Trout Lake

Community Wildfire Risk Assessment

September 2018

Table of Contents

Community Wildfire Risk Assessment

Introduction 4

Location 6

Topography 7

Land Ownership- Parcels and Acreage 8

Home Construction 9

Access 9

Community Wildfire Risk 10

Wildfire Ignition Potential 10

Wildfire Behavior Potential 10

Wildfire Suppression Challenges and Resources 12

Fire Suppression Challenges 12

Fire Suppression Resources 13

San Miguel County Sheriff's Office 13

Telluride Fire Protection District 13

West Region Wildfire Task Force 1 13

San Miguel County Road and Bridge 13

Uncompahgre National Forest 13

Colorado Division of Fire Prevention and Control 14

Trout Lake Water Resources 14

Communications 14

Wildfire Risk Reduction Recommendations 15

Recommendation #1- Complete Structure-Specific Site Visits for Each Residence in the Trout Lake Community 15

Home Ignition Zone Activities 16

Home Hardening 16

Recommendation #2- Design and Implement Defensible Space Assessment and Implementation Around Individual Houses/Cabins 18

Defensible Space 18

Recommendation #3- Design and Implement Hazardous Fuels Reduction on Trout Lake Land Company Land and United States Forest Service Land 20

Recommendation #4- Continue to Promote Slash Management for Residents Via the Community Chipping or Burn Pile 21

Recommendation #5- Complete a Road Access and Improvement Field Assessment and Map 22

Recommendation #6- Develop a Community Level Wildfire Preparedness and Emergency Response Plan 23
Recommendation #7- Hold a Community Wildfire Information Forum 23
Conclusions 23
Additional Information 24
West Region Wildfire Council 24
FireWise Communities/ USA 24
Appendix 1- Trout Lake Rapid Risk Assessment 25
Wildfire Risk Assessment Elements 25
Scoring 26
Wildfire Risk Assessment Rating Key 27
Wildfire Risk Analysis Results 28
Figure 10. Parcel Level Wildfire Risk Ratings Maps 29
Relative Risk 30
Appendix 2- Table of Wildfire Risk Reduction Recommendations 36

Introduction

This document drafted by Courtney Haynes, Mitigation Specialist for the West Region Wildfire Council (WRWC), is the product of a collaborative effort between the Trout Lake Cabin Owners Association, Trout Lake and Lizard Head Land Companies, Colorado State Forest Service, United States Forest Service, Telluride Fire Protection District, San Miguel County Emergency Management Department, and Excel Energy.

The Trout Lake Cabin Owners Association invited the West Region Wildfire Council and the Telluride Fire Protection District to attend their annual Cabin Owners Association Meeting in July, 2018. It was at this meeting that the West Region Wildfire Council encouraged the Trout Lake Community to consider taking the steps towards having a Community Wildfire Risk Assessment report written about their community. The participating residents unanimously agreed to move forward with the assessment and also agreed to partially contribute financially towards the cost of assessment.

The West Region Wildfire Council assembled a field meeting with members from the above partnering organizations on August 29, 2018. The field day highlighted many of the challenges the Trout Lake Community faces with respect to wildfire. It also allowed partners to identify ways the Trout Lake Community can mitigate or address the challenges, which resulted in the recommendations listed in this document.

This document serves as an update and expansion to the Trout Lake section of the San Miguel County Community Wildfire Protection Plan (CWPP) developed in 2009. The San Miguel County Community Wildfire Protection Plan identified the Trout Lake Community as having an overall fire hazard rating of 'High' and listed one page of recommendation for the community to reduce their wildfire risk.

The purpose of this document is to provide the residents of the Trout Lake community with additional site specific, detailed, community-level suggestions to help them prepare for a wildfire event and reduce their wildfire risk. Addressed in this document is a wildfire-centric community profile of Trout Lake Community, a current identification of the wildfire risk of the community, an identification of wildfire preparedness activities, and further recommendations to reduce the wildfire risk within the community. This assessment is a result of in-depth conversations and field time with fire professionals and members of the Trout Lake Cabin Owners Association in order to address areas of concern and develop strategic recommendations.

While this Community Assessment provides an overview of the community as a whole, a Rapid Wildfire Risk Assessment is a parcel specific look at individual homeowners' wildfire risk. The West Region Wildfire Council, in partnership with the Telluride Fire Protection District, conducted a Rapid Risk Assessment for the Trout Lake community in 2014. The rapid assessment assesses a variety of factors that contribute to a home's vulnerability during a wildfire event. The factors accounted for were: address visibility, emergency ingress/egress, driveway width/clearance, topography, slope, background fuels, defensible

space, and the home construction elements of roofing, decking and siding. These factors play a critical role in a structures ignitability as well as the ability for fire fighters to safely and effectively defend the structure. These factors were analyzed to determine the relative wildfire risk of individual homes within the Trout Lake Community, and are summarized at the end of this document (Appendix 1).

Paired together, the Community and Rapid Wildfire Risk assessment provide an in-depth profile of the community's wildfire risk by evaluating this risk at the landscape scale as well as the parcel level. Combined this risk assessment will help educate community members, and provide actionable recommendations for reducing wildfire risk (Appendix 2).

Community Profile

Location

The Trout Lake Community is located in the southeastern most corner of San Miguel County, Colorado (Figure 1). The community is approximately 8.5 miles (straight-line distance) southwest of Telluride, Colorado, the largest town nearby. Access into the Trout Lake Community is by via North and South Trout Lake Roads, which enter the community on the east side of State Highway 145. The focal point of the community is Trout Lake, which is surrounded on all sides by residential development. Trout Lake is within the Lake Hope sub watershed of the South Fork of the San Miguel River, which is part of the San Miguel/Dolores River Watershed. The community is bordered on all sides by the Uncompahgre National Forest.

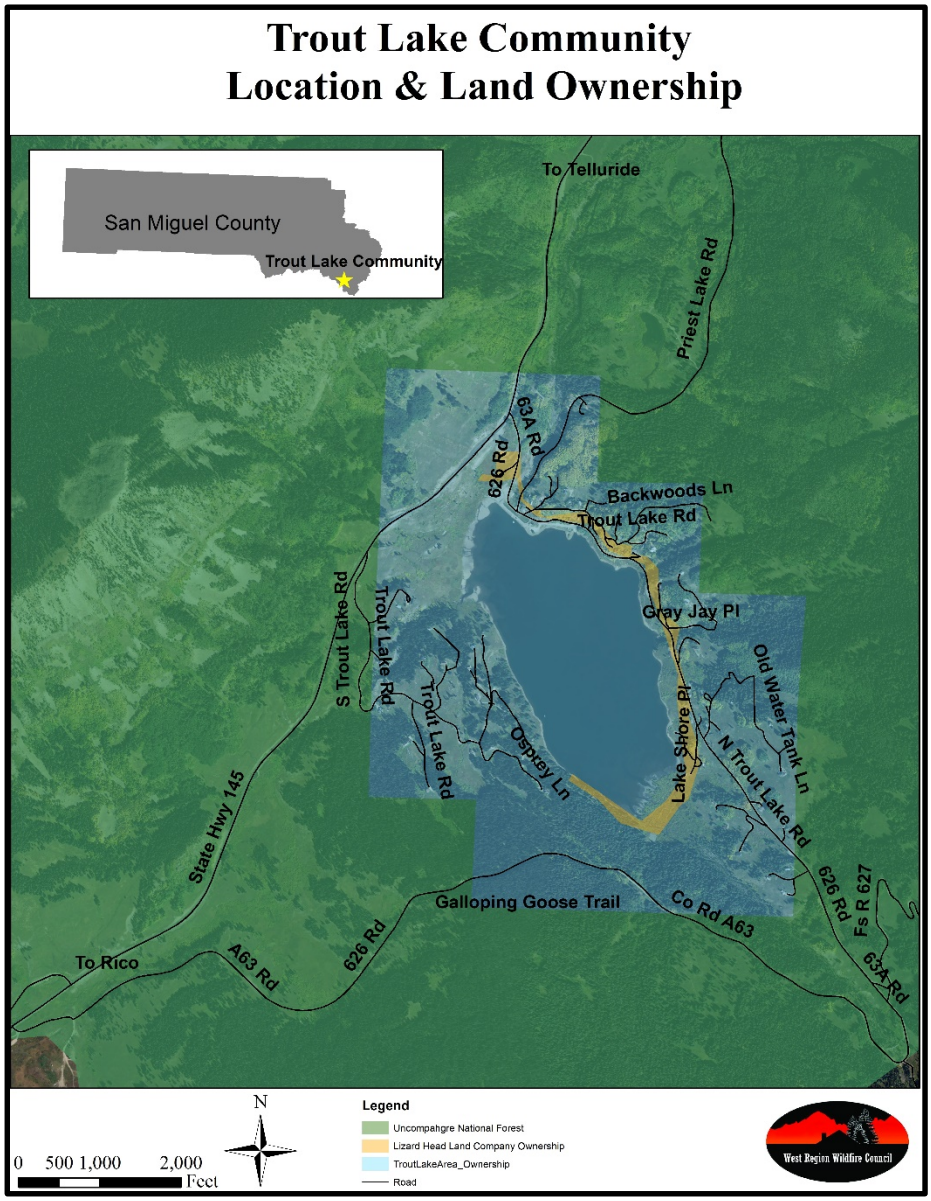


Figure 1. Location and Land Ownership Map.

Topography

The landscape topography forms a bowl shape around Trout Lake (Figure 2). The entrance into the Trout Lake Community on North Trout Lake Road is 9,770 feet and the highest elevation within the community is at 10,168 feet along the southeastern boundary. The western edge of the lake is substantially steeper than the east side of the lake and the area contains all aspects.

Figure 2. Picture showing "bowl" shaped topography of the Trout Lake Community, looking south. Lower elevations on the east (left) side of the lake are comprised of aspen. The forest type on the west (right) side of the lake are comprised of spruce/fir.

Cover Type

The Trout Lake Community is comprised of spruce/fir and aspen forest cover types and montane grasses and forbs. Cover types are influenced by both aspect and elevation. The fuels in the eastern side of the lake are dominated by aspen, with a smaller component of Englemann spruce and subalpine fir. Closest to the eastern lake edge, slopes are generally more moderate and become steeper towards the north and east. The east side of the lake has a predominately westerly aspect. On the west side of the lake, the opposite is true; steeper slopes, higher elevations, and easterly aspect support a forest that is dominated by Englemann spruce and subalpine fir (higher percentage of spruce) and small pockets of aspen (Figure 2). Both sides of the lake have small areas of non-forested acres, that are dominated by grasses and forbs.

Land Ownership- Parcels and Acreage

Ownership of land within the Trout Lake Community is slightly complicated; it is split between two land companies, the Trout Lake Land Company and the Lizard Head Land Company. These land companies own the land upon which all of the houses and cabins within the community are built. Homeowners within the community own their individual structure and an additional 50' from a site pin, beyond that all of the land in the community is considered Land Company "common land". According to 2018 GIS spatial data, the Trout Lake Land Company owns 452.32 acres and 88 cabin/house sites. The Lizard Head Land Company owns a sliver of land along the eastern shore of the lake, a total of 21.45 acres, and 17 cabin/house sites. Both Land Companies have their own governing boards but operate under the umbrella of the Trout Lake Cabin Owners Association (TLCOA). The majority of the residents within the Trout Lake Community are seasonal residents, and primarily occupy their cabins/houses during the summer months.

Figure 3. Entrance Sign at Trout Lake, showing Ownership.

The water level in Trout Lake is managed by Excel Energy and Excel Energy ownership extends to 75 feet above high water mark. A dam and penstock are constructed at the northeast edge of the lake and water flowing out of the lake is used to partially support hydroelectric generation at the historic Ames Hydroelectric Project power plant.

Figure 4. Rules and Regulations of Trout Lake Recreation Area.

From the time ice melts on the lake until October 31 the Trout Lake Recreation Area is open to the public and supports abundant recreational use. Excel Energy also manages the recreation facilities of the lake such as bathrooms and a gazeebo. Excel Energy is also purposefully cautious about not drawing water levels too low so the area can adequately support recreation.

Home Construction

According to TLCOA Richard Weil, the first cabin was built in 1921. At this point in time, all but approximately nine building sites have been developed with houses/cabins. Structures range in size (small cabins to larger houses), age, and status; some structures are seasonal cabins with little to no insulation and others are year-round residences fully insulated to withstand cold Colorado winters.

Access

Access for all residences within the Trout Lake Community is obtained initially from North or South Trout Lake Roads. North Trout Lake Road enters the community off Highway 145 from the northeast side of the Lake. In the summer months the road continues onto United States Forest Service Land and becomes a popular seasonal gravel road (A63 Road), which loops around the south and west sides of the lake and connects back to Highway 145 near Lizard Head pass. This gravel road provides adequate evacuation for residents during the summer months, however parts of it could be nearly impassable during wet times of the year (heavy rains). The road is not plowed during the winter and instead is used as a popular ski/snowmobile trail known as the "Galloping Goose" trail.

South Trout Lake Road serves as the singular access for residents on the south side of the Lake. This route into and out of the community poses a general concern for both evacuation efforts and emergency responders in the event of a wildfire, as it will be necessary for all traffic to traverse this route. According to members of the Trout Lake Community, there is a very unimproved trail/road that links up to the Galloping Goose trail/road but in its current condition would be challenging to use for most vehicles (including emergency vehicles) as an evacuation or emergency ingress/egress.

Almost all secondary roads within the community are dead end roads with a singular ingress. Most are private roads and maintained by residents of the community. Many of the private roads and driveways, especially on the north side of the lake, are not amenable to firefighting apparatus. Many driveways have less than 20 feet of clearance, have very steep grades, and/or have inadequate turnarounds.

Community Wildfire Risk

Wildfire Ignition Potential

Large wildfires and numerous wildland starts close to the Trout Lake Community indicate that the potential ignition of a wildfire exists. Potential ignition sources that could threaten Trout Lake are: lightning, human caused ignitions resulting from recreation, road side ignitions, and ignitions resulting from power line failures.

Summer monsoons are the cause of frequent electrical storms in the Colorado Mountains. A single lightning strike carrying 20,000 amperes of electrical current can heat the surrounding air temperature to 53,000 degrees Fahrenheit. If a strike occurs in a receptive fuel bed, a wildfire ignition is probable.

Heavy recreational activity adjacent to the Trout Lake Community could result in a potential wildland ignition. The Trout Lake Community is bordered on all sides by the Uncompahgre National Forest. Dispersed camping sites, including fire rings, are frequent along the Galloping Goose trail which boarders the Trout Lake Community on the western side. In addition, Trout Lake and surrounding Hope Lake and Priest Lake are popular recreation areas during the summer months. An escaped campfire on adjacent public lands could ignite a wildfire that would threaten the Trout Lake Community.

Roadside ignitions along Highway 145, as the result of sparks or discarded cigarette butts, have the potential to turn into large wildland fires that would greatly impact the Trout Lake Community.

Numerous low hanging power lines provide utilities to homes within the Trout Lake Community. These power lines have the potential to be damaged by falling trees or extreme weather events. If damaged one of these lines could result in a wildfire ignition within the community.

Wildfire Behavior Potential

The potential wildfire behavior of an incident within the Trout Lake Community will vary dependent on weather conditions. High fire weather conditions include: high temperatures, high winds and a low relative humidity. These conditions will dramatically increase the fire behavior of a potential wildland incident. Sustained drought will result in decreased fuel moistures and will also increase wildfire behavior. Typically, wildfires move up slope but depending on weather conditions (mainly wind direction and speed) flame fronts can move downslope, called “backing down”. If an ignition occurs on the higher elevation slopes west of Trout Lake, it is still conceivable that the fire would back down towards the Trout Lake Community, especially with prevailing southerly and southwesterly winds.

In addition to weather conditions, wildfire behavior is also dictated by fuels. Listed below is the typical fire behavior observed in the fuels present within the Trout Lake Community: grasses, aspen, as well as Englemann spruce and subalpine fir.

Grass: The grass fuel type responds quickly to changing weather. This fuel will dry or absorb moisture rapidly. Because of this fire behavior in this fuel type can range from low when burning conditions are marginal to extreme during hot, dry weather. Increases in wind speed or slope will cause fire in grass to increase in flame height and intensity. Generally, grass is a flashy fuel with high rate of spread and a short duration. This grass/forb fuel type is highly receptive to weather. A period of high temperatures, sustained winds, and low humidity can rapidly create a receptive fuel bed. The rate of spread and flame length of a wildfire in this fuel type are very high and can be extreme if the grasses are fully cured. There are very few large areas of grasses/forbs within the Trout Lake Community though many cabins have areas of grass surrounding them. Thus, it is key to manage this vegetation close to structures. In general, all grasses with 30 feet (Zone 1) of any structure should maintained to a cut height of no more than 6 inches and no grass should be within 5 feet of any structure (Zone 1A).

Aspen stands: Fires with aspen are typically low to moderate in intensity except when pockets of sage brush, conifers, or dry grasses are consumed. Aspen is considered an early successional species that colonizes an area after a disturbance, such as a wildfire. It generally does not remain as a climax species for long periods of time, and typically will be replaced by conifer species over time. Due to high moisture content of the wood, forests dominated by aspen are not generally prone to wildfires. Generally, it is a tree species that can be promoted around structures without increasing the risk to the structure. Typically fires in aspen stands are of short duration. The rate of spread in aspen is typically moderate to high, but because of a low fireline intensity wildfires in aspen stands are typically easier to stop. Many of the structures on the east side of Trout Lake are built within pure aspen stands and therefore are at lower risk to wildfire with respect to forest type than residences on the western side of the lake.

Engelmann Spruce and subalpine fir (spruce/fir) stands: Fires are more likely to torch individual trees, to run through crowns, and to spot in spruce/fir stands. This increase in fire behavior makes them potentially harder to control. Fires in conifer stands are lower frequency but have high intensity. Fires in this fuel type can be of either short or long duration, and the rate of spread is generally moderate too fast. The spruce/fir fuel type on the western side of the lake extends west of the Trout Lake Land Company boarder into the Uncompahgre National Forest. Additionally, the Englemann spruce fuel type in this area has a density that can support an active crown fire under high fire-weather conditions. In the event that a wildland fire enters the canopy of the Englemann spruce and initiates active crowning, fire behavior will be extreme, with average flame lengths two to three times the tree height. Such fire behavior is capable of emitting fierce levels of radiant heat. Englemann spruce trees range in height from 45-130 feet, indicating that flame lengths could be up to 390 feet during an active crown fire. Embers dispersed from an active crown fire can cause spot fires, or spotting, a fair distance from the flame front. Spotting distance of up to about 2 km (1.24 miles) are frequently seen on crown fires, and long-distance spotting in excess of 10 km (6.21 miles) has been reported. Embers landing on or near

homes with ignition vulnerabilities are often the reason homes are lost in a wildfire event. This forest type poses the highest risk to the Trout Lake Community with respect to wildfire. This is due to direct flame contact as well exposure to radiant and convective heat forces to homes on the western side of the lake and ember generation to all homes within the Trout Lake Community.

Wildfire Suppression Challenges and Resources

Fire Suppression Challenges

Given the many factors that are in play during a wildfire event, it is difficult to determine what type of fire suppression efforts/resources may be engaged. Lower intensity ground wildfires are typically fought by ground crews, where as active crown fires are typically fought by aerial assault. However, fire suppression challenges may make it difficult or impossible for firefighting resources to adequately defend structures of parts of a community during a potential wildfire event. The fire suppressions challenges listed below are challenges firefighting resources may face within the Trout Lake Community. Identifying these challenges makes it even more crucial for residents to understand that firefighting resources may not respond as expected, thus increasing the importance of pre-emptive mitigation measures.

Fire suppression resources responding to an incident in the Trout Lake Community have the potential to encounter challenges that may affect their ability to contain a wildfire. The biggest challenges that emergency responders will contend with are ingress, low hanging power lines, and fuel load.

Firefighting suppression activities within Trout Lake Community may be limited due to access. The entire community is accessed by two roads, North Trout Lake Road and South Trout Lake Road. The Galloping Goose trail serves as a secondary evacuation route, but may not always be passable. Most secondary roads within the community are dead end roads, and many are very steep and narrow. Without a solid secondary evacuation route in parts of the community, an actively burning wildfire within the community may be too dangerous for fire fighters to engage.

The Incident Response Pocket Guide, a tool that all wildland firefighters use as a reference when engaging a wildfire, identifies power lines as a specific hazard to firefighters. Fire burning at the base of wooden power line poles can cause downed lines and heavy smoke or flame can cause electrical current to arc from the line to the ground. In these circumstances firefighting activity within 100 feet of power lines will be severely limited.

The fuel load within the community continues to exist in a state that can support active wildfire behavior including group torching and active crowning. An active wildfire in this current fuel load may prevent fire suppression resources from actively engaging an incident within the community.

Fire Suppression Resources

San Miguel County Sheriff's Office

The San Miguel County Sheriff's Office acts as the fire marshal for all wildfire incidents in San Miguel County. As the fire marshal, the San Miguel County Sheriff's Office may be involved in incident command, reporting incidents, delegating jurisdictional response and conducting investigations of fire origins and causes. In 2018, the San Miguel County Sherriff is Bill Masters.

Telluride Fire Protection District

The Trout Lake Community is within the Telluride Fire Protection District (TFPD) which includes 4 fire stations including in Telluride, Mountain Village, Placerville, and San Bernardo. The District is comprised of 65 volunteer firefighters, 34 volunteer EMS, and hires 3 seasonal wildland firefighters. Station 4 (San Bernardo, 3595 Highway 145) is the closest station to the Trout Lake Community, just a few miles north on Highway 145 from Trout Lake. This station has a 2,000 gallon Type II engine, a 2,000 gallon Type I engine, and ambulance, and a wildfire Type 6 engine. The Insurance Safety Office (ISO) recently re-rated the fire district and due to the addition of the new engine, the classification from a 10 in the San Bernardo area was changed to a 3/3Y within 5 road miles of any of the stations. This is a significant change and for homes whose insurance companies subscribes to ISO. When a 911 call is initiated in the station 4 response zone station 2 (Mountain Village) is also paged as automatic aid. As of 2018, the chief of the Telluride Fire Protection District is Chief John Bennett.

West Region Wildfire Task Force 1

In 2018, the West Region Wildfire Task Force 1 was formed by the following Fire Protection Districts: Hotchkiss, Gunnison, Montrose, and Telluride. The concept of the Task Force is that the participating Districts have access to the other Districts resources in the event of a wildfire. This collaborative effort helps provide the District in need with resources within the first few critical hours of a wildfire event. The Trout Lake Community has coverage of this resource because it is located within the Telluride Fire Protection District.

San Miguel County Road and Bridge

A mutual aid agreement through San Miguel County can make the counties heavy equipment available to emergency response. The San Miguel County Road and Bridge Department maintains large pieces of equipment that could be utilized in the event of a wildfire. They also have the ability to help provide communication to residents during emergency events.

Uncompahgre National Forest

The Uncompahgre National Forest staffs seasonal engines that are available for fire suppression efforts on incidents that may threaten the Trout Lake Community. United

States Forest Service services may be available to provide structure protection, but they will not risk the life of their firefighters to do so.

Colorado Division of Fire Prevention and Control

The Colorado Division of Fire Prevention and Control (DFPC) staffs wildland firefighting resources in Montrose, Colorado. This is the closest state resource to the Trout Lake Community. In addition, the DFPC staffs six engines throughout the state. Colorado Division of Fire Prevention and Control also has numerous aircraft available to assist on incidents as requested. The state staffs two Multi-Mission Aircraft that can be utilized for fire detection, surveillance and support; two Single Engine Airtankers; and two Type III Helicopters with Helitack Crews.

Trout Lake Water Resources

The largest water resource for the Trout Lake Community is Trout Lake. As noted above, the lake is used primarily for recreation and for hydroelectric generation. During a wildfire event water resources can be obtained from the lake as well. Within the last few years Excel Energy paid to improve the existing boat ramp to a permanent concrete ramp. This improvement drastically increased the ability for fire engines to draw water from the lake. Although a dry hydrant has not been constructed this area, the installation of a dry hydrant and an underground cistern would provide additional water resources in the event of a wildfire.

Most houses/cabins within the Trout Lake Community have private underground wells. Forty houses/cabins on Trout Lake Land Company land tap into a spring fed water system, and use this system instead of having wells. The system includes two 5,000 gallon above-ground water tanks that supply water to the homes using 6 feet deep waterlines. The maintenance and integrity of this water system are governed by the Trout Lake Water Association's board.

Communications

One of the biggest challenges facing the Trout Lake Community is the lack of adequate modes of communication. Cell phone coverage is intermittent and often non-existent when cell towers have a lot of demand, for example during festivals in the Telluride community. Additional cell tower installations, on Specie Mesa or Grey Head, are being discussed but there are no concrete plans for this yet. Some residents have landline telephones, but not all. Residents are also encouraged to sign up for San Miguel County's CodeRed Emergency Alert system, but it may not be the most reliable way to notify residents. In the event of a wildfire, or any other emergency, emergency notification will likely occur with door-to-door communication. Some members of the Trout Lake Community are aware of these challenges, but the overall community would benefit from becoming fully aware of this situation.

Wildfire Risk Reduction Recommendations

The recommendations listed below have been identified to reduce the wildfire risk of residents within the Trout Lake Community. They are numbered for simplicity, but the numbering is not indicative of prioritization. Many of the recommendations will need to be developed further and the West Region Wildfire Council recognizes that additional conversations and meetings with project partners and leadership from the Trout Lake Cabin Owners Association and the Trout Lake and Lizard Head Land Companies will need to take place. A summary table of all of the recommendations are listed in Appendix 2. The summary table includes the reasons for the recommendation, the action to date, the key action needed for next steps, and funding considerations. More in-depth background information about each recommendation is provided below.

Recommendation #1- Complete Structure-Specific Site Visits for Each Residence in the Trout Lake Community

This recommendation suggests that every cabin/house within the Trout Lake Community have a Site Visit completed to identify wildfire risk to the individual structure. These one-hour Site Visits build off of information collected during the Rapid Risk Assessments which were completed by the Telluride Fire Protection District and WRWC in 2014. The intention of the Rapid Risk Assessment is to assess a site for 11 parameters and to do so quickly for an entire community. Results from Trout Lake's Rapid Risk Assessment are included below in Appendix 1.

As a follow up to the Rapid Risk Assessment, WRWC has found that wildfire risk reduction is best addressed on an individual basis when a more in-depth Site Visit is completed with a homeowner and a wildfire mitigation specialist. The one-on-one interaction with the homeowner (Figure 5), paired with specifics relating to the residents' structure and surrounding landscape, provide the best outcomes for wildfire mitigation. During a site visit wildfire mitigation specialists focus on identifying and addressing wildfire risk to the Home Ignition Zone, Home

Figure 5. Emergency Manager for San Miguel County, Henry Mitchell, visits with residents of Trout Lake during a Site Visit in 2018.

Hardening, and Defensible Space. General recommendations for these components are listed below.

Home Ignition Zone Activities

The Home Ignition Zone is identified as the area immediately adjacent to the home where wildland land fuels and home construction materials meet. Generally, this zone encompasses the first five feet around the home and should include *NO* combustible material. Flammables within the home ignition zone are vulnerable to ignition by a passing flame front, creeping surface fire or embers. If these materials become involved they pose an immediate threat to a structure. It is recommended that flammable material such as firewood, gas containers and propane tanks are not stored within the Home Ignition Zone, and instead are stored a minimum distance of 30 feet away from the home, on the uphill side.

Vegetation within the Home Ignition Zone should be minimal to none. If vegetation is planted within this zone care should be taken to use Firewise Plant Materials. If grass exists within the Home Ignition Zone it should be regularly mowed and irrigated. An ideal Home Ignition Zone is a non-combustible barrier that buffers the home from the wildland fuels. This non-combustible barrier can be designed using rock, gravel, brick, flagstone, concrete, etc. Combustibles, such as wood chips or mulch, should not be used in the Home Ignition Zone.

Home Hardening

The three factors that cause a home to ignite during a wildfire are direct contact to flames, radiant heat and embers. By maintaining a defensible space around a structure, ignition as a result of direct flame contact or radiant heat is greatly reduced. As well as encouraging all Trout Lake residents to maintain a defensible space around their homes, it is also recommended that all landowners take some steps to harden their structure itself. By hardening their structure, a homeowner can mitigate the risk of a home ignition as a result of flying embers or radiant heat.

Figure 6. Home hardening efforts completed by a resident of the Trout Lake Community.

The areas of a house that are vulnerable to ignition are the roof, siding, any decking, and any vents. It is recommended that roofs are constructed out of Class A non-combustible material, and that all flammable debris (leafs, needles, etc.) is cleared from the roof and

gutters. Homes constructed with wood or vinyl siding are at a higher risk to combustion than homes constructed with heavy log timbers or non-combustible siding (i.e. brick, stucco, concrete board). Homes constructed with wood or vinyl siding can be hardened by retrofitting with non-combustible materials. Metal flashing installed at the base of the home (Figure 6) will shield combustible siding from radiant heat generated from a surface fire. It is recommended that decking surfaces are not constructed of wood except for large structural components, that no combustible material is grown or stored under any deck, and that any exposed combustible columns of the deck are enclosed at the base with a non-combustible material. Finally, to prevent embers from entering a home through vents it is recommended that a 1/8" metal screen is used to cover any gable, roof, attic, or soffit vents.

Typically, individual site visits also provide an opportunity to assess defensible space surrounding structures. Given the complicated ownership within the Trout Lake Community, in that residents do not own the property surrounding their structures, this topic is discussed below in Recommendation #2.

As of September 28th, 2018, WRWC completed 14 Site Visits with residents of the Trout Lake Community, and additional Site Visits are planned. These residents requested site visits during the annual Cabin Owners Association meeting in July, 2018. These initial site visits highlighted some key issues residents face with regards to the Home Ignition Zone and home hardening.

Figure 7. Storage of flammable materials adjacent to a house in the Trout Lake Community.

One challenge facing homeowners is the ability to store flammable materials, such as propane tanks and fire wood piles, more than 30 feet away from the home. As noted above, residents only own their house/cabin footprint and the land 50' extending from a site pin. The rest of the surrounding land is owned either by the Trout Lake Land Company or the Lizard Head Land Company. Depending on the layout of the property, it is not feasible for homeowners to store these flammable materials on their property and have them more than 30 feet away from the structure or on the uphill side of the structure. It is recommended that the respective Land Companies consider allowing permission for homeowners to store flammable materials on Land Company land to achieve these specifications. In addition, previous rules of the HOA's required that homeowners paint propane tanks and install fencing around them to hide from view. These practices are not recommended because they can increase the vulnerability of a propane tank to explode during a wildfire event and

residents should be allowed and encouraged to remove combustible fencing material from around propane tanks. New HOA regulations require that any new propane tanks that are installed are buried, which is the best possible wildfire mitigation practice.

Recommendation #2- Design and Implement Defensible Space Assessment and Implementation Around Individual Houses/Cabins

Defensible Space

It is encouraged that all landowners maintain a defensible space around their home. Defensible space is the area around a home or other structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire. Defensible space provides room for firefighters to safely and effectively suppress wildland fire. Creating defensible space also reduces the chance of a structure fire spreading to neighboring homes or the surrounding forest. Defensible space typically consists of three 'zones' extending out from a structure. Zone 1 of the defensible space extends 30 feet from the structure, Zone 2 extends past Zone 1 up to 100 feet from the structure, and Zone 3 can extend from 100 feet from the structure all the way to the property boundary.

Zone 1 is the area that requires maximum hazard reduction. Only a small amount of vegetation should be present in this zone. Ideally, all trees should be removed within this zone, the more trees removed within this zone, the less vulnerable the structure will be. If a tree is left within Zone 1 consider it a part of the structure and adjust the distance of Zone 1 accordingly. Dead vegetation should be removed and living plants should be pruned and maintained to prevent excessive growth. All grasses should be irrigated and mowed to a height of 6 inches or less. As well as maintaining vegetation in Zone 1, it is also very important to remove other combustibles that could play a role in a home's ignitability. Do not store firewood in this zone, rake pine needles and organic debris away from the structure, clear debris from gutters, and remove any slash or woody debris.

Zone 2 is an area of fuels reduction designed to diminish the intensity of a fire approaching a home. Treatments in this zone are designed to break up continuous fuels surrounding a structure. Remove stressed, diseased, dead or dying trees and shrubs in this zone. Remove enough trees and shrubs to create a 10 to 20 foot minimum spacing between crowns. Prune remaining trees and remove any ladder fuels from under remaining trees, this prevents a ground fire from climbing into the crown and 'torching' the tree.

Zone 3 provides a gradual transition from Zone 2. In this zone very dense pockets of vegetation can be thinned, but the crown spacing can be more flexible than Zone 2. As in Zone 2 consider mitigating the hazards associated with ladder fuels. A forest with a higher canopy reduces the chance of a surface fire climbing into the tops of the trees. Treatments in Zone 3 also provide an opportunity to improve the health and resiliency of the stand. Stands in this zone can be actively managed to protect water quality, improve wildlife habitat, boost the health and growth rates of trees within the stand, address any forest insects or diseases, and increase a trees survivability during a wildfire.

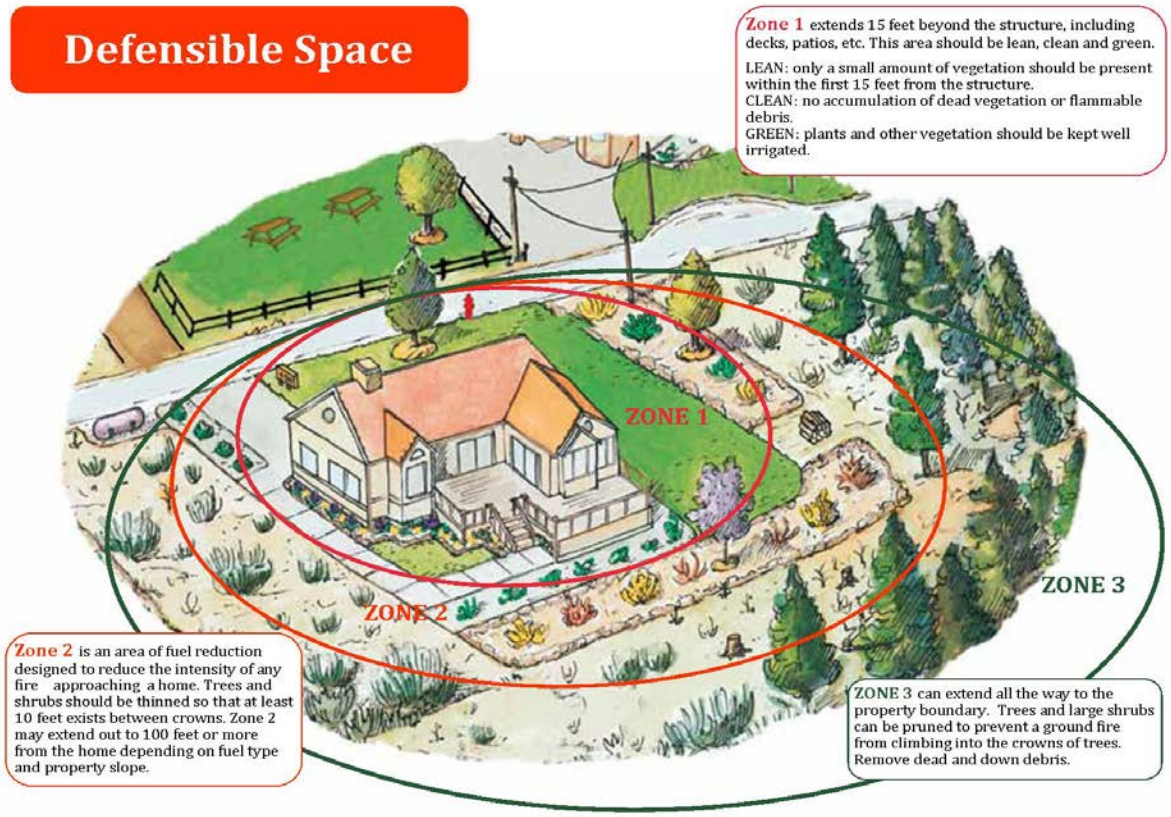


Figure 8. Diagram showing Defensible Space Zones around a home.

No house/cabin within the Trout Lake Community has formally worked to create defensible space designed to meet Colorado State Forest Service Standards. These defensible space standards are intended to give a home a fighting chance against an approaching wildfire. By creating and maintaining a defensible space around a structure the structure's chance of ignition is greatly reduced, the ability of fire suppression resources is greatly increased, and the wildfire risk of a property is dramatically reduced.

Many homeowners within the Trout Lake Community have taken moderate steps to remove fuels from surrounding their houses/cabins, mostly through pruning and mowing. Currently the Lizard Head Land Company allow residents to trim and cut vegetation within 50 feet of their house/cabin, and the Trout Lake Land Company generally allows residents to trim and cut vegetation within 30 feet of cabins with prior approval of the Design and Review Board. It is recommended that the Land Companies allow residents the ability to cut and prune any tree within 30 feet of the structure.

A heavy fuel load of grass is present at lower elevations within the Trout Lake Community. Grass which is unmanaged can exceed three feet in height by the end of the growing season and can quickly dry. Under these conditions grasses can become a very receptive fuel bed.

Fire in this fuel type can spread very quickly. It is recommended that grass is mowed immediately adjacent to structures and extend to 30 feet. By mowing this fuel immediately adjacent to structures potential flame length and radiant heat generated from these grasses will be greatly reduced in the event of a wildfire. It is recommended that the Design and Review boards of the Land Companies allow residents the ability to mow grasses within 30 feet of the structure.

Recommendation #3- Design and Implement Hazardous Fuels Reduction on Trout Lake Land Company Land and United States Forest Service Land

Hazardous fuels reduction beyond Zone 2 of defensible space projects can strategically link treatment areas together and can greatly affect wildfire behavior within the community. With higher connectivity between hazardous fuels reduction areas, wildfire behavior can be affected at a larger landscape level including decreasing flame lengths. Fuels reduction can help return forest stocking levels to historic conditions so wildfire events in the area are not a stand replacing event in the spruce/fir forest type, which will help reduce potential post-fire sedimentation into Trout Lake. In addition, suppression crews may have safer and more effective operational abilities.

Hazardous fuels reduction projects can include: linked defensible space, roadside thinning, protection of critical infrastructure (such as power lines), and fuel breaks.

Linked defensible space work can incorporate multiple house/cabin owners, as well as Trout Lake and/or Lizard Head Land Company land. Once individual residents express an interested in creating defensible space work around their house/cabin (through Site Visits, Recommendation #1), WRWC can work with the Land Companies to expand these defensible space areas, as applicable.

Fuels reduction is also recommended for areas along many roads in the Trout Lake Community. Several roads within the Trout Lake Community were constructed in dense fuels and traverse steep slopes. In the event of a wildfire, extreme fire behavior may be experienced along the roads, preventing fire fighter access and emergency evacuation efforts. Mitigating hazardous roadside fuels, by breaking up the connectivity of tree crowns within 100' of the center line of roads within the community, will improve emergency ingress. Additionally, any mitigation along roadways will act as a fuelbreak within the community affecting the rate of spread of a potential wildfire. Recommendation #5 (below) would help identify areas where fuels reductions are needed. These identified areas will be targeted for roadside thinning. The WRWC will work with the respective Land Companies to implement these projects.

Power lines crisscross the Trout Lake Community, especially on the west side of the lake. San Miguel Power completes regular maintenance on these lines within a 10 foot right-of-way, and typically focus their maintenance on hazard trees. In places, fuels exist within close proximity to overhead power lines. Mitigation is recommended to buffer these power

lines from wildland fuels. Completing this action would have the benefit of preventing a potential wildfire ignition due to a failure in the power line. Additionally, mitigation along the power lines would improve fire suppression operations in the event of a wildfire.

In addition to working on private Land Company land, it is recommended that the Trout Lake Community work collaboratively with the Uncompahgre National Forest to create a fuelbreak on the southwest side of the community, possibly spanning both Trout Lake Land Company land and National Forest. The West Region Wildfire Council will work with foresters from the Colorado State Forest Service and United States Forest Service to identify the best location for a fuelbreak and how best to design and implement the project. This fuelbreak will be designed to reduce the severity, intensity, and duration of a wildfire burning towards the Trout Lake Community from USFS land.

Recommendation #4- Continue to Promote Slash Management for Residents Via the Community Chipping or Burn Pile

For several years, residents in the Trout Lake Community have contributed slash (pruned branches from around their house/cabin) to a communal chipping pile. In the past, the Trout Lake Cabin Owner's Association have paid residents of the community or hired third party chipping services to chip the pile and residents were allowed to take chips from the pile to much around their houses/cabins. In 2018, grant funding obtained by WRWC paid for hiring a contractor to chip the pile. In an effort to discourage residents from using chips around their houses/cabins as mulch, which is a wildfire risk, WRWC encouraged the TLCOA to fund hauling the chipped material off site using a waste dumpster.

Figure 9. The Trout Lake Community Chipping Pile in 2018 before it was chipped.

The West Region Wildfire Council will continue to work with the Trout Lake Community to provide this chipping service for free through the Community Chipping Program, though some specifications must be met for the community to continue to receive financial support from the WRWC. These specifications are outlined in Appendix 2.

Recommendation #5- Complete a Road Access and Improvement Field Assessment and Map

There are significant ingress/egress challenges for emergency response and evacuation within the Trout Lake Community. A formal assessment would help identify areas of poor road conditions, steepness/inaccessibility, roadside pinch-points, heavy fuel loads, lack of signage, turn-around, and unimproved evacuation routes. A map showing all of the above road access concerns and improvements would be useful for TLCOA and partners, and could be included as an appendix to this document.

Some of this assessment information (steepness/inaccessibility, poor road conditions, turn-around locations) will be useful for the Telluride Fire Protection District and the San Miguel County Emergency Management Department with regards to emergency response to the Trout Lake Community. Other assessment information (pinch-points, heavy fuel loads) will be useful to WRWC when planning hazardous fuels reduction (see Recommendation #3).

Many roads within the Trout Lake Community are inaccessible to firefighting apparatus. Driveways are inaccessible if driveway clearance is less than 20 feet, heavy fuel loads present a risk to firefighter safety, or if inadequate turn-arounds exist at the end of the driveway. If possible, driveways should be improved with heavy equipment and adequate turn-arounds should be created. It is recommended that vegetation along the driveway be mitigated to reduce the fuel load that may pose a risk to firefighter safety. By improving driveways the structure can be directly accessed by firefighting apparatus and fire suppression operations will be more effective.

Addressing within the Trout Lake Community is inconsistent. Some houses/cabins refer to lot numbers that are identified on their stock certificate as their address, instead of physical addresses even though the San Miguel County GIS department reassigned houses/cabins with physical address numbers. In order to best serve first responders in the event of an emergency, it is recommended that all homeowners install proper physical address numbering that is easily seen from the road. Signs should be constructed out of reflective, non-combustible material with lettering that is at least 3 inches A county-wide effort was made to supply all residents with physical address signs that meet the specification above. Some houses/cabins within the Trout Lake Community are displaying these signs, but others are not. The assessment will identify houses/cabins that are not displaying these signs and the WRWC can assist landowners with obtaining these signs if they do not have them.

Recommendation #6- Develop a Community Level Wildfire Preparedness and Emergency Response Plan

The Trout Lake Community faces several challenges with preparing for and responding to emergency events including modes of communication, lack of knowledge of evacuation routes and locations, and preparing personal emergency kits. A concise plan (1-3 pages) could be developed to effectively identify and communicate these challenges to residents of Trout Lake. San Miguel County has published "Resident Evacuation Guide" that could be updated and modified to be specific to the Trout Lake Community.

The San Miguel Emergency Management Department would be an ideal partner to develop a Wildfire Perpardness and Emergency Response plan specifically for Trout Lake. Leadership within the community, from the Trout Lake Cabin Owners Association and Lizard Head and Trout Lake Land Companies, could help disseminate this information to residents. The information could also be incorporated as part of a Community Wildfire Information Forum, outlined below in Recommendation #7.

Recommendation #7- Hold a Community Wildfire Information Forum

A Community Wildfire Information Forum would engage residents and provide information about the recommendations included in this document as well as provide general wildfire education to the Trout Lake Community. Given high attendance rate at the annual Trout Lake Cabin Owners Association annual meeting in July, this may be a perfect opportunist to include a wildfire information forum. In addition to reporting the findings of this document, the information forum could include information about the following: home hardening and defensible space using a house/cabin within the community as an example, misconceptions about wildfires and wildfire behavior, highlighting previously completed defensible space projects in similar communities, and emergency preparedness.

Conclusions

The Trout Lake Community Assessment is an educational document intended to help homeowners understand their wildfire risk and provide them with recommendations that can be completed to help mitigate this risk. The West Region Wildfire Council and partners are hopeful that by providing this document, homeowners will take a proactive role in actively mitigating the wildfire risk of their homes and properties and preparing for wildfire.

Additional Information

West Region Wildfire Council

The West Region Wildfire Council (WRWC) promotes community wildfire adaptation throughout Delta, Gunnison, Hinsdale, Montrose, Ouray and San Miguel Counties. As a collaborative regional focal point for wildfire related information, the West Region Wildfire Council:

EDUCATES homeowners about wildfire risk and promotes activities that help communities and homeowners increase fire adaptedness.

PROMOTES wildfire risk reduction through community preparedness and planning.

PROVIDES funding to assist landowners with hazardous fuels reduction project and defensible space.

SUPPORTS cooperator efforts to collaboratively achieve common wildfire related objectives.

WRWC members include private citizens, local, county, state, and federal agencies with an interest in, and a commitment to addressing wildfire risk across the region. The WRWC provides communities with education about wildfire risk, assists with the development of wildfire planning initiatives and encourages homeowner risk reduction actions through implementing strategic fuels reduction projects and the creation of defensible space.

The West Region Wildfire Council offers a reimbursement based Cost-Share Program to private landowners who are interested in implementing defensible space or completing fuels reduction projects. For more information, please visit: www.COwildfire.org or contact the West Region Wildfire Council at (970)615-7300

FireWise Communities/ USA

FireWise Communities/ USA recognition program is a great way for communities to be actively engaged in promoting wildfire risk reduction and education. The completion of this Community Wildfire Assessment qualifies the Trout Lake Community to become a nationally recognized Firewise Community. With the drafting of this assessment the next steps necessary for the Trout Lake Community to gain Firewise Recognition are sponsor a Firewise Board, invest $25.96 per-capita annually towards wildfire mitigation within the community, observing an annual Firewise Community Day, and submitting an application to FireWise Communities. A Trout Lake Firewise Board would be responsible for utilizing the information from this document to complete and enhance mitigation efforts within the community, expenses towards wildfire mitigation and in-kind volunteer time count towards the community's per-capita investment. For more information or to submit a Firewise application, please visit: www.Firewise.org.

Appendix 1- Trout Lake Rapid Risk Assessment

The parcel specific wildfire risk analysis is based on research by Jack Cohen at the Fire Science Lab in Missoula, Montana and research from the Institute for Business and Home Safety (IBHS) on a home's survivability during a wildfire event.

The wildfire risk analysis used in the Trout Lake Parcel Level Wildfire Risk Assessment takes advantage of the science used to understand the factors contributing to home ignition during wildfires and adds additional, locally-specific components that influence home survivability. The wildfire risk analysis provides a baseline understanding of wildfire risk of the Trout Lake community.

The purpose of the parcel specific wildfire risk assessment is to give each individual homeowner an educational tool to help them be better prepared in the event of a wildfire. The results of the parcel specific assessment provide a visual depiction of the risk ratings and give each homeowner a list of specific recommendations to implement in order to reduce their wildfire risk. All primary homes were assessed for wildfire risk in 2014. Only primary residential structures were given consideration; outbuildings were not included in the wildfire risk assessment.

Wildfire Risk Assessment Elements

All homes in the Trout Lake Community were reviewed using the following criteria:

- **Addressing:** Having correct, visible and reflective addressing is a crucial component to any type of emergency response effort. Smokey environments during a wildfire event reduce visibility. Reflective, contrasting addressing is much easier to see in such conditions.

- **Ingress/ Egress:** Knowing primary and secondary ingress/ egress routes is crucial for successful evacuation. Having more than one way in and out of your neighborhood reduces the risk of becoming trapped by a fast moving wildfire. Furthermore, fire department knowledge of residential areas where there is only one point of access is a helpful tool in pre-planning for evacuation, suppression operations and firefighter safety.

- **Driveway Width:** It is important for firefighters to know that they can safely get apparatus in and out of a home's driveway. Driveway width analysis is a combination of approximate shoulder to shoulder measurement as well as the distance between overhanging vegetation or obstructions and the driveway.

- **Dangerous Topography:** These are areas where wildfires can move quickly and increase in intensity. Steep chimneys and cliff edges are two examples of dangerous topography. A home's location relative to dangerous topography can largely affect its survivability during a wildfire event. Dangerous topography can have severe impacts on fire behavior over a given landscape.

- **Slope:** The slope category characterizes the *average overall* slope across the parcel where a home is situated. Homes situated on the steepest **slopes** (Greater than 45%) are exposed to higher wildfire risk.

- **Background Fuel:** The fuel type and density directly surrounding a home can affect the fire behavior in the particular area. This category focuses on the fuel on the land surrounding the property, whereas *Defensible Space* focus on the fuel on the property. Given varying weather conditions, grassy open meadows tend to be conducive to fast moving, yet low intensity fire behavior, whereas fire in a heavily forested environments can be much more intense.

- **Defensible Space:** Defensible space is "an area around a structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire towards the structure." Having defensible space is one of the "primary determinants of the home's ability to survive a wildfire" (CSFS Creating Wildfire-Defensible Zones: Fire-12). Whether or not a home has adequate defensible space is a factor that wildland firefighters take into consideration when deciding where to stage resources. It is also important to remember that during a large wildfire event, resources are often limited. Having defensible space can increase the survivability of a home without firefighter intervention.

- **Roofing Material:** A home's roofing material has been proven to be a primary factor in a home's survivability during wildfire event. Class A, non-combustible roof construction increases a home's survivability, whereas wood shake shingle roofing material increases a home's wildfire risk drastically.

- **Siding Material:** Whether a home's siding is made out of combustible material or a non-combustible material also effects survivability. Vinyl/ wood siding is more likely to fail or ignite than a heavy log, stucco or composite siding material.

- **Other Combustibles:** Firewood piles, patio or deck furniture, propane tanks and other combustibles near a structure can be factors that compromise a home's resistance to wildfire. These materials are often found stacked under elevated decks which can cause the deck to ignite and compromise the structure.

- **Decks and Fences:** Decking and fencing material have proven to add potential vulnerability to a home's resistance to wildfire. Combustible fencing attached to a structure can become the conduit for a home to ignite. Well maintained wood deck can be less combustible than an unmaintained dry deck.

*NOTE: It is important to consider vulnerability points of the structure. When the wildfire risk assessment was completed, homes were assessed for their 'weakest' point. If a home's siding had both non-combustible material as well as wood siding, the home was considered to have 'wood siding' since the wood siding is a component that increases the home's risk to damage or loss from a wildfire.

Scoring

Each criterion in the wildfire risk assessment has an attached 'score' that corresponds directly with the elements' potential to compromise a structure during a wildfire event. In other words, elements that make a structure significantly more vulnerable to wildfire are given more weight when considering the wildfire risk. Roofing material and defensible space are the two most significant survey criteria and therefore carry the heaviest weight. The following pages show the wildfire risk analysis scoring sheet that was completed for each structure within the community.

Wildfire Risk Assessment Rating Key

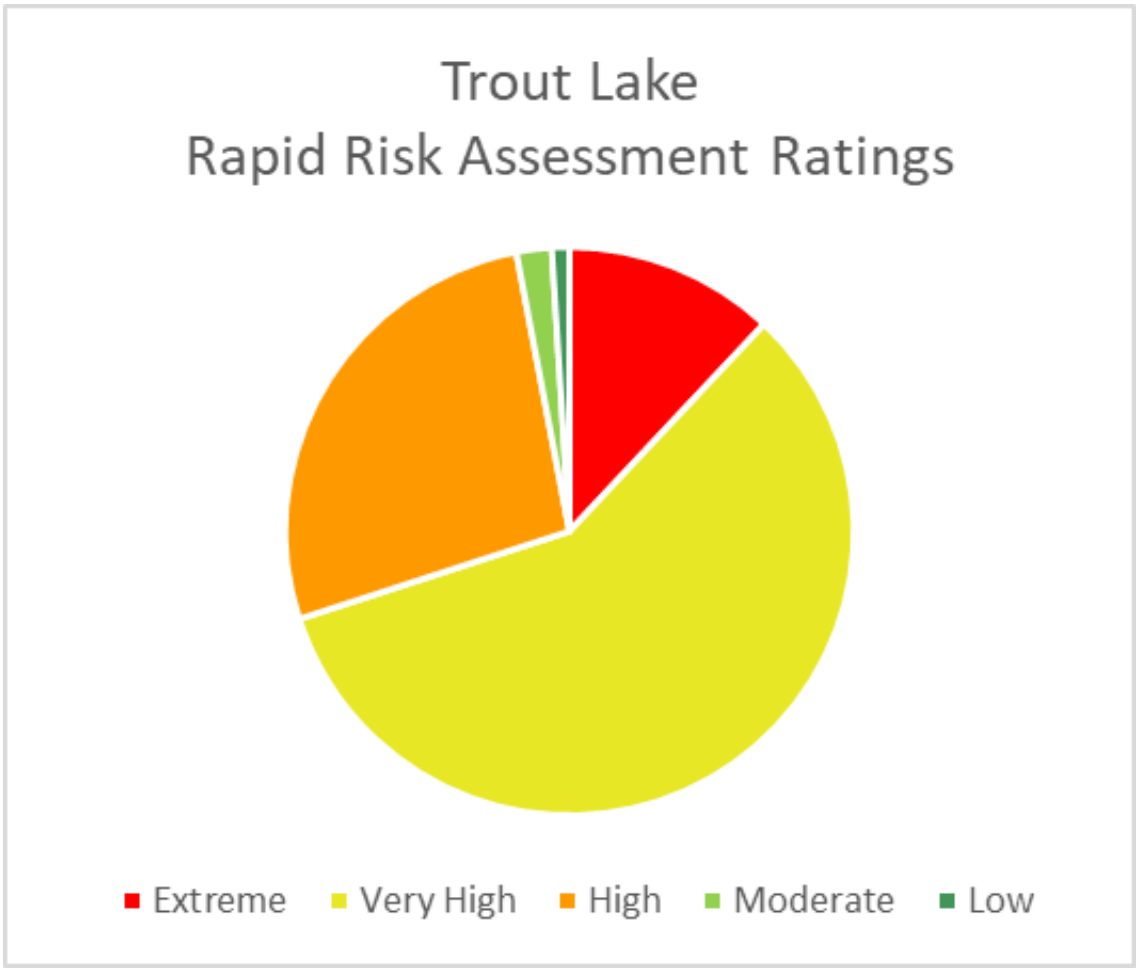
CATGEORY	OBSERVED CONDITION	POINTS
Address Visible	Posted and Reflective	0
	Posted, NOT Reflective	5
	Not visible from the road	15
Ingress / Egress	Two or more roads In/Out	0
	One road In/Out	10
Driveway Clearance	Greater than 24'	0
	Between 20'-24'	5
	Less than 20'	10
Distance to Dangerous Topography	Greater than 150'	0
	Between 50'-150'	30
	Less than 50'	75
Slope	Less than 20%	0
	Between 20%-45%	20
	Greater than 45%	40
Background Fuels	Light	25
	Moderate	50
	Heavy	75

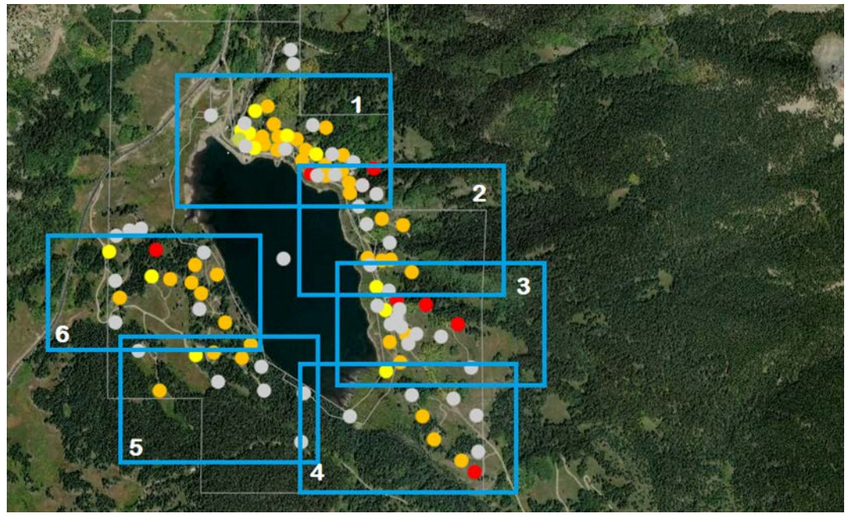
CATGEORY	OBSERVED CONDITION	POINTS
Defensible Space	Greater than 100'	0
	Between 30'-100'	50
	Between 10'-30'	75
	Less than 10'	100
Roofing Material	Class A: Non-Combustible (Tile, Metal, Asphalt)	0
	Class B or C: Combustible (Wood)	200
Building Exterior	Non-combustible	0
	Log, heavy timbers	20
	Wood, vinyl	60
Other Combustibles	None, Greater than 30' from structure	0
	Between 10'-30' from structure	10
	Less than 10' from structure	30
Decks & Fencing	None	0
	Non-combustible Deck/Fence attached to structur	20
	Combustible Deck/Fence attached to structure	50

Overall Total Rating	Min	Max
Low	25	150
Moderate	151	175
High	176	270
Very High	271	365
Extreme	366	665

Wildfire Risk Analysis Results

100 primary structures were assessed in the Trout Lake community. The results of the wildfire risk analysis found that **1** home was given a **low** wildfire risk rating, **2** homes were assessed to have a **moderate** risk rating, **27** homes were assessed to have a **high** risk rating, **58** homes had a **very high** risk rating and **12** homes were assessed to have an **extreme** risk to wildfire.





Overall Total Rating

Low
Moderate
High
Very High
Extreme

Figure 10. Parcel Level Wildfire Risk Ratings Maps

Relative Risk

The wildfire risk analysis results are a demonstration of relative risk; meaning that the risk ratings are based on the level of risk within the Trout Lake Community and not an absolute risk rating. These risk ratings do not reflect or inform insurance rates or policies. Each insurance provider utilizes their own underwriting guidelines. An 'EXTREME' rating versus a 'LOW' rating is not an absolute indicator of whether a home will burn or survive in a wildfire event. Factors such as response, weather, etc. will influence a specific homes outcome during a wildfire. The risk ratings and subsequent risk reduction recommendations are intended to provide educational information to the Trout Lake Community in order to help better prepare for a wildfire event.

To see your parcel specific wildfire risk analysis results please refer to your parcel specific URL by going to www.cowildfire.org/myhome and entering your ID. The ID for your property can be obtained from the West Region Wildfire Council by calling (970) 615-7300. Additional parcel specific wildfire risk information is attached to the appendix of this document. Wildfire risk analysis results are listed in alphabetical order by street name.

Table 1. Rapid Risk Assessment Data for Residences within the Trout Lake Community, 2014.

House Number	Street Name	Street Type	Address Visible	Ingress / Egress	Driveway Clearance	Distance to Dangerous Topography	Slope	Background Fuels	Defensible Space	Roof	Building Exterior	Other Combustibles	Decks & Fencing	Wildfire Risk
23	CONIFER	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
52	CONIFER	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
53	CONIFER	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
45	CREEK VIEW	DR	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
50	CREEK VIEW	DR	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
51	CREEK VIEW	DR	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
161	FISHERHAWK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
162	FISHERHAWK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
112	GOLDEN HORN	RD	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
114	GOLDEN HORN	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
152	GOLDEN HORN	RD	Not Visible from the Road	One Road In/Out	Greater than 24'	Greater than 150'	Less than 20%	Moderate	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
22	GOLDEN HORN	RD	Posted and Reflective	Two or More Roads In/Out	Greater than 24'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Non-Combustible	Between 10' - 30' from structure	Non-Combustible Deck/Fence attached to Structure	Moderate
28	GOLDEN HORN	RD	Not Visible from the Road	One Road In/Out	Greater than 24'	Greater than 150'	Less than 20%	Moderate	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
40	GOLDEN HORN	RD	Posted, NOT Reflective	Two or More Roads In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
48	GOLDEN HORN	RD	Posted, NOT Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
49	GOLDEN HORN	RD	Posted, NOT Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
50	GOLDEN HORN	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	High
52	GOLDEN HORN	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Less than 10'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
80	GOLDEN HORN	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
81	GOLDEN HORN	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Less than 10'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
140	GRAY JAY	PL	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
165	GRAY JAY	PL	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Log, Heavy Timbers	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
166	GRAY JAY	PL	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High

House Number	Street Name	Street Type	Address Visible	Ingress / Egress	Driveway Clearance	Distance to Dangerous Topography	Slope	Background Fuels	Defensible Space	Roof	Building Exterior	Other Combustibles	Decks & Fencing	Wildfire Risk
2	GRAY JAY	PL	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
4	GRAY JAY	PL	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
47	GRAY JAY	PL	Posted and Reflective	One Road In/Out	Less than 20'	Less than 50'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	Less than 10' from structure	Non-Combustible Deck/Fence attached to Structure	Extreme
51	LAKE SHORE	PL	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
76	LAKE SHORE	PL	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
98	LAKE SHORE	PL	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Greater than 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Non-Combustible Deck/Fence attached to Structure	High
135	MARMOT	WAY	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
144	MARMOT	WAY	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Non-Combustible	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
48	MARMOT	WAY	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
207	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class B or Class C	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
28	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
29	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
302	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class B or Class C	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Extreme
385	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Non-Combustible	None, Greater than 30' from structure	Non-Combustible Deck/Fence attached to Structure	Moderate
45	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
62	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
96	OLD WATER TANK	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Extreme
119	OROURKE	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
120	OROURKE	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
49	OROURKE	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High

House Number	Street Name	Street Type	Address Visible	Ingress / Egress	Driveway Clearance	Distance to Dangerous Topography	Slope	Background Fuels	Defensible Space	Roof	Building Exterior	Other Combustibles	Decks & Fencing	Wildfire Risk
136	OSPREY	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
137	OSPREY	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
17	OSPREY	LN	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Non-Combustible Deck/Fence attached to Structure	High
43	OSPREY	LN	Posted, NOT Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Less than 10'	Class A	Wood, Vinyl	None, Greater than 30' from structure	None	High
84	OSPREY	LN	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
25	PRIEST LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
309	priest lake		Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	High
311	priest lake		Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
11	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Non-Combustible Deck/Fence attached to Structure	Very High
124	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	Very High
159	SHEEP MOUNTAIN	DR	Not Visible from the Road	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
175	SHEEP MOUNTAIN	DR	Posted, NOT Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Moderate	Less than 10'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
176	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Log, Heavy Timbers	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
195	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
230	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Less than 50'	Greater than 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
231	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Less than 50'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
40	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
65	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class B or Class C	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Extreme

House Number	Street Name	Street Type	Address Visible	Ingress / Egress	Driveway Clearance	Distance to Dangerous Topography	Slope	Background Fuels	Defensible Space	Roof	Building Exterior	Other Combustibles	Decks & Fencing	Wildfire Risk
67	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Log, Heavy Timbers	Less than 10' from structure	Non-Combustible Deck/Fence attached to Structure	Very High
69	SHEEP MOUNTAIN	DR	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
1016	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
1018	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Less than 50'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
1022	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Wood, Vinyl	Less than 10' from structure	Combustible Deck/Fence attached to Structure	High
1062	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Less than 50'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
117	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Less than 20%	Heavy	Greater than 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
1208	TROUT LAKE	RD	Posted, NOT Reflective	One Road In/Out	Between 20' -24'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class B or Class C	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
1320	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Between 50' - 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
1413	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
1415	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Less than 20%	Heavy	Greater than 150'	Class B or Class C	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
1417	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
1700	TROUT LAKE	RD	Not Visible from the Road	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
240	TROUT LAKE	RD	Posted and Reflective	Two or More Roads In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
308	TROUT LAKE	RD	Posted and Reflective	Two or More Roads In/Out	Greater than 24'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
340	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Less than 10' from structure	Non-Combustible Deck/Fence attached to Structure	Very High
342	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
421	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Between 50' - 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
444	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Between 50' - 150'	Less than 20%	Heavy	Less than 10'	Class A	Log, Heavy Timbers	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
521	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
523	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
550	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
552	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Less than 10'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High

House Number	Street Name	Street Type	Address Visible	Ingress / Egress	Driveway Clearance	Distance to Dangerous Topography	Slope	Background Fuels	Defensible Space	Roof	Building Exterior	Other Combustibles	Decks & Fencing	Wildfire Risk
602	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Greater than 24'	Less than 50'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
795	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Greater than 24'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
801	TROUT LAKE	RD	Posted, NOT Reflective	One Road In/Out	Greater than 24'	Greater than 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Non-Combustible	None, Greater than 30' from structure	Non-Combustible Deck/Fence attached to Structure	Low
814	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	High
819	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Less than 10'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
871	TROUT LAKE	RD	Posted, NOT Reflective	One Road In/Out	Greater than 24'	Greater than 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	High
904	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Between 20% - 45%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
941	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
967	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
969	TROUT LAKE	RD	Posted, NOT Reflective	One Road In/Out	Between 20' -24'	Greater than 150'	Between 20% - 45%	Heavy	Greater than 150'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
984	TROUT LAKE	RD	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 30' - 150'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	High
110	WHISTLE PIG	WAY	Posted and Reflective	One Road In/Out	Less than 20'	Between 50' - 150'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Very High
111	WHISTLE PIG	WAY	Posted, NOT Reflective	One Road In/Out	Less than 20'	Less than 50'	Between 20% - 45%	Heavy	Less than 10'	Class A	Wood, Vinyl	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	Extreme
70	WHISTLE PIG	WAY	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	None, Greater than 30' from structure	Combustible Deck/Fence attached to Structure	High
15	WILD HARE	PL	Posted and Reflective	One Road In/Out	Less than 20'	Greater than 150'	Less than 20%	Heavy	Between 10' - 30'	Class A	Wood, Vinyl	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High
16	WILD HARE	PL	Posted and Reflective	One Road In/Out	Less than 20'	Less than 50'	Between 20% - 45%	Heavy	Between 10' - 30'	Class A	Log, Heavy Timbers	Between 10' - 30' from structure	Combustible Deck/Fence attached to Structure	Very High

Appendix 2- Table of Wildfire Risk Reduction Recommendations

#	RECOMMENDATION	REASON FOR RECOMMENDATION	ACTION TO DATE	KEY ACTION NEEDED FOR NEXT STEPS	FUNDING CONSIDERATIONS
1	**Complete Structure-Specific Site Visits for Each Residence in the Trout Lake Community**	• One hour Site Visits builds off of data collected during Rapid Risk Assessments. • Face to face interaction between homeowner and mitigation specialist ensures best education and understanding or wildfire risk. • Site Visits will provide assessment of Home Ignition Zone and make mitigation recommendations for home hardening and creating defensible space. • Home hardening mitigation recommendations identify site-specific ways to reduce risk of home ignition from embers • Site Visits will identify willing homeowners who are interested in creating defensible space around their homes, even if the land is owned by a Land Company. • Site visits will generate a formal assessment (report) for each resident through a mobile application (MyWildfireRisk) that details home hardening and defensible space mitigation measures specific to their home/cabin. • Online platform of MyWildfireRisk will allow residents to report risk reduction measures over time.	• Rapid Risk Assessment data was collected in 2014- assessed some home hardening and defensible space components • 14 Site Visits with WRWC have been completed- no formal report given to homeowners at this time • Site Visits quickly identified need and interest level of homeowner to complete defensible space work around home	• TLCOA and Land Companies Decide on Options below: Option 1- WRWC performs Site Visits on an individual, case by case for those residents who independently sign up for a Site Visit. Option 2- TLCOA facilitates the process for WRWC to complete Site Visits on every cabin, with an opt out option for residents who are not interested. • Lizard Head and Trout Lake Land Companies should consider modifying permissions for cabin owners to store flammable materials (propane tanks and firewood) on Land Company land	• WRWC is currently in the process of rolling out a new mobile and online application (MyWildfireRisk) that will aid mitigation specialists during 1 hr Site Visits. The mobile application will generate a site-specific report and residents will be able to enroll into the MyWildfireRisk online platform. • WRWC is currently working on developing a fee structure for these services. Information about these new services and fees will be made available in the Spring of 2019.
2	**Design and Implement Defensible Space Around Individual Houses/Cabins**	• Creating Defensible Space around homes is effective at increasing a homes' survivability during a wildfire event. • Defensible Space designs incorporate site-specific ways to manage vegetation in Zone 1 (home ignition zone), Zone 2, and Zone 3. • Defensible Space Design for each area include the steps of scoping the extent of the defensible space around each structure, designating boundaries of the defensible on the ground, marking trees within the defensible space, mapping, and developing a Scope of Work. • In-depth defensible space designs will ensure high comfort level for the house/cabin owner, the respective Land Company, and the contractor who is hired to do the work.	• The amount of adequate defensible space was identified during 2014 Rapid Risk Assessments but defensible space components were not assessed to point of implementation • Initial Site Visits in 2018 quickly identified need and interest level of homeowners who signed up for a Site Visit to complete defensible space work around house/cabin. Of the • Of the 14 Site Visits WRWC completed in 2018, 8 cabins/house needed defensible *and* residents were interested in defensible space work. • No defensible space designs were developed in 2018	• For residents who choose to have a Site Visit completed, WRWC can determine how many are in need of and interested in creating defensible space around their cabins. • Of those residents who are interested in defensible space, WRWC can take next steps to design and implement defensible space. • Design and Review Boards of Lizard Head and Trout Lake Land Companies should consider allowing residents ability to manage grass/weeds/shrubs within 30 feet (Zone 1) of their house/cabin without board approval. • Design and Review Boards of Lizard Head and Trout Lake Land Companies should consider allowing residents the ability to prune or remove trees within 30 feet (Zone 1) of their house/cabin without board approval.	• The cost for WRWC to design a Defensible Space project (including field work, mapping, and developing a SOW) is $350.00/ per cabin/house. • The cost of implementing the project (hiring a contractor to complete the work) will be determined by the scope of the individual project. • TLCOA will need to determine who will pay for the cost of the design and implementation phases (residents vs. Land Companies). • WRWC will work with TLCOA to identify and secure cost-share funding for the implementation of defensible space projects once they have been identified.

#	RECOMMENDATION	REASON FOR RECOMMENDATION	ACTION TO DATE	KEY ACTION NEEDED FOR NEXT STEPS	FUNDING CONSIDERATIONS
3	**Design and Implement Hazardous Fuels Reduction on Trout Lake Land Company Common Land and United States Forest Service Land**	• Hazardous fuels reduction beyond Zone 2 of defensible space projects can strategically link treatment areas together over a larger area. • Hazardous fuels reduction includes linked defensible space, fuel breaks, roadside thinning, and protection of critical infrastructure (such as power lines). • Fuels reduction can help return forest stocking levels to historic conditions so wildfire events in the area are not a stand replacing event in the spruce/fir forest type. • Fuels reduction provides ability to reduce fuel loads and can modify fire behavior over larger area. Fuels reduction could reduce potential flame lengths and post-fire erosion and sedimentation into Trout Lake. • Fuels exist within close proximity to overhead power lines within the Trout Lake Community. Buffering power lines from wildland fuels could help prevent a potential wildfire ignition due to a failure in the power line. Additionally, mitigation along power lines would improve fire suppression operations in the event of a wildfire.	• No hazardous fuels reduction projects on Trout Lake Land Company land or USFS land have been designed or implemented. • San Miguel Power completes regular maintenance of the 10' power line ROW but no other implementation work has been completed.	• WRWC and partners will identify strategically placed, cross boundary (Trout Lake Land Company and US Forest Service Land) hazardous fuels reduction project including linked defensible space, fuel breaks, roadside thinning, and protection of critical infrastructure such as power lines. • Projects will be designed in a similar way to defensible space projects. WRWC may need to secure additional spatial data (power lines) to aid in mapping. • WRWC will coordinate with CSFS and USFS to ground-truth projects for operability.	• WRWC will work with TLCOA to identify and secure funding for the implementation of hazardous fuels reduction projects once they have been identified. • US Forest Service may need to make tree removal part of a commercial timber sale to offset cost of non-commercial work. Hire one contactor to increase efficiency.
4	**Continue to Promote Slash Management for Residents via the Community Chipping or Burn Pile**	• Slash management around individual houses/cabins helps reduce fuel loads within Zone 1 (30 feet from the house). • Contributing slash to a communal pile serves as a way for residents to engage with their community.	• The Trout Lake Community has chipped a communal chipping for several years. • In 2018, WRWC funded the chipping of the communal pile in Trout Lake and TLCOA funded the cost of a dumpster that the chipping debris was piled into so it was hauled off site.	• Option 1- Trout Lake Community can annually chip the communal pile, with no pile restrictions, at their own cost • Option 2- Trout Lake can participate in the WRWC Community Chipping Program, however a few specifications *must* be met. 1. The slash must be stacked in such a way that butt ends are all facing the same direction, and the dimensions of the pile do not exceed 5 feet high, 10 feet deep, 50 feet long. 2. Participants MUST register that they have contributed to the pile through WRWC. 3. Chipping debris should be collected in a dumpster, at the expense of the TLCOA. 4. TLCOA help develop educational signs/materials that inform residents of the pile dimensions and registration requirements. 5. This agreement will extend into 2019, and will be reassessed annually by WRWC and TLCOA. • At some point, TLCOA could explore the possibility of burning piles with Telluride Fire Protection District, which could be a better way to dispose of slash material.	• Option 1- The cost of chipping the communal pile (labor and materials) is at the expense of the TLCOA. • Option 2- WRWC will pay for the cost of the labor and materials to chip the communal pile BUT specifications *must* be met, including the cost of TLCOA providing/paying for a dumpster for disposal of the chipped material. • Depending on logistics, burning piles may be a less expensive way to dispose of the slash pile, however details would need to be explored with the TFPD.

#	RECOMMENDATION	REASON FOR RECOMMENDATION	ACTION TO DATE	KEY ACTION NEEDED FOR NEXT STEPS	FUNDING CONSIDERATIONS
5	**Complete a Road Access and Improvement Field Assessment and Map**	• At first glance, there are significant ingress/egress challenges for emergency response and evacuation within the Trout Lake Community. • A formal assessment would help identify areas of poor road conditions, steepness/inaccessibility, roadside pinch-points, heavy fuel loads, lack of signage (see below), turn-around, unimproved evacuation routes. • Some of this assessment information (steepness/inaccessibility, poor road conditions, turn-around locations) will be useful for the Telluride Fire Protection District and the San Miguel County Emergency Management Department with regards to emergency response to the Trout Lake Community. • Other assessment information (pinch-points, heavy fuel loads) will be useful to WRWC when planning hazardous fuels reduction. • Initial Site Visits identified a few cabins/house where address signs are not posted. Proper address signage aids in all types of emergency response, including fire protection. • A map showing all of the above road access concerns and improvements would be useful for TLCOA and partners. This could be included as an addendum to this document, and also be incorporated in Recommendation #6.	• No formal assessment, other than the Rapid Risk Assessment, has assessed ingress/egress concerns. • The San Miguel County GIS department and the San Miguel County Road and Bridge department spearheaded the re-addressing of each cabin/house and distributing and installing address signs. • Some county-issued signs were installed in the Trout Lake Community, but not 100% coverage	• WRWC, Telluride FPD, and San Miguel County Emergency Department complete a "field day" assessment of all roads and driveways within the Trout Lake community to assess ingress/egress. • WRWC develop a map (appendix to this document) showing results of the assessment. • WRWC will work with residents of Trout Lake to provide information on how they can obtain address signs from San Miguel County if they do no already have one. • Based on assessment, TLCOA decide which improvements are feasible to implement within the community.	• WRWC is able to conduct this field assessment and map for an additional fee of $800.00. WRWC will work with partners collecting mobile GIS data during a one day site visit and compile date into a comprehensive map. • The implementation of some of the improvements (such as roadside thinning) could be included in funding for hazardous fuels reduction projects (see Recommendation #3). • The implementation of some of the improvements (such a turn abounds) may require funding from TLCOA or private residents.
6	**Develop a Community Level Wildfire Preparedness and Emergency Response Plan**	• The Trout Lake Community faces several challenges with preparing for and responding to emergency events including modes of communication, lack of knowledge of evacuation routes, evacuation locations, and preparing emergency kits. • A concise plan (1-3 pages) could be developed to effectively communicate to residents the challenges the community may face in the event of an emergency, such as a wildfire.	• No formal preparedness plan, specific to the Trout Lake Community, has been developed. • San Miguel County has published "Resident Evacuation Guide" that could be updated and modified to be specific to the Trout Lake Community.	• TLCOA should work with San Miguel County Emergency Management Department and Telluride FPD to identify emergency and communication challenges in Trout Lake Community and ways to effectively communicate these challenges to residents so they understand the challenges and can take actions to prepare.	• TBD, if necessary.
7	**Community Wildfire Information Forum**	• A Community Wildfire Information Forum would engage residents and provide information about the recommendations included in this document as well as provide general wildfire education. • Example Site Visit (using a cabin within the community) and providing examples of what to expect from fuels mitigation work may provide necessary level of education for community by-in	• Trout Lake Cabin Owners Association (and Trout Lake Land Company and Lizard Head Land Company) hold and annual HOA meeting the third Saturday in July. This meeting typically has over 80% attendance from residents.	• Identify key partners to present at/attend HOA meeting. WRWC, TFPD, San Miguel Emergency Management Department, CSFS, others?	• No funding required.