

In summary, we were fairly successful in reducing the amount of burning, although many homeowners still preferred to burn their slash.

Objective

Provide information to utility companies to help set priorities to reduce ignition fuels and windfall hazards in power line corridors.

Result-

- This objective was included at a time when we had active involvement on the steering committee by Flathead Electric Cooperative. However, that involvement has not been sustained and this objective was not met.

Objective

Encourage all land development ordinances and codes to include: requirements for adequate water supply for fire fighting and a requirement for adequate means of ingress and egress. Ultimately this objective sought to implement FireWise requirements for new subdivisions prior to approval.

Result-

- This objective was met. The Lincoln County Subdivision Regulations were updated in early 2010 and the City of Libby Subdivision Regulations were adopted in late 2011.

Objective

Promote effective fire risk assessments and fuel treatment programs for homeowners that are carried out on an ongoing basis in all WUI areas in Lincoln County.

Result-

- The County was very successful in meeting this objective – 955 assessments and 1618 acres of fuel reduction work have been accomplished since 2001. As stated previously not all communities participated equally for many reasons. Over the course of our program we have been able to at least offer cost share assistance to all of the residents in the county. Although priority areas were initially targeted, Northwest RC&D periodically released grant opportunities countywide.
- We were less successful in having the assessment information maintained in a data base by the DNRC in Missoula, Northwest RC&D or by the county. This will remain an objective of the plan.
- A hot line number was established for free assessments by Northwest RC&D, funded by the county.

Objective

Promote fuel reduction projects in the WUI based on the values at risk and the potential of an uncharacteristic wildfire. Seek opportunities that allow other landowners and agencies to cooperate with the project when it can be determined that a larger treated area can be more effective.

Result

- Lincoln County met and exceeded this objective. A number of the treated areas were significantly expanded by treating adjacent landowners' lands through the cooperation of private landowners and agencies: Whispering Pines (USFS), Pine Bay (USFS), Schoolhouse Lake (DNRC 2012), Fairview Heights (Lincoln Co.), Barnaby Lake (Joe Flanigan), Farm to Market (USFS, DNRC), Glen Lake (C. Zook), Bobtail (USFS).

- The demonstration areas in Lower Quartz Creek and Pine Bay were implemented, although more are needed in the county. There is also a need for quality demonstration signs in the future.
- Several contractor meetings were held throughout the county. FireWise signs, funded by State Farm Insurance, were posted on some of the treated properties. However, placement of these signs was inconsistent.

Objective

Provide the appropriate resources to maintain an effective emergency response system to wildland urban interface fires in Lincoln County.

• **Results-**

- The objective to prepare a database of resource information that could be shared with fire suppression agencies was a very ambitious objective. Libby RFD is in process of building a data base which eventually will contain valuable information on fire risks, access points, water sources, hazards, etc. The county has assigned a risk rating to the fuels in and around the Libby WUI which will become a part of this database.
- Enhanced 911 is in operation
- The position sought in the objective ended up being more of a GIS person who is currently helping with the construction of the database for Libby RFD.
- The last three action items addressed fire suppression issues which the FireSafe Council determined should be handled in the Lincoln County Interagency Management Operating Procedures.

Objective

Sustain a coordinated and cooperative program of timely information and educational programs for county residents and recreational home owners.

Result-

- The parts of this objective relating to providing informational and educational programs on FireWise have basically been met. There have been numerous presentations by the county forester and DNRC representative to communities throughout the county since 2001. In more recent years the county has sponsored the Libby and Eureka Bus Tour/BBQ which is intended to inform community leaders of our FireWise program. Our FireSafe Council has sponsored monthly FireWise messages in the county newspapers in 2012. We have numerous educational programs going on in the county schools. The Governor's Office has designated the month of May as wildfire preparedness month and we have used this as an opportunity to get out the word on the FireWise program, including a county proclamation, newspaper articles and radio announcements.

- In 2005 we had thought that there was a good opportunity to work with the realtors of the county to promote FireWise with both buyers and sellers. We developed a brochure and an inspection process that would help identify residences that fire experts could certify as being fire safe. Unfortunately the real estate boom started about that time and the South Lincoln County Realtors Association advised the County that they were not interested in pursuing this effort. However, the Eureka area realtors received FireWise training during a Lincoln County Conservation District workshop in 2010.

8. 2013 GOALS AND ACTION PLAN

Programmatic Statement of Intent:

Emphasize prevention of fires in the WUI using a proactive, cooperative approach with incentive measures

Goal (1)	Increase support for alternative methods to burning when reducing fuel hazards (e.g. chipping, commercial timber harvesting, firewood availability)	
	Action Items:	Participants:
	<ul style="list-style-type: none"> Provide cost share alternatives to burning such as chipping or removal of wood products in fuel reduction grants. 	County Forester, Flathead Economic Policy Center (FEPC)
	<ul style="list-style-type: none"> Identify recent and visible fuel reduction project with informational signs. 	County Forester, FEPC
	<ul style="list-style-type: none"> Continue involvement by FireSafe Council members in the Kootenai National Forest Stakeholder Coalition to promote the removal of forest products 	LCFSC members
Goal (2)	Increase the promotion of fire risk assessments and fuel reduction programs for homeowners.	
	Action Items:	Participants/Responsible Party:
	<ul style="list-style-type: none"> Offer all county fire departments financial incentives for completing residential fire risk assessments. 	County Forester (ongoing)
	<ul style="list-style-type: none"> Investigate the possibility of maintaining a fire risk assessment record keeping system. 	County Forester
	<ul style="list-style-type: none"> Identify and apply for additional funding sources for fuels reduction work. 	County Forester, FEPC
	<ul style="list-style-type: none"> Implement the 2012 Libby FireWise Community and Lake Creek/West Kootenai fuel reduction grants. 	County Forester, FEPC Lincoln County FireSafe Council (LCFSC)
	<ul style="list-style-type: none"> Offer free FireWise assessments through FEPC hotline number 	County Forester, FEPC

Goal (3)	Maintain and/or increase the number of FireWise Communities in the county.	
	Action Items:	Participants/Responsible Party:
	<ul style="list-style-type: none"> Contact Em Kayan Village and Chain of Lakes homeowner associations and help them meet the requirements of the national FireWise Community Program. 	County Forester, Fire Departments
	<ul style="list-style-type: none"> Continue to work within the Lincoln County FireSafe Council to help implement the Libby FireWise Community Plan. 	County Forester, Libby RFD, LCFSC
	<ul style="list-style-type: none"> Identify additional communities in the county for inclusion into the FireWise Community Program and provide the incentive and assistance to obtain that status by 2015. 	County Forester, Fire Departments
Goal (4)	Improve the community's capability to react to a catastrophic wildfire.	
	Action Items:	Participants/Responsible Party:
	<ul style="list-style-type: none"> Share databases of resource information that will allow the efficient and effective response to fire emergencies. 	USFS, DNRC, Lincoln County
	<ul style="list-style-type: none"> Complete the shared database for the Libby FireWise Community by 2015. 	County Forester, Libby RFD
	<ul style="list-style-type: none"> Complete a county inventory and map of GPS data showing areas that have had fuel reduction projects within the past 10 years for all forested lands in the WUI by 2015. 	County Planning Department, State and Federal agencies, FEPC
	<ul style="list-style-type: none"> Develop Lincoln County Evacuation Plan 	Fire Co-op
Goal (5)	Increase the available tools that will allow fire fighters to respond more effectively to a wildfire.	
	<ul style="list-style-type: none"> Work with DES, fire suppression agencies and community leaders to provide a fire simulation exercise in the Libby community by June 30, 2013. 	Director of Emergency Services, LCFSC
	<ul style="list-style-type: none"> Develop evacuation/safety zone guidelines by June 30, 2014. 	LCFSC, Emergency Management, Sheriff's Department
	<ul style="list-style-type: none"> Identify areas in the county that would benefit from the use of a fire-spread analysis by September 30, 2013. 	County Forester, LCFSC
	<ul style="list-style-type: none"> Conduct fire-spread analyses of previously identified areas in county by September 30, 2014. 	County Forester

Goal (6)	Improve the communication about FireWise to the citizens of Lincoln County.	
	Action Items:	Participants/Responsible Party:
	<ul style="list-style-type: none"> • Coordinate the FireWise educational delivery in the county school system. 	Provider Pals, Forest Service
	<ul style="list-style-type: none"> • Conduct FireWise summer camp for 15-20 county students at the Historic Raven Ranger Station in summer 2013. 	Provider Pals, Flathead Valley Community College
	<ul style="list-style-type: none"> • Conduct a FireWise summer camp for 15-20 county teachers at the Historic Raven Ranger Station in summer 2013. 	Provider Pals, Flathead Valley Community College
	<ul style="list-style-type: none"> • Complete the Lincoln County FireWise Trailer and have operational by summer 2013. 	LCFSC
	<ul style="list-style-type: none"> • Consider implementing a FireWise curriculum into the Libby School System. 	Libby School Superintendent, LCFSC
	<ul style="list-style-type: none"> • Continue large FireWise advertisements about the FireWise program in the local newspapers in 2013 	LCFSC
	<ul style="list-style-type: none"> • Continue printing annual FireWise calendar 	LCFSC
	<ul style="list-style-type: none"> • Continue and expand use of the LCFSC Website 	LCFSC

Appendix 1

Grant Accomplishments

Area	Fuel Reduction (Acres)	Agreements	Assessments
Em Kayan Village*	45	18	42
Wilderness Plateau*	35	15	37
Barnaby Lake*	38	12	8
Whispering Pines*	95	17	
Farm to Market*	206	17	4
Lower Quartz		3	3
Pine Bay*	41	13	
Glen Lake*	22	5	116
Chain of Lakes*	166	40	23
Rawlings Tract*	58	29 (est.)	
Rexford Bench			11
Rolling Hills			40
Tetrault/Valley	7	6	
County Wide	10	2	
County Wide	82		
Schoolhouse Lake*	82	18	88
Yaak	44	22 (est.)	
Bobtail*	47		
McCormick*	25		
Meadows*	36		
Bull Lake	56		179
Fairview Heights*	40		
Yaak Meadows			155
S. Lincoln Co.	344		1
Trego/Fortine/Stryker	130		87
Total	1618 Acres	217	794