

LITTLE VALLEY COMMUNITY WILDFIRE RISK ASSESSMENT REPORT



Adopted by Little Valley FIREWISE® Board:
December 16, 2014



Site Visit conducted:

October 1, 7 & 17, 2014

Reviewed by Little Valley CSD
General Manager & Fire Chief:

December 5, 2014

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Certificate of Completion

This certificate is presented to

Dan Douglas

who has satisfactorily completed the course

CONDUCTING A COMMUNITY ASSESSMENT IN THE WILDLAND/URBAN
INTERFACE: BEGINNING THE PROCESS

September 2, 2013



Firewise Principles & Community Risk Assessment Training

April 29 and 30, 2014

Is Awarded To

Dan Douglas



Division Manager



1. INTRODUCTION and BACKGROUND

Introduction

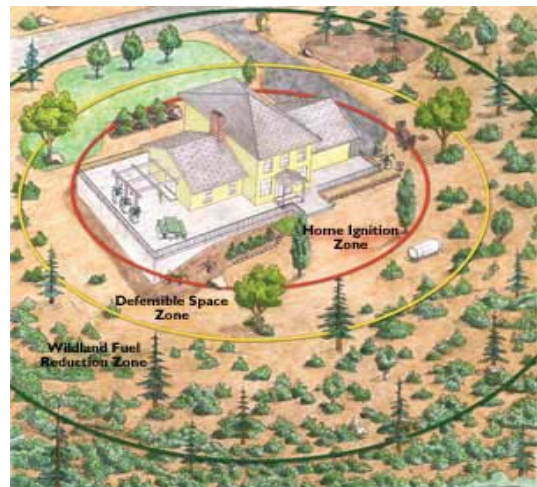
The Firewise Communities/USA® recognition program is designed to provide an effective wildland fire management approach for preserving wildland living aesthetics. The program can be tailored for adoption by any community and/or neighborhood association that is committed to ensuring its citizens maximum protection from wildland fire. The following community assessment is intended as a resource to be used by the Little Valley 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.

In September of 2014, the Little Valley Community Services District Board requested information from the Lassen County Fire Safe Council, Inc. regarding the process of obtaining “Firewise Communities/USA®” recognition for their community located in northwestern Lassen County. Little Valley lies within a wildland-urban interface (WUI), an area that figures prominently in wildland fire discussions. The Little Valley area consists of the community of Little Valley entirely. For purposes of this document, the Little Valley community consists of residences amongst tall trees and brush surrounded by undeveloped public land under the jurisdiction of the Lassen National Forest and Bureau of Land Management as well as private timber lands, making this a good example of a WUI community.

The potential for catastrophic wildland fire has been recognized in the Little Valley Community. Various efforts have been made over the years to reduce hazards on residential lots and state laws are followed regarding the creation and maintenance of defensible space on all lots with structures. Nevertheless, fire remains a priority safety concern throughout the community.

2. Definition of the Home Ignition Zone

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



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

contacting them. Also, reducing the volume of live and dead vegetation will affect the intensity of the wildfire as it enters the home ignition zone.

3. Scoping

Included in this assessment are observations made while visiting the area. The assessment is broken into sections to address two concerns: the fire dangers existing within the Little Valley community and the critical fire conditions in the surrounding area.

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. Little Valley 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 the house and its immediate surroundings within 100 to 200 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.

4. 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 lighter 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.

Fire behavior on the reviewed landscape would be mostly surface fire with some pockets of torching. Torching trees both increase fire intensity and become excellent generators of embers for spotting. Embers or firebrands are produced from burning needles, leaves, bark, twigs and cones, when natural vegetation burns. Embers tend to be carried aloft by the superheated air of the blaze and can then be carried long distances in advance of the actual flame front by even light winds. It is not uncommon to find glowing embers a mile ahead of the main fire.

If the conditions are right, 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.

For purposes of this assessment, there are two viable scenarios for a severe wildland fire event, a) a major blaze in lands adjacent to the community, producing large quantities of windblown embers, and b) a lightning strike without precipitation and the rapid onset of downdrafts. Subsequent spot fires, torching tree, ornamental shrubbery and burning structures in the interiors of developments could produce additional quantities of embers, contributing to further ignition potential.

5. Site Description

This portion of the report describes certain elements of the community of Little Valley, as it relates to fire issues. The first map (*Figure 1*) shows the Little Valley WUI Treatments Project area as documented in the Lassen County Community Wildfire Protection Plan (CWPP) and current work plan. The Little Valley community location is 40.895188N, 121.180646W.

5.1 Overview

Little Valley is a small unincorporated community located in the northwestern corner of Lassen County, California. It is located 43 miles northwest of Susanville, the Lassen County, County Seat. The only paved road to the community starts in Pittville, which is located on the Lassen-Shasta County line and is 15 miles northwest of Little Valley. The community of Little Valley is rather isolated from all other areas of Lassen County. The nearest larger and most convenient market area is to the northwest in Shasta County at Fall River Mills and McArthur, twenty-five miles away. The community itself is under the jurisdiction of the Little Valley Community Services District (CSD) and is surrounded in part by USFS lands and under the Hat Creek Ranger District of the Lassen National Forest USFS District Protection Area (DPA). This means the local CSD is responsible for fire protection of the structures and land in this area with assistance from the USFS. The surrounding area lies within the State Responsibility Area (SRA). This means the Little Valley CSD is responsible for fire protection of the structures and CAL FIRE is responsible for fire protection of the wildland. (*See Figure 4 for Little Valley Community Services District fire protection boundaries*) Many homes and properties within the community are considered "vacation/hunting cabins" and are usually unoccupied except during the summer and hunting seasons. Some home are on lots that are not maintained by anyone and others that have accumulated significant debris on and surrounding the properties.

Federal lands in the Little Valley area include large forested parcels surrounding the community owned by the USDA Forest Service to the west and south, while the Bureau of Land Management (BLM) is the major ownership to the north and east. Sierra Pacific Industries (SPI) owns and manages about 700 acres immediately adjacent to town, mostly to the west. Little Valley Meadow and Dixie Valley are privately owned ranching operations.

5.2 Topography

Little Valley sits at an elevation of 4,190 feet. The topography of Little Valley, (*see Figure 2*), is a small meadow type valley surrounded with timbered hills and mountains. Horse Creek runs through it in a northerly direction which empties into the Pit River. The community of Little Valley sits on the edge of the timber to the west in a small pocket of the valley a half-mile from Horse Creek. The land slopes up to the west and north with a very sharp rise of a lava finger on the east. The lumber mill (*now Crum Ranch*) sits at the south end of this finger with the mill pond to the south and the former lumber yard to the north just south of the railroad tracks, west of the lava flow and east of the community itself. This finger is part of a larger hill that separates the Little Valley community and Crum Ranch from Horse Creek.

The former Corder Ranch compound is about a quarter of a mile south of the community and is now part of the 300 acre Crum Ranch. Part of the Corder Ranch Compound was also purchased by Mountain Jewel Ranch. It consists of various ranch houses and outbuildings that are required for a self-sustaining ranch operation. The old Little Valley school house was located just west of the ranch buildings and the property is privately owned.

The northern end of a range of mountains is directly to the west of the community. This range extends southerly and is dominated by Blacks Ridge and Blacks Mountain. Blacks Mountain is 9 miles south of the community of Little Valley.

The soil on both sides of the main road through the community to the Crum Ranch is of red loam soil mixed with lava rock. The valley floor east of the main road and south of the mill pond is pasture type soil. The Mountain Jewel Ranch compound is also pasture type soil.

The timber in the area is mainly pine and related evergreens with varying amounts of oak. There is underbrush in the wooded area. The meadow land is grassy.

FIGURE 1– Little Valley community Project Area Map

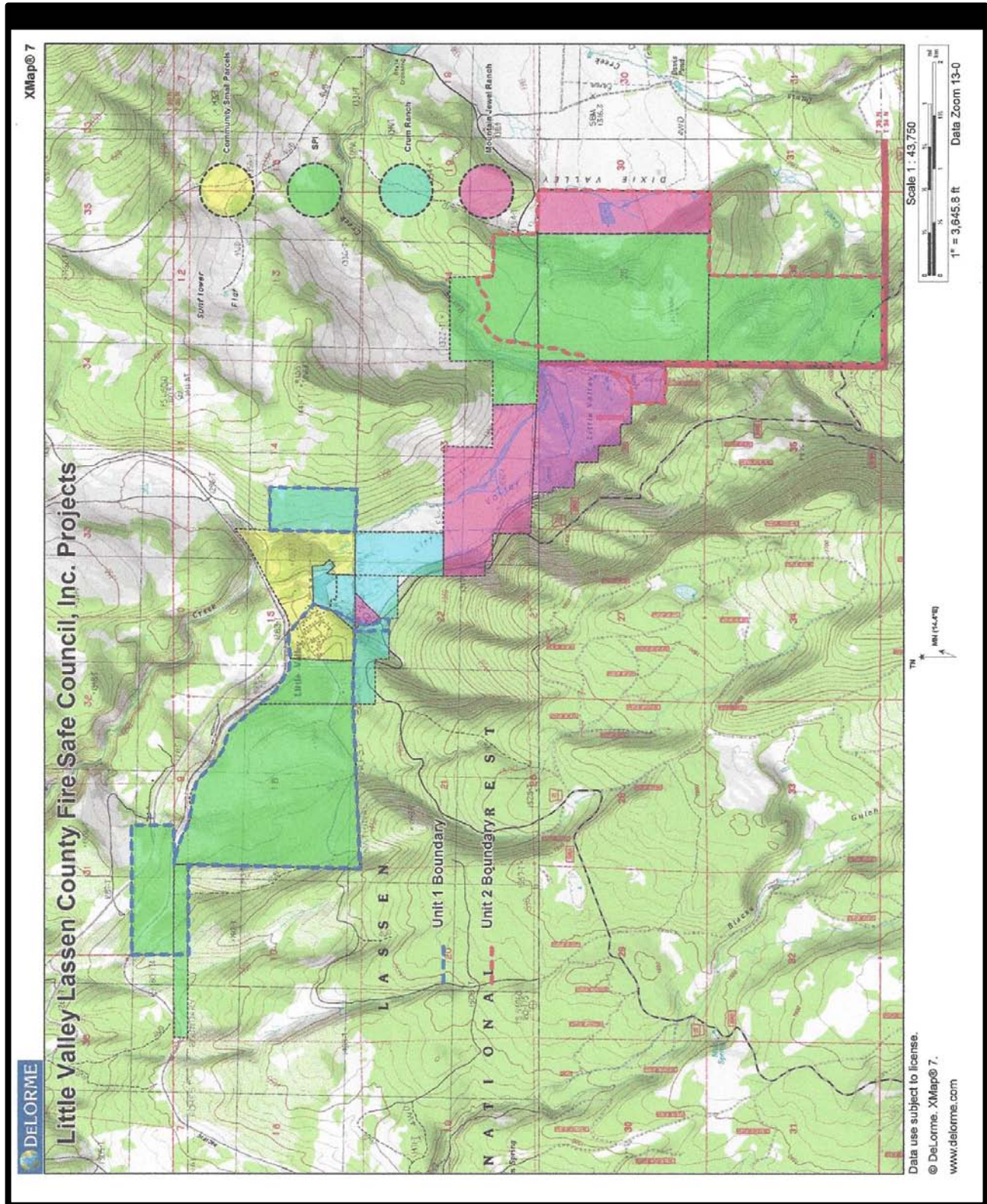
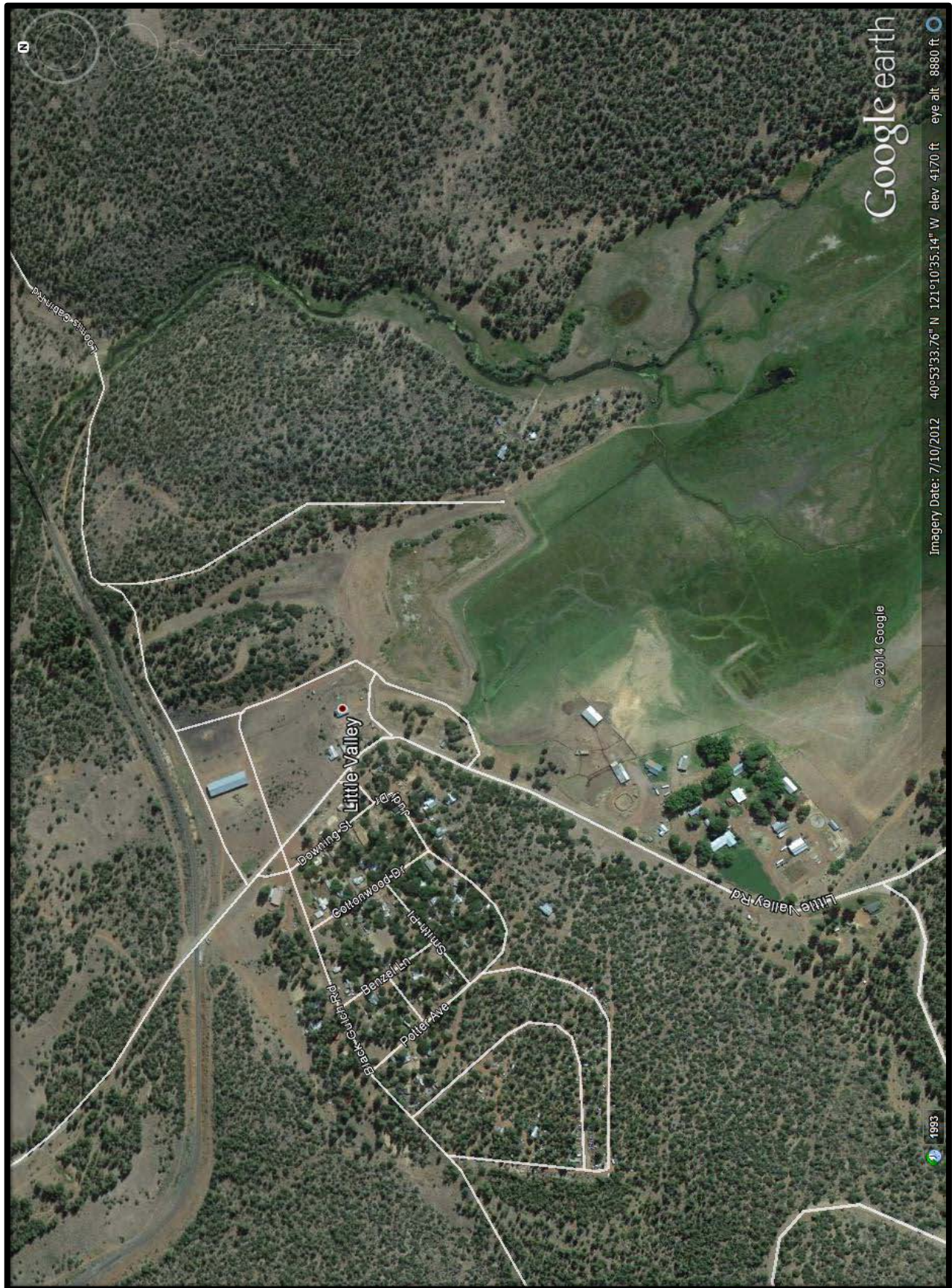


FIGURE 2- Little Valley Community Topography and Local Roads



5.3 Vegetation

The eastside pine forest surrounding the Little Valley community is a prime example of an historic change in the landscape vegetative condition caused by past timber harvest practices and the absence of a natural fire regime. As a result, dense stands of young growth pine have established that are in need of thinning. Invasive Western Juniper has also crept in to the forest and adjacent sagebrush steppe and needs to be removed. Vegetation in Little Valley consists of mixed stands of Ponderosa Pine and western juniper. Shrub understory consists of bitterbrush, mountain mahogany, rabbit brush and big leaf sage along with various annual grasses and forbs. Montane Hardwood Conifer forest within the project area is in need of thinning in order to restore ecosystem health, reduce ladder fuels and make human habitation safer.

The current fuel loadings and vegetation patterns tend to have a seasonal cycle, with fuel loadings of up to 10 tons per acre with a spread rate of 3 feet per minute with 3-foot flame lengths on average with no wind in the less managed timbered areas. Fine fuels under a ¼ inch (*twigs and grass*) compose approximately 200 lbs per acre. Fuel arrangement will not significantly affect fire behavior.

Areas with mostly brush have fuel loadings of up to 1.4 tons per acre with a spread rate of 3 feet per minute with 2-foot flame lengths on level ground with no wind. The fuel consists of small material which tends to be more receptive to fire brands and will react more readily during windy conditions.

5.4 Protective Zones

A substantial protective zone runs north to south along the east, southeastern portion of Little Valley (*see figure 2*) providing a natural protective zone adjacent to the community.

5.5 Demographics

The community and surrounding area of Little Valley has a population of 70, with 51 residences, according to the Lassen County Assessor's Office.

According to the Lassen County Assessor's Office, Little Valley consists of 83 parcels. Approximately 52 of those parcels have been improved in some way (*meaning they have some type of structure*) and 31 parcels are undeveloped.

5.6 Local Fire Department

The Little Valley Community Services District (CSD) has the oversight of the local Little Valley Volunteer Fire Department which has one small station located within the CSD offices and provides fire suppression and emergency medical services within the service area (*see Figure 3*).



5.6.1 Personnel

The Little Valley Volunteer Fire Department Fire Chief states that there are 7 volunteer firefighters.

5.6.2 Equipment at Station

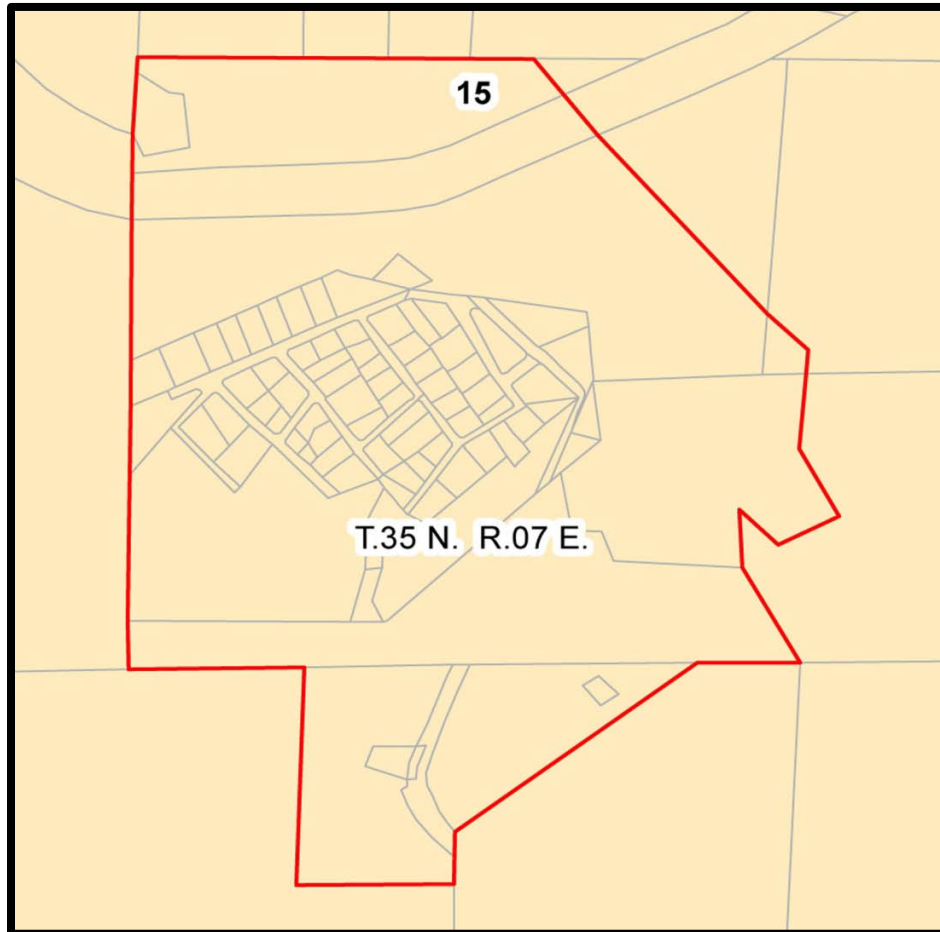
Equipment located at the fire station includes the following vehicles:

Table 1: Little Valley Volunteer Fire Department equipment List

Vehicle Description	Capacity	Make	License	Year
Structure Unit	650 gals.	International	Unavailable	1957
Wildland Unit	650 gals.	International	Unavailable	1968
First Responder	300 gals.	Dodge	Unavailable	1973
Water Tender	1,200 gals.	Ford	Unavailable	1966

Department resources include firefighter gear for all responders (*i.e., protective clothing, breathing apparatus, and radios*), necessary firefighting tools and appropriate medical response equipment.

FIGURE 3 – Little Valley Community Services District and Volunteer Fire Department Boundary



A significant concern during the review of the fire services are the age and condition of the equipment. It is unclear during this assessment that all vehicles are able to respond if needed due to the working condition and age. Significant funding needs to be discovered in order to replace aging equipment to insure adequate response times.

Currently there are no automatic aid or mutual aid agreements in place with other nearby agencies to supplement the Little Valley Volunteer Fire Department force. Such support in the event of a major structural fire would typically come from other agencies as well as the Lassen National Forest and CAL FIRE. Fire protection for the wildland surrounding Little Valley would be through the Lassen National Forest Hat Creek Ranger District, the Bureau of Land Management and CAL FIRE.

5.7 Fire Hydrant System

There is a fire hydrant system throughout the community of Little Valley. The hydrant system is supplied by a 126,000 gallon tank. The supply tank is owned and maintained by the Little Valley Community Service District (LVCSD). There is a rental agreement with the property owner for the use of the property where the tank is located. The tank is supplied by a well which is owned and maintained by the LVCSD. Hydrants are located throughout the community and placed in strategic locations for ease of access by the fire department. A hydrant is located next to the fire hall for quick access by the fire department if necessary.

Domestic water is supplied by the LVCSD and property owners are accessed a user fee and billed monthly by the district.



5.8 Little Valley WUI Area Treatment History

A 5.5 mile buffer was placed around the community of Little Valley Ca. Within this buffer there were three pieces of NEPA within the past 10 years Blacks Ridge EA, Pittville DFPZ EA, and Barely EA. All three EA's treated within the buffer as well as outside of the buffer. These three documents cover over 23,000 acres that have been surveyed with treatment being conducted on select parcels. All or most of the ground adjacent to the Forest boundary around Little Valley has been treated and is available for prescribed fire. There are still treatments that will take place in this area, with the majority of it being fuels type projects.

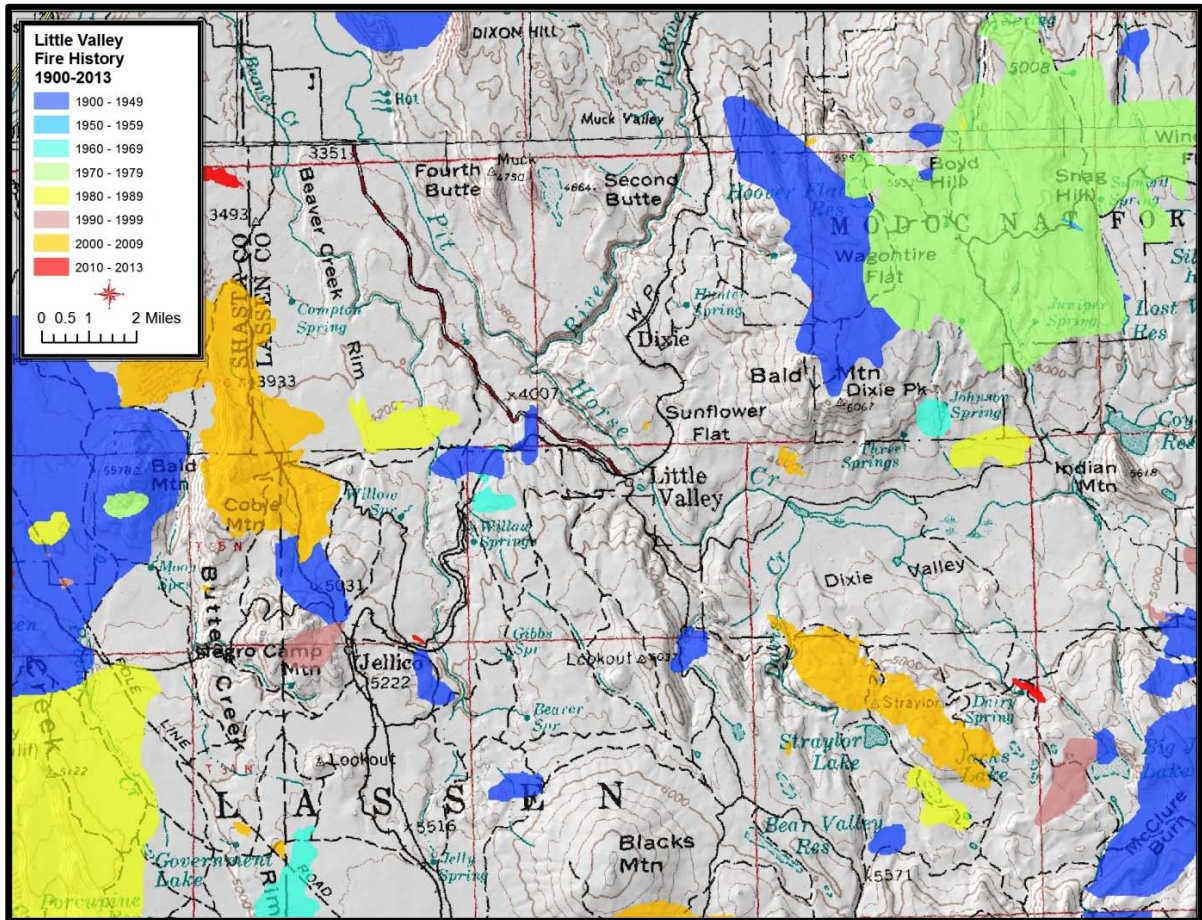
An additional EA that covers a large portion of this area is the Eastside Underburn EA. This EA covers noting more than continual burning through the use of prescribed fire. This EA allows the Hat Creek Ranger District to maintain all treated areas within a 57,795 acre area.

Prescribed Fire:**

<u>Year</u>	<u>Size</u>
1989	221 acres
2005	816 acres
2005	167 acres
2005	575 acres
2006	1,028 acres

** This does not account for any prescribed fire prior to 1989 or after 2006. There has been a continual burning program within the 5.5 miles around Little Valley. The fore mentioned acres are reported in the Cal Fire History.

5.9 Little Valley WUI Area Fire History



5.10 Fire Record

Area Fire information as reported by the State of California:

Wildfire**:

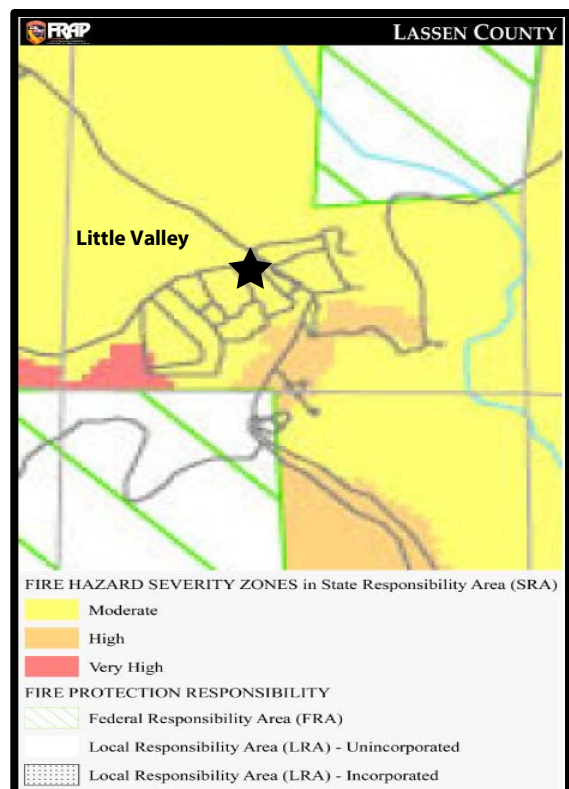
<u>Year</u>	<u>SIZE</u>	<u>Ownership</u>	<u>Cause</u>
1917	358 acres	U.S.F.S.	UNK
1920	6838 acres	U.S.F.S.	UNK
1920	316 acres	U.S.F.S.	Lightning
1942	254 acres	U.S.F.S./BLM	UNK
1942	545 acres	U.S.F.S.	UNK
1961	223 acres	U.S.F.S.	UNK
1964	182 acres	U.S.F.S.	Man
2004	3,292 acres	CalFire	Lightning
2004	118 acres	BLM	Lightning
2014	39,729 acres	Multiple	Lightning

** This table does not reflect any fires that were not 10 acres or larger. Also does not reflect any fires not reported. This also does not show the Peterson Fire which was lightning caused in 2008 and burned 8021 acres of multiple ownerships.

5.11 CAL FIRE, FIRE HAZARD SEVERITY ZONE RATING

Periodically, Cal FIRE reviews and updates its statewide assessment of general fire hazards within and near the State Responsibility Areas (SRAs). This assessment generates fire hazard severity zone ratings (FHSZ). The 2007 CAL FIRE "Fire Hazard Severity Zone" (FHSZ) map for the region rates most of the Little Valley community as a Moderate fire hazard risk area with surrounding areas in close proximity to the community rated as High to Very High risk (see Figure 5).

FIGURE 5 – Little Valley Fire Hazard Severity Rating Map



5.12 FIRE DISTRICT ISO RATING

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

- The quality of the fire department

- The water supply and hydrant system
- Communication systems
- Building codes
- Property inspection programs.
- Community fire prevention programs.

ISO ratings range from 1 to 10, with 1 being perfect. Since the ISO ratings are used by insurance companies to set insurance premium rates, the lower the ISO fire rating, the lower the premium.

ISO has updated the Fire Suppression Rating Schedule to include "extra credit" for fire departments who conduct community fire prevention programs. The Firewise® program will help with this effort.

- Little Valley Volunteer Fire Department currently has no ISO rating.

6. Assessment Process

A team approach was taken in preparing this assessment of fire hazards and risks in Little Valley. Relevant background data was initially collected by several team members identified in the Introduction to this document.

On October 1st and 7th, 2014, team members 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. Conducting the inspection were:

- Dan Douglas, Education Director / Assessment Specialist, Lassen County Fire Safe Council, Inc., and,
- Leah Sandberg, Fire Prevention Specialist, CAL FIRE

7. Important Considerations

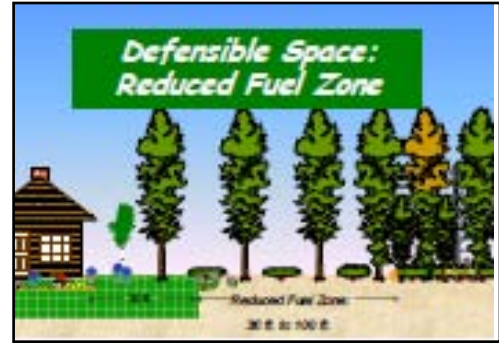
The Firewise Communities/USA® program seeks to create a sustainable balance that will allow communities to live safely while maintaining environmental harmony in a WUI setting. Homeowners already balance their decisions about fire protection measures against their desire for certain flammable components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



7.1 Recognizing Fuels

Fuel is anything combustible. It can be trees and other natural vegetation, wood products of all kinds (lumber, siding, shakes, plywood, furniture, paper), carpeting, drapes, fabrics, most synthetics and plastics, rubber products, motor vehicle and heating fuels, and on and on. Fuels are everywhere around us in our daily lives, but we seldom view them as such.

When it comes time to review our vulnerability to fire, we need to adopt a firefighter's perspective as we look over our homes and yards. If the material is combustible, it is fuel. It may be part of something we consider to be essential to our lives, but it is still fuel to a fire. Lack of recognition of fuels, or denial of their existence, simply puts us at greater risk. It's what we choose to do about the fuels around us that will ultimately make a difference.



7.2 Reducing Fuel Volume

When large, uninterrupted quantities of natural fuels exist, a serious fire danger exists. For example, a dense, overstocked forest is generally recognized as a serious fire concern. The sheer volume of fuel that is available in a large, heavy stand of trees with a continuous fire ladder has the potential not only for intense heat at that location but also the production of huge quantities of embers from torching trees.



Reducing the volume of fuel in an area is a recognized technique for reducing fire hazards. This is part of the thinning process used in creating shaded fuel breaks to offer greater protection to communities in forested areas.

7.3 Separating Fuels

Closely associated with the reduction of overall fuel volume is the practice of separating or interrupting fuels. Aside from its application in fuel breaks, this technique is perhaps the single most important step a property owner can take in reducing vegetation fire hazards on residential parcels. The basic principal behind separation is quite simple, create gaps between fuels such that a fire burning one piece of fuel cannot easily ignite an adjacent combustible object. If a gap exists between one stand of trees and the next, there is less chance of a fire progressing from stand to stand. The same thing is true of flammable brush or shrubs; interrupting the growth inhibits the progression of fire. A fuel gap around the perimeter of the structure is even more important, since it separates the

structure from combustible materials that might otherwise be ignition sources. This is called horizontal separation, because a gap exists horizontally between fuels.

Vertical separation is also important. This is accomplished by removing the lower limbs of trees and smaller trees and brush under a tree to create a gap between the surface and ladder fuels that would be carrying the fire into the tree crown to prevent torching. If there are flammable shrubs or brush specimens in the same area as the trees, the gap between the lower tree limbs and the top of the surface vegetation needs to be adjusted so that lower flames do not ignite the tree branches. Avoid planting flammable shrubs directly beneath trees. Avoid planting flammable shrubs under or adjacent to raised decks for the same reason.

8. Observations and Recommendations

This report groups the issues into physical zones, starting at the structure and working outward from there. No attempt has been made to quantify the number of instances that such problematic issues were observed. Recommended remedial action is shown in *italic type*.

8.1 Fire Hazards

- Pine Needles on Roofs or in Gutters

Most homes in Little Valley were good at keeping roofs and gutters clear of pine needles. Some homes, however, had some accumulations of pine needles. Such accumulations serve as an ignition bed for flying embers and they can also promote the growth of mold at the roofing interface. When pine needles fill gutters, they not only interrupt the flow of rainwater, they too become ignition beds right at the vulnerable edge of the roof.



- *Regular removal of needles from both roofs and gutters will solve these issues.*

- Wood Piles Next to Structures

The desire to have a handy supply of firewood causes some residents to stack their wood supply right up next to their home. Firewood stacks are excellent “ember magnets,” allowing embers to drift into small openings and eventually ignite the wood. If the stack is in close proximity to the residence or any flammable portion of it, the fire can rapidly progress to the structure.



- *A more prudent practice is to keep firewood piles a safe distance from structures (a thirty foot gap is recommended). Another alternative is to screen firewood stacks with hardware cloth (openings no larger than 1/8 inch) such that embers cannot reach the wood; make sure that the screening completely encloses the stack, with no gaps at the bottom and with the metal screen spaced about an inch away from the wood so that embers that land on the screen cannot ignite the outer surfaces of the wood.*
- *If wood is stored inside or next to attached or adjacent structures of the home move to a safer location with at least a 30 foot gap as recommended above.*

- Flammable Materials Next to or Under Structures

Flammable material stacked up against or right next to a structure poses a fire hazard. Storing such material under a deck is also a concern. This applies to wood products, cardboard, fabrics, plastics or any other kind of combustible material. Pine needles up against the base of wood siding or under decks create similar ignition vulnerability.



- *Regular attention to accumulated or stored materials is required to avoid this common issue. Pine needles that accumulate under decks and within 30 feet of a structure increase its risk during a wildfire. Removing pine needles from these areas greatly increases the chance of your home surviving. Enclosing the underside of decks helps keep pine needles from accumulating there.*

- Flammable Materials on Decks

Many items commonly found on decks are made of or contain flammable materials. Chairs, umbrellas, tables, door mats, BBQ propane bottles, etc., all fall into this category.

- *It is probably not realistic to expect everyone to store such things in a safe area until they are needed on the deck, but it is good practice to remove them to a safe area if there is an approaching fire or when you will be away from home for an extended period.*

- Hazardous parcels

There are multiple parcels within the community that are not properly maintained, have large amounts of accumulated debris or have other issues that require attention. This is a significant risk to them and adjoining property owners as well as the entire community.



- *Measure should be taken to address these*

parcels by any means necessary to mitigate removal of hazardous materials.

- General tree thinning where appropriate to reduce fuel volume.
- Thinning or removal of new brush growth
- Removal of accumulating surface litter or debris
- Installation of required and proper screening on chimney pipes, soffits, foundations, etc.



8.2 Propane/Fuel Tanks

- Flammable Materials Next to Tanks

Code requires that we keep the area right around our propane/fuel tanks free of flammable materials. Unfortunately, we sometimes forget that requirement. Having flammable materials, vegetation or debris crowded around the tank is an invitation to disaster. Most residents deserve credit in this area as the area around their propane tanks are well maintained. There were some tanks, however, that had grass and brush growing up to and under the tank. This creates a path to a highly combustible fuel source. In addition other fuel tank types are in extremely close proximity to the home structure itself.



- *It is essential that combustible materials be removed from within ten feet (10') of propane tanks.*
- *Relocate fuel tanks a minimum of ten feet (10') from structures.*

8.3 Defensible Space

As trees, shrubs and grass grows, they can change what was previously an acceptable situation into one that no longer meets state requirements for residential defensible space. Though most residents have done an excellent job creating defensible space around their home, we did observe some homes where trees needed to be limbed, brush needed to be removed and branches needed to be pruned away from chimneys and



stove pipes. In addition, there are multiple homes within the community that have accumulated a significant amount of debris surrounding the home and property

- *CAL FIRE guidelines for meeting the requirements of State Law (PRC-4291) should be followed to ensure proper shrub selection and placement. Lower limbs of trees over eighteen feet (18') in height must be removed such that there is a MINIMUM of six feet (6') of clearance between the surface and the lowest part of the tree limb, and the surface beneath such trees must be kept clear of any flammable debris or vegetation. Grass should be cut to 4" or less. Tree branches should be kept clear of chimneys and stove pipes. Further specifics and alternatives can be found in the PRC-4291 guidelines.*
- *Choosing the right plant materials placed in close proximity to the structure is critical. Some plant materials are highly volatile when introduced to flame and embers therefore these plants/shrubs should be either removed or relocated.*
- *Work with home/property/renters, etc. to remove accumulated debris from around structures.*

8.4 Ingress/Egress

There is only one paved main road leading into Little Valley (*Little Valley Road*). The road is 13 miles in length before reaching the community, and is maintained by the Lassen County Road Department. There are no paved roads within the community itself. There are several other accessible roads into and out of the community. These roads are USFS maintained roads but are sufficient for evacuation use as well as apparatus use. Although the roads do have signage almost all could use improvements. All other roads inside the community are unpaved and very narrow. Should a fire sweep through this community, egress for residents and access for fire service vehicles could be compromised.



- *The community should develop measures to address the local road conditions and work with the Community Service District to make improvements as funding becomes available.*
- *Roads signage should be constructed of proper materials that are fire resistant and clearly posted.*
- *Roads signage should include cross street signage.*
- *Roads sign post should be replaced with fire proof posts.*



- *Roads signs that are obstructed by trees and/or shrubbery should be cleared of these or other obstructions.*

8.5 Access to Structures

It is important that emergency service personnel have access to residences. Fire apparatus needs to be able to get into driveways and access all sides of a home in order to provide structure protection. Many homes, in the community have items blocking access to the structure. House numbers should be standardized so that first responders are able to more easily find the home.



- *Items preventing access to a structure should be relocated/removed.*
- *Encourage the installation of standardized house numbering system that is highly visible including large reflective numbers with contrasting background.*

8.6 Vegetation Beyond the Home Ignition Zone

- **Reduction of Fuel Volume and Ladder Fuels**

Vegetation on undeveloped lots and common areas within Little Valley is not covered by the defensible space requirements of PRC-4291 but is of significant concern.

- *Efforts should be made to educate homeowners (including absentee owners) about the benefits of creating defensible space. Corrective action would be relatively straightforward, and should focus on:*
 - *Elimination of "ladder fuels" (i.e., fuels bridging the gap between the surface and lower tree limbs)*
 - *Removal of additional lower branches, as needed*
 - *General tree thinning where appropriate to reduce fuel volume and maintain forest health*
 - *Thinning or removal of new brush growth*
 - *Thinning or removal of new seedlings/saplings*
 - *Removal of accumulating surface litter or debris.*
 - *Removal of debris piles.*

9. Successful Firewise® Modifications

When adequately prepared, a house can likely withstand a wildfire with minimal 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.
- **Hardening the home** by taking measure to protect the structure by adding fire resistant improvements such as:
 - *Install perimeter foundation, gable, eave and roof vents using 1/8 screening that restrict the ability of embers gaining access into the home.*
 - *Install metal, composition or tile (or other non-combustible) roofing with capped ends and covered fascia.*
 - *Installing fire resistant siding.*
 - *Installing double pane windows.*
 - *Boxing in roof overhangs with enclosed soffits.*
 - *Enclosing decks or foundations with 1/4 or smaller screening to eliminate the accumulation of leaves and debris under the structure.*

Several examples of positive actions were observed during the assessment inspection at the community of Little Valley.

A brief summary of some of the positive indicators that were noted would include the following:

- Volunteer firefighters participate in regular and updated training.
- Additional fire suppression resources are very distant from the community.
- Defensible space work is evident in some areas.
- There is f access for emergency vehicles via main thoroughfares and are well signed.
- Those lots that are developed do have good addressing.
- It is also noted that many homeowners have taken steps to reduce the effect of fire to their home by installation of some of the recommended measures noted above.

10. Next Steps

This assessment once approved and adopted by the Little Valley Firewise® Board will be incorporated into the Lassen County CWPP and will provide a blueprint on recommended improvements to the community to improve wildfire survivability and may assist in improving the ISO ratings for the community.

The Little Valley Firewise® Board is seeking Firewise Communities/USA® recognition. This assessment provides agreed-upon, area-specific Firewise® solutions and recommendations and have been utilized to develop the community's action plan.

The community has met the following Firewise Community/USA® standards:

- A local Firewise® board was created on October 1, 2014 in order to satisfy Firewise Community/USA® status requirements.
- The community has invested in excess of the minimum contribution of \$2.00 annually per capita in its local Firewise® activities in the amount of \$2,500 total invested in 2014.
- Firewise Communities/USA® Day activities were held on October ____, 2014 which was a presentation of the Firewise Communities/USA® program to the community by the Lassen County Fire Safe Council, Inc. Education Director. In addition to that event the Lassen County Fire Safe Council, Inc. are working on a community-wide hazardous fuels treatment project to remove hazardous fuel accumulations surrounding and within the community and adjacent private timberlands thereby reducing the communities' fuel hazard threats and improving wildland fire survivability for the community and residents.
- This document represents the Community Assessment that has been completed.

Little Valley residents 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 keep regular vigilance by identifying the things that will ignite their homes and address those that are evident and as they arise.

11. Literature Cited

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Exhibit A

Little Valley Firewise® Community Assessment - Action Plan

Little Valley Firewise® Community Action Plan

Upon the development and subsequent adoption of the Little Valley Community Assessment document discussion was held regarding the need to develop a “Community Action Plan”. The Community Action Plan is a list of actions the community can take in order to systematically address the recommendations presented in the Assessment.

A meeting was held on November 15, 2014 to develop and approve the list of actions that are reasonably achievable by the community.

The Little Valley Community Action Plan consists of the following:

- 1.) **Work to update and/or replace aging fire/first responder equipment and establish Mutual Aid Agreements with other agencies** – Due to the fact that the current fire/first responder equipment is old and requires constant maintenance it would be necessary to update aging equipment as soon as possible. If equipment is unable to respond in a timely manner loss of structure and possibly life could occur. It is imperative to look for funding sources due to the costs associated with the replacement of this type of equipment. In addition, establishing mutual aid agreements will help in the interim while procurement of adequate equipment and supplies for the volunteer fire fighter corps is discovered and obtained.
- 2.) **Purchase and install proper street signage** - Due to the lack of street sign throughout the community work to purchase and install street sign at all intersection throughout the community
- 3.) **Clear debris around homes** - Homeowners with significant amounts of debris surrounding home and property should work to clear debris so that firefighters have adequate access to all sides of home. Those homeowners that are unable to do work without assistance the community should work together to assist those homeowners in the removal/relocation of hazardous debris.
- 4.) **Annual Firewise® Activity Days** – Conduct annual “Firewise® Activity Day(s)”. These annual events are activities provided to bring attention to the community of the need to create and maintain the individual homeowner and property owners’ defensible space. At a minimum, Little Valley will conduct at least one Firewise Day event per year.
- 5.) **5 Year Review of Community Action Plan** – This is an opportunity to review the Community Action Plan update the plan and make any additions to the plan that would be relevant to the overall community safety from wildland fires.

With the assistance from the Lassen County Fire Safe Council, Inc., education director, Title III funds were used to present to the community the steps necessary to become a recognized Firewise community. We have formed our Firewise Board of Directors made up of local community members and have adopted our Community Assessment including the Community Action Plan thereby satisfying our annual requirement to conduct a Firewise® Day Activity. Our Firewise® activity was conducted on October 1, 2014.

Work on action item number 1 will require significant funding to provide for replacement funds for aging equipment therefore we will conduct a review of this action plan upon our success of obtaining funds or within 5 years from initial adoption of plan whichever comes first.