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## **7. Risk Assessment: Identifying and Evaluating Assets at Risk**

### **7.1. Assets at Risk in Lake County**

Assets (or values) at risk are those things that are important to quality of life that can be threatened with destruction or loss from wildfire. These include homes, infrastructure, cultural sites, wildlife habitat, natural resources, air quality, recreational facilities and areas, historical structures, and any other important attribute that individual communities rely on for their well being.

The term “assets” however may not fully convey the community value found in them. They are the precious and often unquantifiable elements that make up the quilted fabric of community life. Like much of Northern California, Lake County’s communities have evolved with a connection to the land and its history. This has created what could be described as high community value, springing from a shared sense of place, strong family and neighbor ties, and enjoying community life with a bioregional flavor.

Communities can suffer greatly if highly valued or essential infrastructure is damaged or destroyed during a wildfire or other disaster. Some communities contain infrastructure that is critical to the entire county (e.g. hospitals or utilities), which naturally makes the risk of loss much graver in the event of a wildfire. Many of the more populated areas in Lake County contain the county’s most critical facilities: water sources/storage, major thoroughfares, schools, fire stations, hospitals, government facilities, etc. These areas, such as the cities of Lakeport and Clearlake, have a higher concentration of community assets, thus having a higher asset value. When a high-value concentration area combines with the presence of hazardous fuels and a high fire threat, it is an area the community considers more at risk of loss due to wildfire. *(For more information regarding fire hazards, see Maps 3-4 Fire Hazard Severity Zones and 3-7 Fire Threat in Chapter 3).*

In October 2008, eleven CWPP public meetings were held throughout Lake County. At these meetings, local community assets were identified. Some of the most important community assets and values identified at these meetings included schools, churches, fire stations, hospitals, senior centers, neighborhoods, commercial districts, golf courses, campgrounds, and more. *See maps in Appendix B-2.*

#### **7.1.1. Homes and Structures**

In addition to protecting human lives, homes are considered one of the highest priorities for protection within Lake County. All homes are considered of equal community importance or value. According to projections from the US Census in 2007, there were approximately 34,982 homes in Lake County.<sup>1</sup> Homes within the county are generally concentrated within town centers (especially around Clear Lake) and along the major roadways, such as Highway 20 and State Routes 53, 29, and 175.

Much of Lake County’s population surrounds Clear Lake. Some populated areas, however, are more remote and may be harder to defend than the more localized and compact communities surrounding the Lake and along the main transportation corridors. Populated but remote areas such as Lake Pillsbury, Spring Valley, Double Eagle, the communities on Cobb Mountain, and other outlying areas are considered valuable assets within the county. Even though homes not directly adjacent to wildlands often burn during wildfire events, it is the remote homes and those on the edges of communities that are at the greatest risk, because they are generally the first to be reached by a wildfire. Homes with untreated wood shake roofs are at the highest risk, even when they are in the middle of a community. The sparks created from a fire often land on roofs and ignite the structures that are well away from the approaching fire. This is why Senator Feinstein introduced in 2009 her “Fire Safe Communities” legislation to support communities that make replacement of wood shake roofs mandatory.

Map 7-1 at the end of this chapter shows property values by parcel for the county. Higher property values generally occur in the more modern populated areas. However, the highest property values shown are those associated with large landholdings (ranches, etc.). This does not mean that these properties have the highest value per acre, rather that their large number of acres increases their total value. This information was used on a rough scale to compare property values countywide.

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<sup>1</sup> U.S. Census Bureau. *Lake County Quickfacts*. <http://quickfacts.census.gov/qfd/states/06/06033.html>.

## 7.1.2. General Infrastructure Assets

As each individual community has developed in Lake County, vital infrastructure has been built in order to serve the needs of the growing population. Infrastructure includes all of the roads, utilities, water, and all other services that help Lake County residents live here. The major road systems within the county—Highway 20 and State Routes 29, 53, and 175—are essential assets. Erosion and landslides following a wildfire event can pose a significant threat to the transportation infrastructure. Fire suppression efforts often utilize roads to strategically place equipment and personnel during wildfires.

Airstrips are important infrastructure in the county. They provide recreational opportunities, emergency landing sites, potential evacuation sites, and help create a destination for visitors. There are two airstrips that can be used as emergency landing or evacuation destinations. These airstrips include Lampson Field south of Lakeport, and the USFS Gravelly Valley Airstrip in Lake Pillsbury.

“Lampson Field is a general aviation airport and the sole public use facility in Lake County. The Public Works Department oversees the operation, maintenance and improvements to the Airport.... The airport runway, designated Runway 10-28, is 3,600 feet long and 60 feet wide with; an 85-foot displaced threshold at the east end. The runway is lighted. A full length parallel taxiway is located on the south side of the runway.”<sup>2</sup>

Gravelly Valley Airstrip however is a primitive landing site used mostly by small, fixed-wing aircraft and helicopters. It is roughly 75-100 yards wide and ¾-mile long. It is unstaffed, has a gravel surface, and is without lights, communications, or hangars. Lake Pillsbury FPD uses it as an emergency evacuation site with helicopters.

The public and private utilities within Lake County are also important assets. Geothermal power plants, electrical transmission lines, and communication towers are all at risk from wildfire. Many of these are in remote areas that have high fire threats, which causes them to be at higher risk.

Lake County is home to The Geysers, the largest geothermal power generation facility in the world. The Geysers consists of several power-generating sites within a thirty-square-mile stretch along the Sonoma/Lake County boarder. These facilities produce enough electricity to power approximately 850,000 homes. Energy produced at The Geysers provides energy to customers south of the Golden Gate Bridge and up to the Oregon border. Wildfire is a major threat to these facilities because of their remoteness and adjacency to highly flammable vegetative fuels. In 2004, the *Geysers Fire* burned roughly 12,500 acres here. In its path this fire burned 6 residences, 14 outbuildings, 1 commercial property, and 12 vehicles. For this and other reasons, The Geysers is included as a “Community At Risk” from wildfire (*see Chapter 1 for more information on Communities at Risk*).

Pacific Gas and Electric (PGE) maintains transmission lines and a dozen substations within Lake County. Some of the substations are active while others are for future use, located in both rural and suburban areas. All substations are maintained to meet the minimum state requirements of 100 feet of clearance. In most instances all of the vegetation is removed and gravel is placed on the ground, for access and to eliminate flammable material.

Communication towers have traditionally been located on top of peaks (such as Mt. Konocti) and can be threatened by wildfire. Some of the towers receive power from underground lines, while others have aboveground lines. Aboveground power lines can pose a wildfire threat as a possible ignition source, for example if a tree falls on the lines. All communication towers have backup power supplies (batteries or propane). They are required to have fire alarms, fire extinguishers, and maintain a minimum fuel clearance of 100 ft. Within this 100’ clearance, many of the towers are void of vegetation or have gravel for access and to limit the amount of flammable material. Fire Protection Districts have access to all communication towers.

The communication tower on Mt Konocti is being rebuilt to provide more space for communications infrastructure. This tower is one of the most centrally located in the county and contains emergency communications systems.

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<sup>2</sup> Lampson Airport, [www.co.lake.ca.us/Residents/Roads-Transportation/Airport.htm](http://www.co.lake.ca.us/Residents/Roads-Transportation/Airport.htm).

Domestic gas usage within the county is in the form of propane. There are several propane distributors, generally with large storage tanks (e.g. 30,000 gallons or more, located both in suburban and rural settings. Tanks are inspected yearly for both function and to ensure they meet their minimum 100’ fuel-clearance requirement.

The security of clean water is fundamental to all communities. Increased surface runoff following a wildfire can cause inputs of nutrients, ash, and other particulate matter into the county water sources. These inputs can also cause water treatment facilities to function incorrectly; this happened following the 1996 *Fork Fire*.

There are approximately 95 different water service providers of varying size found throughout the county, supplying domestic water to residents and visitors. All of the water suppliers are site-specific and service the needs of a certain location, often a subdivision. Facilities maintained by these providers, such as treatment plants, pumps, and storage facilities can be damaged during or following a wildfire.

### 7.1.3. Commercial Assets

The primary commercial centers within the county are the incorporated and unincorporated metropolitan areas surrounding Clear Lake. Areas not directly adjacent to Clear Lake, such as Middletown, Kelseyville, and Coyote Valley, also have important commercial centers.

Lake County is also a year-round tourism and recreational destination, although tourism peaks in summer. Boating, fishing, camping, wine tasting, sight seeing, and many other recreational activities help bring in monies that aid in the development of community infrastructure and services. During wildfire events, tourism and recreational opportunities are often reduced or eliminated due to actual or perceived dangers visitors may face, and compromised air quality.

Major recreation areas include the county’s lakes; most notably Clear Lake. Other important recreational locations include Snow Mountain, Yuki, Sanhedrin, and Cache Creek Wilderness Areas; Cow Mountain Recreation Area; Mendocino National Forest; Anderson Marsh; Boggs State Demonstration Forest; and numerous campgrounds, casinos, and hot springs throughout the county. Areas within the Mendocino National Forest, wilderness areas, Cow Mountain, hot springs, and the Demonstration Forest are the most vulnerable to wildfire because of their remoteness as well as their natural association with fire.

### 7.1.4. Schools

There are seven school districts in Lake County: Kelseyville Unified, Konocti Unified, Lakeport Unified, Lucerne Elementary, Middletown Unified, Upper Lake Union Elementary, and Upper Lake Union High School. There are also three parochial schools and two community colleges within the county to make up a total of 53 schools. Many schools are located in areas that have medium to high fire hazard.

### 7.1.5. Medical Facilities

Two hospitals and three nursing homes exist within the county, with six senior assistant centers. These facilities are essential to the health, safety, and lifestyle of local residents. The following table lists these sites.

**Figure 7-2. Lake County Medical Facilities and Senior Centers**

Name	Address	Emergency Power Supply
Sutter Lakeside Hospital	5176 Hill Rd. East, Lakeport	Generator
Saint Helena Hospital	15630 18th Ave., Clearlake	Generator
Meadowood Nursing Center	3805 Dexter Lane, Clearlake	Generator
Evergreen Lakeport Healthcare Center	1291 Craig Ave., Lakeport	Generator
Lakeport Skilled Nursing Center Inc.	625 16th St., Lakeport	Generator
Highlands Senior Service Center	3245 Bowers Ave., Clearlake	Handheld lights w/ batteries
Kelseyville Seniors, Inc.	5245 3 <sup>rd</sup> St., Kelseyville	Handheld lights w/ batteries
Lakeport Senior Center	527 Konocti Ave., Lakeport	Handheld lights w/ batteries
Live Oak Senior Center	12502 Foothill Blvd., Clearlake	Handheld lights w/ batteries
Lucerne Alpine Senior Center Inc.	10 <sup>th</sup> and Country Club Dr., Lucerne	Handheld lights w/ batteries
Middletown Senior Citizens, Inc.	15299 Central Park Rd., Middletown	Handheld lights w/ batteries

### 7.1.6. Cultural Assets

People have been living in Lake County for 10,000 to 12,000 years. The most notable human habitation here is that of the Pomo Indians, several bands of which still remain, (*see Chapter 1 for more information*). More than 10,000 years ago, the land that is now Lake County was occupied and managed entirely by Pomo Indians. Today, approximately 1,600 acres remain in tribal ownership in the county.

Throughout this time of human habitation cultural resources have accumulated throughout the county, including: bedrock mortars, grassland sites for basket making, oak trees for acorn gathering, ceremonial gathering places, and more.

Threats to these valuable resources are due primarily to development and subdivisions. Many of the cultural gathering sites for items such as sedges, which provide valuable basket material, are within private land holdings, leaving these sites out of reach as a cultural resource to local tribal members. High-intensity fire poses a threat to resources such as oak stands that provide acorn-gathering sites for local tribes. These types of fires can kill oaks, while low-intensity fire can help with oak regeneration and seed protection. Low-intensity fire was used for thousands of years to help reduce insect damage to mast crops.

Post-settlement assets are abundant within the county as well. There are many historical buildings such as barns, schools, and churches that are valued by local residents and visitors. Some of these buildings were identified in the community meetings (*see Appendix B-2*): the Brickhouse Tavern, Loch Lomond General Store, and Lower Lake School. Historical resorts such as Forest Lakes Resort, the resorts in Blue Lakes, and Pine Grove Resort are all valued within the county. Historic downtown areas are found in Kelseyville, Lakeport, Lower Lake, and Upper Lake. Historic ranches and farm equipment are also at risk from wildfire. Efforts are being made to preserve and consolidate many of these resources through collection for a museum.

### 7.1.7. Natural Assets

Lake County is ecologically rich; there are many natural assets to protect and steward. Natural assets can be as important and valuable as property or material assets. Natural assets directly and indirectly contribute significantly to the quality of life, economy, and ecological diversity of the county. Many of these natural assets are located in remote areas that have associated high fire threat and hazard conditions.

During the community meetings, many of the county's natural assets were identified. Some of these include (in no particular order of importance): scenic vistas, Harbin Hot Springs, High Valley Ranch, Boggs Lake Reserve, Clear Lake, and Big Pines Campground.

The state parks, state forest, national forest, and wilderness areas are all important ecological areas within the county. They provide critical habitat for threatened and endangered plants and wildlife such as the bald eagle, Northern spotted owl, and Boggs Lake hedge-hyssop. *See Chapter 3 for more information on threatened and endangered species in the county, and Chapter 4 for vegetation types.*

Recreational and research opportunities, scenic vistas, and more are associated with these natural assets. An overall lack of fire as a result of fire suppression has caused many of these areas to become overly dense, with high fire threats. In many cases this overcrowding causes plants and trees to become stressed and unhealthy, leaving the site at greater risk of high-intensity wildfire.

Among the natural resources of every community is air. Lake County is fortunate to have exceptionally clean air. The county is known for its nineteen years of Designated Clean Air Achievement.<sup>3</sup> The American Lung Association (ALA) found in 2007 that Lake County's air quality ranked 3<sup>rd</sup> cleanest in the nation for particulate pollution.<sup>4</sup> In 2009, ALA reaffirmed that Lake County ranked an "A" grade in air quality standards, with the third healthiest air in the nation.<sup>5</sup> This air quality is a treasured asset that needs to be protected. Wildfires can burn out

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<sup>3</sup> Lake County Air Quality Management District. [www.lcaqmd.net](http://www.lcaqmd.net).

<sup>4</sup> California Air Pollution Control Officers Association (CAPCOA) Newsletter. Volume 19, Issue 9. September 2007.

<sup>5</sup> American Lung Association. State of the Air Report 2009. p. 24 and p. 54. [www.lungusa2.org/sota/2009/SOTA-2009-Full-Print.pdf](http://www.lungusa2.org/sota/2009/SOTA-2009-Full-Print.pdf).

of control for days or weeks, and the ash and smoke pollution in the air is a risk to the community as well as the natural environment. Vegetation and plant life can also be harmed by atmospheric pollution and smoke.

The major natural resource businesses within the county include agriculture and wineries. Lake County currently has 24 local wineries that offer scenic views, recreational and tourism opportunities, local products, revenue, and jobs. Ranches within the county provide grazing land, recreational activities, and local food. Both of these natural resource-based industries can be affected by wildfire. The wineries may be at risk from wildfire because of their dependence on long-lived grape vines. Due to the arrangement of grape vines within vineyards, fire is not likely to burn through them, although during the late summer months, dry and brittle vines can pose a fire risk. If a wildfire was to burn through a vineyard, it could destroy valuable natural resources.

Cattle ranches may be at greatest risk from wildfire because of their fairly natural arrangement. Fire can quickly sweep through thousands of acres of ranchland, potentially damaging grazing habitat. However, ranches also benefit from wildfire as new growth and essential nutrient recycling resulting from a wildfire replenishes the burned-over area. Thus, controlled burning is used as a management tool on many ranchlands.

Agricultural lands that are managed for food crops (such as strawberries, pumpkins, etc.) are not at great risk from wildfire because of the heavy management that takes place there. However, fruit and nut tree orchards, such as Lake County's walnut orchards, could sustain damage from direct flame contact or even the heat of a wildfire. Although the understory vegetation tends to be eliminated in orchards, making it very difficult for a fire to move through, the heat of a fire could damage a portion, or all, of a tree.

### **7.1.8. Conflicts Between Natural Assets and Human Occupation**

Human encroachment into highly flammable wildland areas creates a conflict that often threatens life, property, and the natural environment. Most vegetation types found within Lake County have the potential to carry high-intensity wildland fires. In fact, most are dependant to some extent on fire to remain vigorous (*see Chapter 4 for more information*). At the same time, these areas are often aesthetically pleasing and provide an atmosphere in which many seek to live. This is quite apparent in Lake County, as residents slowly expand into these beautiful but highly flammable and remote areas such as Cobb Mountain, and the wildland-urban interface around the shoreline communities. The greatest threat generally occurs where the wildland meets the community, although wildfire can burn down houses well inside communities, especially in the case of large ember storms.

The various Rivas communities are built within and adjacent to highly flammable vegetation. This vegetation, combined with steep slopes, very limited access, and expensive investments (i.e. homes and other community infrastructure), creates a major conflict between human habitation and the natural values, or assets, that make it a desirable place to live. Therefore, the Rivas area is one of the most problematic in the county in terms of wildfire prevention and protection.

On Cobb Mountain, homes continue to be built in remote areas with highly flammable vegetation. Many are summer residences or vacation homes that are not well maintained for fire protection. Access is often on thin and windy roads, problematic during evacuations and other emergencies. This type of encroachment into wildland areas can be a significant threat to both the people and the ecosystem in which they live.

Concurrently, positive work is occurring throughout the county to address these issues and conflicts. The South Lake Fire Safe Council has implemented several projects in the Cobb Mountain area. The Clear Lake Riviera Community Association in cooperation with the Kelseyville Fire Protection District has implemented a simple and effective fire safety program that can be a model for other developments throughout the county.

Other examples include shaded fuelbreaks and fuel-reduction projects around areas such as the Lakeview Campground, Konocti Lookout, and Boggs State Forest. These projects will not eliminate fire, but minimize the intensity of fire in these communities. These projects help to address some of the conflicts between natural assets and human occupation. If residents, agencies, and relevant organizations implement the projects proposed in this CWPP, the risk associated with wildfire to Lake County's assets can truly be minimized.

## 7.2. Assessing Risks in Lake County

The following table summarizes the communities, assets, risks, and fire-fighting capabilities in Lake County to develop an overall risk ranking for all included communities. Each of these areas is explained below.

### **Community, Structure, or Area at Risk**

These are generally the communities at risk from wildfire in Lake County, both existing and proposed CARs. Additional populated areas were identified if their overall risk rating was either “Medium” or “High.” Middletown, Kelseyville, Finley, Clear Lake Keys, and Bachelor Valley/Witter Springs resulted in a “Low” overall risk rating from this analysis; therefore they were not included in this table. Where there were clearly differing areas of risk within the same community, those communities were separated out. For example, Lower Lake, Morgan Valley, and Twin Lakes were identified separately as they have distinct wildfire issues.

### **Assets at Risk**

This was compiled from this chapter, local property values, and the information gathered at community meetings. All neighborhoods and population centers are assumed to be equally important local assets and values. The ratings in this column compare overall assets countywide based on the information described above.

### **Fuel Hazard**

Fuel hazards describe the amount of fuels in a given area that could burn during a fire. Fuel hazards were based principally on fire history and fire hazard severity zones as developed by CAL FIRE and described in Chapter 3. This was combined with information gathered through local field tours in October 2008, and aerial imagery on Google Earth. Further information was provided from data gathered at the community meetings.

### **Risk of Wildfire Occurrence**

Risk of wildfire occurrence refers only to the possibility of a wildfire occurring in the given community. It does not reflect the possibility of a fire starting locally, including one that may simulate wildfire conditions. This information was taken from CAL FIRE’s fire threat information, information gathered through local field tours, and topographical and wildland vegetation analysis using Lake County GIS data and Google Earth.

### **Structural Ignitability**

Structural ignitability means the ability of buildings, especially homes, to burn. This information was based on visual surveys and local information. Older, wooden homes generally have higher structural ignitability than newer homes—especially those homes with tile or metal roofs.

### **Fire-fighting Capability**

Fire-fighting capability describes the ease with which firefighters can get to a community to fight a fire. This information was taken largely from Chapter 6. Supplemental water flow (and other information) was also taken from the 2007 LAFCO Final Report<sup>6</sup>. It is based on factors such as how close a fire station is, the level of equipment and/or staffing, and the amount and pressure of water available for firefighting. A high ranking in this category would decrease the overall risk ranking of a community.

### **Overall Risk**

The overall risk category is a sum of the above categories, and the analysis done for each. The higher the ranking in each of the categories (except fire-fighting capability) leads to a higher overall risk. The higher the ranking in the fire-fighting capability column brings the overall risk down.

### **Observations**

These include a summary of key ranking factors in the various categories, especially in the case of anomalies.

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<sup>6</sup> Lake Local Agency Formation Commission (LAFCO). *Lake County Fire Protection Districts Municipal Service Review and Sphere of Influence*. October 19, 2007.

Figure 7-3. Summary of Assets and Associated Wildfire Risks for Medium and High Risk Communities in Lake County<sup>7,8</sup>

Community, Structure, or Area at Risk	Assets at Risk	Fuel Hazard	Risk of Wildfire Occurrence	Structural Ignitability	Fire-Fighting Capability	Overall Risk	Observations
<b>Anderson Springs</b>	Med	High	High	High	Low	<b>High</b>	High fuels, older wooden homes, small and windy roads, remote, significant wildfire threat. Good local FSC. Limited water.
<b>Clear Lake Riviera</b>	High	High	High	Med	Med	<b>High</b>	High-value real estate, with high fuels in a dense development. Wildfire threat from Hwy 29 could threaten rest of Rivas. Fire station with limited staffing. Water is limited.
<b>Double Eagle</b>	Low	High	High	High	Low	<b>High</b>	Very remote development, surrounded by fuels with high wildfire threat. Very bad roads/access. Minimal fire protection. Limited water.
<b>Greater Cobb Area including Loch Lomond</b>	High	High	High	High	Med	<b>High</b>	High fuels, older wooden homes, fire stations staffed only during fire season. Includes surrounding areas and forested landscape. Significant wildfire threat, access issues. Limited water. Good local FSC.
<b>Harbin Hot Springs and Other Springs</b>	Med-High	High	High	High	Low	<b>High</b>	High fuels, important tourist/recreational destinations, high ignition risk from many visitors, very limited access/evacuation.
<b>Jago Bay, Point Lakeview</b>	High	High	Med	High	Low	<b>High</b>	Tight roads, heavy fuels, older homes. Wildfire threat from Hwy 29 could threaten Rivas. Difficult access/evacuation. Limited water.
<b>Lake Pillsbury</b>	Low	High	High	High	Low	<b>High</b>	High wildfire threat, surrounding fuels. USFS in-holding community, limited fire protection capacity. Limited water supply outside LP Ranch.
<b>Lakeport</b>	High	Med	High	Med	High	<b>High</b>	High values and historical areas, with significant wildfire threat from BLM to east, some urban areas with high fuels and density.
<b>Spring Valley and Long Valley</b>	Med	Med-High	High	Med-High	Low	<b>High</b>	Good clearance, limited fuels within Spring Valley development. Higher fuels, wildfire threat in surrounding areas. Limited water supply. Remote.

<sup>7</sup> This table is adapted from Step 5a of the CFA Simplified CWPP Template. p. 5. <http://cafirealliance.org/cwpp>.

<sup>8</sup> Communities that obtained an Overall Risk of “Low” were not included in this list; see text in 7.2 for the list of these communities.

Community, Structure, or Area at Risk	Assets at Risk	Fuel Hazard	Risk of Wildfire Occurrence	Structural Ignitability	Fire-Fighting Capability	Overall Risk	Observations
Clearlake Oaks	Med	High	High	Med	Med	High-Med	Wildfire threat during extreme fire weather, with high interface fuels and ignition potential. Good fire protection, limited water supply.
Glenhaven	Med	High	High	Med	Med	High-Med	Narrow strip along Hwy 20, potentially blocked to limit evacuation. High wildfire threat during extreme fire weather, high interface fuels. High ignition potential. Limited water.
Hidden Valley and Coyote Valley	High	Med-High	Med-High	Med	Med-High	High-Med	High fuels in the interface. Threat of wildfire from east/northeast. HV Lake HOA great fuel reduction program. Other areas have access and water issues.
Hilderbrand District	Med	High	High	High	Med	High-Med	Residential area along southern end of Highway 29. Older homes. No hydrants, local fire history.
Lucerne	Med	High	High	High	High	High-Med	High wildfire threat from FS during extreme fire weather, with high interface fuels. Some historic sites. Good fire protection and water supply.
Nice	Med	High	High	High	High	High-Med	High threat of wildfire from FS during extreme fire weather event, combined with high fuels in the interface. Good fire protection and water supply.
Riviera Heights*	High	High	Med	Med	Low	High-Med	High-value real estate, with high fuels in a dense development. Not significant wildfire threat, but significant ember threat from local ignitions. Fire station with limited staffing. Good water supply.
Riviera West*	High	High	Med	Med	Low	High-Med	High-value real estate, with high fuels in a dense development. Access issues. Not significant wildfire threat, but significant ember threat from local ignitions. Good water supply, no fire station.
Blue Lakes	Low	High	High	High	Low	Med-High	High fuels and windy roads behind Lakes. Potential evacuation/access issues. No community water system, water source is the lakes.
Clearlake	High	Med	High	High	High	Med-High	Principal urban center. High fuels to east, some subdivisions with high fuels, many older homes. Good local fire protection.
Morgan Valley	Med	Med-High	High-Med	High	Med	Med-High	Rural interface east of Lower Lake, potential wildfire threat from public lands to east. Water and fire protection issues.

Community, Structure, or Area at Risk	Assets at Risk	Fuel Hazard	Risk of Wildfire Occurrence	Structural Ignitability	Fire-Fighting Capability	Overall Risk	Observations
Scotts Valley	Med	Med	High	Med	Med	<b>Med-High</b>	Agricultural valley between Lakeport and BLM. Excellent controlled-burn history and interest. Wildfire threat from BLM lands. Water issues.
Buckingham*	High	Med	Med	Med-Low	Low	<b>Med</b>	Very high-value real estate, limited water supply. Limited wildfire threat. Access/evacuation issues.
Jerusalem Valley	Low	Med	High	High	Low	<b>Med</b>	Access/evacuation issues, surrounding fuels.
Kelseyville Interface	Med	High	Med	Med	Med	<b>Med</b>	Fuels and wildfire threat from SW and SE, some remote neighborhoods. Mount Konocti fuel issues.
Kono Tayee	Med	Med	Med	High	Low-Med	<b>Med</b>	Some fuels on steep slopes, wildfire threat during extreme weather events. Adequate water.
Lower Lake	Med-High	Med	Med-High	Med	High	<b>Med</b>	Small community with historical district. Heavier fuels and windy roads at outskirts (see Morgan Valley and Twin Lakes). Local fire protection.
Soda Bay*	Med	High	Med	Med	Med	<b>Med</b>	Some fuels, history of local ignitions. Some wildfire threat from State Park to west.
Twin Lakes	Med	Med	Med	Med	Med	<b>Med</b>	Some fuels. Many homes and roads.
Upper Lake	Med	Low	High	Med	Med	<b>Med</b>	Historic, town center, limited fuels. Higher fuels in interface. National Forest wildfire threat during extreme weather events. Water system issues.

**\*The Exception: The Rivas**

The most obvious distinction in Lake County between “risk of wildfire occurrence” as shown in this table, and the possibility of a large wildland urban interface conflagration is that of the Rivas communities (Soda Bay, Riviera Heights, Buckingham, and Riviera West). Everyone in the county by and large agrees that the Rivas would be the worst place for a rural fire to occur. There are large, expensive homes, with a lot of local fuels, and limited access, water supply, and fire-fighting capabilities. However, the chance of a fire coming into the Rivas from the neighboring wildlands is not high. A fire would need to come down Mount Konocti, or around it from the Highway 29 corridor. The probability of either of these occurring is not high. (However, this could happen in the eastern end of the Rivas, in Clear Lake Riviera, Point Lakeview, and Jago Bay.) Therefore, the Rivas area is not ranked as having a high risk of wildfire occurrence, even though a local fire there would quickly simulate extreme wildfire conditions. That said, prioritizing treatment of fuels, implementing defensible space, and reducing structural ignitability are all actions that must happen in the Rivas, and as soon as is feasible. As stated here and elsewhere in this document, the potential damage from an interface fire in the Rivas would likely be greater than anywhere else in the county. It is for this reason that the Rivas area is listed as a top priority area for action within the Action Plan (Chapter 8) even though it did not receive a “high” overall risk ranking in this analysis.

***Map 7-1. Net Property Values***