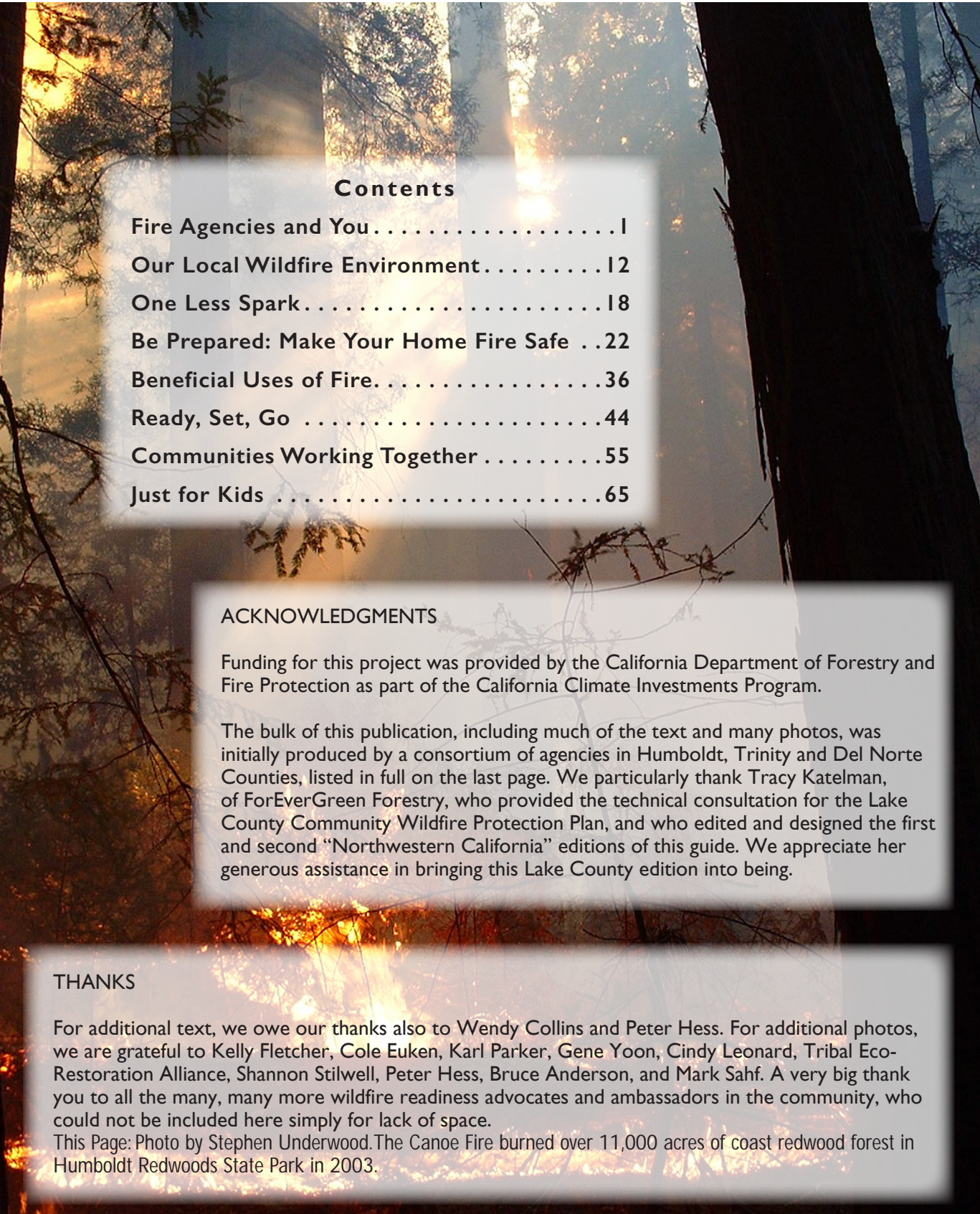




LIVING WITH **WILDFIRE** IN LAKE COUNTY CALIFORNIA





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The bulk of this publication, including much of the text and many photos, was initially produced by a consortium of agencies in Humboldt, Trinity and Del Norte Counties, listed in full on the last page. We particularly thank Tracy Katelman, of ForEverGreen Forestry, who provided the technical consultation for the Lake County Community Wildfire Protection Plan, and who edited and designed the first and second “Northwestern California” editions of this guide. We appreciate her generous assistance in bringing this Lake County edition into being.

THANKS

For additional text, we owe our thanks also to Wendy Collins and Peter Hess. For additional photos, we are grateful to Kelly Fletcher, Cole Euken, Karl Parker, Gene Yoon, Cindy Leonard, Tribal Eco-Restoration Alliance, Shannon Stilwell, Peter Hess, Bruce Anderson, and Mark Sahf. A very big thank you to all the many, many more wildfire readiness advocates and ambassadors in the community, who could not be included here simply for lack of space.

This Page: Photo by Stephen Underwood. The Canoe Fire burned over 11,000 acres of coast redwood forest in Humboldt Redwoods State Park in 2003.

A Message from the CAL FIRE Division Chief for Lake County

Welcome to Lake County California, a great place to live, do business and to visit. Lake County is home to Clear Lake, the largest lake fully within the State of California and one of the oldest freshwater lakes in the world. We are also home to a large portion of the Mendocino National Forest and many other wildlands and forest areas. Over the years, many homes have been built here, often in the midst of these beautiful wildlands. As climate change continues to increase the length and severity of dry conditions and thus the length and intensity of fire season, these homes and natural resources are increasingly threatened by wildfires, both natural and human-caused. We hope this publication will be used as a resource to reduce the risk of wildfire losses to individuals and communities.

The goal of this publication is to raise awareness about wildfire hazards and provide tools and information that can help homeowners, their families, homes, and properties survive and thrive in a fire-adapted environment.

CAL FIRE, along with our state and federal partners, is dedicated to providing the finest possible wildfire protection services to ensure the safety of residents and visitors, as well as valuable resources. In addition, we are working with our local partners to teach both residents and visitors what we all can do to live safely with wildfire. As you will learn in this publication, fire is a natural part of our local environment and we believe there is much that can be done to adapt to this reality. The following pages contain information, checklists, testimonials, and activities that are intended to give you the information you need to take action to prepare your home and community before a wildfire ignites. Tips are also provided about what you can do to prevent unwanted, human-caused wildfires.

We would like to express our appreciation to the local fire departments, local officials, Fire Safe Councils, and Firewise communities in our region. These groups are made up of our neighbors committed to reducing wildfire threat and protecting our communities. We are continually impressed by the work these largely volunteer groups accomplish locally. We would also like to thank each of you who take the time to protect your home and property as well as our natural resources from wildfire damage.

Each of us has a responsibility and a role in our collective efforts to reduce the potential negative impacts of wildfire on our communities and valued resources. The more we work together to make our homes and communities resilient, the more we accomplish towards this goal. Fire-safing efforts benefit not only you, the individual homeowner, but your neighbors, and our community as a whole.

Thank you for taking the time to read through the wildfire safety information provided in this magazine. We encourage you to keep this magazine handy, and easy to access during an emergency, so that you may reference it often as you work to fire-safe your home and property.

Paul Duncan, North Division Chief
CAL FIRE Sonoma Lake Napa Unit
707-481-2362



Who is the CAL FIRE Sonoma-Lake-Napa (LNU) Unit?

LNU is one of twenty-one CAL FIRE administrative units, divided into four field divisions and ten field battalions in Sonoma, Napa, Yolo, Colusa, Solano and Lake counties. LNU has responsibility for more than 2 million acres,, with the third largest population, the largest number of total acres burned, and fourth highest total annual fires among Cal Fire units. LNU has two additional Central divisions that provide support to the operational units including fleet management, training, vegetation management, the Public Information Office, and defensible space and damage inspection plus fuel reduction projects, and prescribed burns.

The LNU region is characterized by steep slopes and valleys with the main ridges oriented north-northwest to south-southeast including the Mayacamas Mountains in Lake County. These ridges affect weather, fuels and fire behavior. The region has seen non typical weather patterns in the past 5-7 years. With California's climate changing, significant wind events along with much less rainfall have created fire conditions more dangerous than in previous decades. The weather can vary greatly on the same day in different parts of the Unit. An average summer day may find the coastal areas at 60 degrees, with dense fog, while inland temperatures climb from 90 to 100 degrees. The warmer the Sacramento Valley becomes, the deeper fog intrudes from the ocean up the coastal drainages, and the windier the inland valleys become. Diverse microclimates benefit from having four seasons and somewhere between 23 to 85 inches of annual rainfall, depending on the location, elevation, and weather patterns. Declared fire season in LNU typically lasts from early June to November.



Vegetation fuel types in LNU consist of grass, oak woodlands, brush, mixed chaparral and timber. Brush is usually composed of chemise on the south and west facing slopes and mixed chaparral on the north and east facing slopes.

LNU headquarters is located in Napa County just north of St. Helena. Initial attack agencies who respond to emergencies include but are not limited to: Local Government Fire, US Forest Service, CAL FIRE units, with a variety of resources including Battalion Chiefs, fixed wing aircraft, helicopters, fire engines, bulldozers, fire crews, water tenders and other support vehicles.

LNU has two categories of operations: "Schedule A" and "Schedule B". Schedule B is the state-funded wildland fire protection mission in State Responsibility Areas (SRAs). LNU has the largest Schedule B and SRA in the state. In addition to the state-funded wildland fire protection mission, CAL FIRE



FIRE AGENCIES AND YOU

LNU is contracted in Lake County to provide personnel and services for the South Lake County Fire Protection District. This contract is known as a “Schedule A” agreement which benefits the State by having a diverse team ready to deal with any sized emergency. It also benefits local communities by having support and management services provided by an all-risk fire agency. LNU also has an “Amador” agreement to provide fire protection to the South Lake County Fire Protection District. An Amador agreement continues the “Schedule B” staffing and station coverage throughout the winter. To qualify for a contract, the requesting agency or district must also have a working fire department. An Amador agreement is designed to augment the existing fire department, not replace it.



During peak fire season LNU resources include approximately 260 permanent and another approximately 250 seasonal personnel of all job descriptions. This staffs 21 fire stations, 31 engines, 6 bulldozers, 2 Conservation Camps, 1 Fuel Reduction Crew, 1 Firefighter Handcrew, 1 Helicopter, 1 Air Attack Base and many other support staff positions. A typical fire station will house between 3-12 personnel on a given day.

Cal Fire also collaborates with the California Department of Corrections and Rehabilitation to manage fire crews that can construct hand line, do mop-up and post-fire patrols, and assist with fire line repair. In Lake County, LNU maintains the Konocti Conservation Camp with two 2 crews, reduced from five crews, due to declining prison population. This decline is largely related to various changes in sentencing law and it is unlikely CAL FIRE inmate fire crew numbers will ever return to historic funded levels again.

Since 2020, LNU has also managed a CAL FIRE Region Fuels Reduction Crew to help with vegetation management and fuel reduction projects including prescribed burning, hand and mechanical fuel reduction, fire planning and fire prevention education.

The helitack base located at Boggs State Forest in Cobb is home to helicopter C-104, a Sikorsky S-701 . C-104’s primary objective is initial attack on wildland fires, but can also perform air rescue operations, medi-vac, reconnaissance and mapping missions, crew transports, cargo delivery, and other related missions. C-104 is staffed with a Pilot, two Fire Captains, one Operations Supervisor, 6 Firefighters, and has a fixed tank that can carry up to 1,000 gallons of water.

Living with Wildfire in Lake County California A Local Firefighter's Perspective

I am currently a fire apparatus operator, which means that I drive the engines based out of South Lake County Fire Station 60 in Middletown. My responsibilities are to take care of my crew, make sure we all get there safely, and make sure that the engine is running smoothly - not to mention the daily run of the mill training and physical fitness and everything else that encompasses

being a firefighter. Although it varies a lot, we like to man a four-person crew on the engine, but for example this past year we could only field a three-person crew, so it was me and a captain and then one firefighter.

I am what is called a "paid call" firefighter, meaning that I'm hired on an as-needed basis under the leadership of full-time personnel. Being a Paid Call Firefighter means you commit to serve and meet the standards required by any Firefighter in the State. In my other life, I am a 20-plus year heavy equipment operator. So besides doing fire, I've done every kind of fire cleanup work. That's how I ended up in Lake County - I initially came up to do fire cleanup and decided to stay. So although I also have a regular job, this year has been a little more dynamic with more staffing challenges. We've had people out injured or affected by Covid, so since September I have worked basically almost full-time as a firefighter.

The 2020 fire season is a good example of what we face these days. It started out slowly but ramped up quickly and affected Lake County on multiple sides. I started off spending 20 days on the "LNU Lightning



Fire Complex", which started in mid August with hundreds of lightning strikes across Lake, Napa Sonoma, Solano and Yolo Counties. It ended up being the fourth largest fire in California to date and killed six people. For that event I and my crew went down on the Napa side, close to Lake Berryessa and Vacaville defending the homes on the Eastern side of the Lake. After we

got relieved, I actually got sent right back out because Chief Wink contacted the heavy equipment contractor that I was working for, and they rented a dozer from them. So I went out to the back side of Hidden Valley and punched Southwest for seven days, cutting lines. This was very interesting because that whole area had burned in the Valley Fire in 2015 and even though the timber's not back, the brush is really back, at least twice as thick as it was before - like a 10 foot wall that you couldn't run through if you had to.

So after that 20-day stretch on the LNU Lightning Complex fire, we got about a month break, and then we went to the Creek fire outside Fresno up at Shaver lake which blew up in early September, mostly in the Sierra National Forest but also destroyed a lot of homes. We were deployed there for 12 days. Our assignment was tactical patrol in a bunch of neighborhoods that didn't seem to have a whole lot of fire activity, but once we got there and investigated it turned out that there was a lot more than we had had anticipated. There were plenty of areas that were far from extinguished that were just smoldering right on the edge of an area with homes that were vulnerable. One day we went up



FIRE AGENCIES AND YOU

into the forest, not knowing where the fire, was and we found active fire that had the potential to take off and had to be handled. This was right above China peak resort in the national forest there near Huntington Lake which saw massive destruction with folks having to be evacuated by helicopter. This is where a big fire tornado blew through. I've got pictures of four-foot-diameter trees that are completely uprooted and laid on their side. The local papers compared the pyrocumulus clouds to a nuclear explosion, with ash thousands of feet in the air. It was very, very chilling to see what nature can do.

That is when the Glass fire kicked off in Napa and we rushed back home to defend Lake County against that fire, which eventually burned right over the border in the northern part of Napa County. We worked that fire for another 13 days, so that was a 25 day stretch. We actually did get a bit of a break - they rested us for a day and then we reported to the incident command center for the Glass Fire. For that operation we started out on the west side over where Sugarloaf Mountain is and did some backfiring operations over there. And then after a couple days of that, we got pushed to Chief Wink's division. He was head of operations for the Eastern side, which covered all of highway 29. And we were assigned picking up hot spots and making sure that everything was okay. We watched the fire painting all the south slope of St. Helene Mountain red.

So staffing does remain a challenge because it can be difficult for employers to release us when the need arises. When the Office of Emergency Service call goes out, there's something big going on and we need all available hands. So it can be a juggling act and we depend on our employers understanding the big picture in the community. And for us, we sometimes can't know if the job will be there when we get off the fire line. But especially these days when any fire has the potential to grow into something really big, we need to be prepared.

Robert Lanning

Firefighter – South Lake Fire Protection District



Help Firefighters Help You

Did you know...

- ✓ **Firefighters don't just fight fire** – they are usually the first at the scene of medical emergencies and traffic accidents which, in many cases, make up over 50% of their emergency responses.
- ✓ Volunteers in Lake County, California are a huge asset to local fire departments and the communities they serve. Almost ALL fire departments in this region – even those associated with a special district – rely on volunteers. In fact, many of them have ONLY volunteers, without any paid staff.
- ✓ Most local fire departments are in URGENT need of individuals interested in serving as volunteer firefighters, emergency medical responders, apparatus operators and/or logistics and administration support.
- ✓ Firefighting resources are NOT cheap, and most departments rely on grants, community donations and fundraisers to survive. Here are some reasons why...
 - All costs are increasing: equipment, insurance, apparatus and facility maintenance and repair, fuel, medical supplies, training, and more...
 - A new fire engine can cost over \$450,000. Even a used engine can cost up to \$150,000.
 - Personal Protective Equipment costs to outfit a SINGLE firefighter can exceed \$3,500.

Local Fire Service Needs your Support

There are many ways you can support your local fire department!

- ✓ *Make a monthly, yearly, or one-time donation.*
- ✓ *Volunteer as a Firefighter! Fire departments are always seeking new recruits!*
- ✓ *Donate your time and abilities! Fire departments need volunteers for more than just firefighting. You can assist in fundraising efforts, administration tasks, and maintenance activities.*
- ✓ *Remember to drive safe, stay healthy, and maintain your defensible space.*
- ✓ *Use the following Fire Protection Agencies Directory pages to find a local fire department near you and find out how you can help. CALL TODAY!*



Volunteer!

Make a difference and enrich your own life.

Volunteering for your local fire department can: help you learn new skills; fulfill a family tradition; give you a sense of camaraderie as part of a team; help you gain experience; prepare you to pursue an exciting career as a firefighter; increase your sense of community identity and pride; and much more!

Think you have what it takes to be a volunteer firefighter?

Get in touch with the local fire department nearest you and start your adventure.

No Experience Necessary to Apply!

Local fire departments establish different selection criteria; however, many departments require that volunteers:

- Be at least 18 years of age.
- Have a valid driver's license.
- Be healthy and in good physical condition.
- Complete basic fire and emergency medical service training (sometime within the first year of service).
- Meet the minimum ongoing training requirements.
- Respond to a certain percentage of calls.

Not sure if firefighting or emergency medical services are for you, but still want to serve your community?

Fire departments are also in need of support volunteers who help with NON-firefighting duties such as logistics, traffic control, administration, public education and fire prevention, and fundraising.

Fire Protection Services in Lake County California

Adapted from the Lake County Community Wildfire Protection Plan (CWPP)

IF YOU HAVE AN EMERGENCY, CALL 911.

911 Calling Tips

- Know the **phone number** from which you are calling.
- Know **where you are**:
 - Use an address, cross street, name of a business.
 - If you don't know, ask someone or look for a piece of mail for the address.
 - Latitude and longitude/GPS points work great too.
- **Communicate** to 911 the nature of the emergency.
- **Listen** to the questions and instructions of the dispatcher.
- **Do not hang up** until instructed to do so.

KELSEYVILLE FIRE PROTECTION DISTRICT

The Kelseyville FPD provides first-response fire and medical service to residents in their 90-square-mile district in Lake County, which includes the communities of Kelseyville, the Rivas, and the western Cobb Mountain area. The district also contains a Sphere of Influence (SOI) on its southeastern border. CAL FIRE provides emergency services within the SOI although the FPD will respond if needed. Local residents currently volunteer with Kelseyville FPD, some of which are "active" firefighters, with more volunteers needed. Kelseyville FPD has three fire stations located throughout the district.

Main Station 55 4020 Main St.

Kelseyville, CA 95415

707-279-4268

Clear Lake Riviera

Station 56

9757 Hwy. 281

Kelseyville, CA 95415

Riviera Heights

Station 57

2816 Riviera Heights Dr.

Kelseyville, CA 95415



LAKE COUNTY FIRE PROTECTION DISTRICT WWW.LAKECOUNTYFIRE.COM

The Lake County FPD provides first-response fire and medical service to residents in their 165-square-mile district, which includes the communities of Clearlake and Lower Lake.

Local residents currently volunteer with Lake County FPD including "active" firefighters and additional paid staff. The Lake County FPD has identified a need for more volunteers. Lake County FPD has six fire stations located throughout the district.

FIRE AGENCIES AND YOU

Lake County Fire Protection District is an independent special district with its own governing Board. Our response area is the Eastern shore of Clear Lake, California, which covers the City of Clearlake and the unincorporated area of Lower Lake.

We are a combination department, paid and volunteer. Our paid staff includes 1 Fire Chief, 3 Captains, 3 Fire Apparatus Engineers, 9 Firefighter/Paramedics/EMTs, 1 EMS Liason, 1 Fire Marshal, 3 Paramedics, 3 EMTs, 1 Financial Analyst, and 1 Finance Assistant. Our volunteer staff includes 3 Captains, 1 Fire Apparatus Engineers, and 5 Firefighters.

Lake County Fire responds to over 4,500 calls per year including structure and wildland fires, vehicle accidents, technical rescue, hazardous materials, and medical aid. Our Main Station (Station 70) is where we primarily respond from and houses almost all of our paid staff. Station 65 in Lower Lake is staffed with 1 ALS personnel at all times.

(Station 70) is where we primarily respond from and houses almost all of our paid staff. Station 65 in Lower Lake is staffed with 1 ALS personnel at all times.

Clearlake Station 70

14815 Olympic Dr. Clearlake, CA 95422
707-994-2170

Lower Lake Station 65

16354 Main St. Lower Lake, CA 95422
707-994-2531

Point Lakeview Station 66

13065 Anderson Rd. Lower Lake, CA 95422

Volunteer Airport Station 71 (at Pierce Airport)

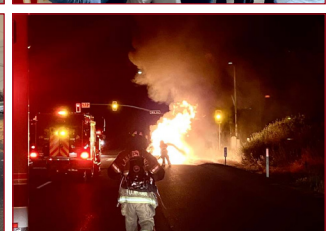
6905 Old Hwy. 53 Clearlake, CA 95422

Volunteer Park Station 72

13428 Lakeshore Dr. Clearlake, CA 95422

Volunteer Pinedale Station 73

10682 Lakeshore Dr. Clearlake Park, CA 95424



LAKE PILLSBURY FIRE PROTECTION DISTRICT

The Lake Pillsbury FPD provides first-response fire and medical service in their 14,329-square-mile district/SOI in Lake County. Local residents currently volunteer with Lake Pillsbury FPD, including “active” firefighters. Additional volunteers are support personnel.

Lake Pillsbury FPD has two stations

FIRE AGENCIES AND YOU

Station 95-1

29501 Fuller Dr., Bldg. B Potter Valley, CA 95469
707-824-9532 707-799-5876



Volunteer Station 95-2

2260 Rice Fork Rd. Potter Valley, CA 95469

LAKEPORT FIRE PROTECTION DISTRICT

The Lakeport Fire Protection District provides first-response fire and medical service to residents in their 49-square-mile district. The district includes the communities of Lakeport, North Lakeport, Scotts Valley, and Finley. Local residents currently volunteer with Lakeport FPD including “active” firefighters. Lakeport FPD has two fire stations.

Station 50

445 N. Main St. Lakeport, CA 95453
707-263-4396



Parkway Station 52

3600 Hill Rd. East Lakeport, CA 95453

NORTHSHORE FIRE PROTECTION DISTRICT

The Northshore FPD provides first-response fire and medical service in their more than 350-square-mile district in Lake County. The district includes the communities of Blue Lakes, Upper Lake, Nice, Lucerne, Paradise Valley, Kono Tayee, Glenhaven, Clearlake Oaks, Spring Valley, and Double Eagle. Local residents currently volunteer with Northshore FPD including “active” firefighters and paid staff. The Northshore FPD has seven fire stations.

Lucerne Station 85 (and District Office)

6257 7th Ave., Lucerne, CA 95458
707-274-3100



Clearlake Oaks Station 75

12655 E. State Hwy. 20, Clearlake Oaks, CA 95423
707-274-3100



Nice Station 85

3708 Manzanita Ave., Nice, CA 95464
707-274-8834

Upper Lake Station 90

9420 Main St., Upper Lake, CA 95485
707-275-2446



Glenhaven Station 76

9458 E. State Hwy. 20, Glenhaven, CA 95457

FIRE AGENCIES AND YOU

Volunteer Spring Valley Station 77

3178 Tamarack Way, Clearlake Oaks, CA 95423

Volunteer Blue Lakes Station 91

5200 W. State Hwy. 20 Upper Lake, CA 95485

SOUTH LAKE COUNTY FIRE PROTECTION DISTRICT

The South Lake County FPD provides first-response fire and medical service throughout their 289-square-mile district. Communities here include Loch Lomond, Cobb, Anderson Springs, Middletown, Hidden Valley, Coyote Valley, and The Geysers. All of South Lake County FPD's staffed stations are serviced by CAL FIRE personnel. Local residents currently volunteer with South Lake County FPD, including "active" firefighters and paid staff. South Lake County FPD has four fire stations located throughout the district.

Main Station 60 (and Training Ground)

21095 Hwy. 175 Middletown, CA 95461

707-987-3089

Hidden Valley Station 63

19287 Hartmann Rd. Hidden Valley Lake, CA 95467

707-987-2953

Cobb Station 62

16547 Hwy. 175 Cobb, CA 95426

707-928-5411

Loch Lomond Station 64

10331 Redwood Rd. Loch Lomond, CA 95461



CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

CAL FIRE provides wildland fire protection for private, industrial, county, state, and municipal forestlands. It provides wildland fire protection in their 753-square-mile service area in Lake County, within its Sonoma-Lake-Napa Unit. CAL FIRE provides wildland fire protection within State Responsibility Area (SRA) land surrounding the communities of Upper Lake, Nice, Lucerne, Clearlake Oaks, Clearlake, Lower Lake, Kelseyville, Lakeport, Cobb, and Middletown. CAL FIRE's Sonoma-Lake-Napa Unit has two battalions within Lake County.

Battalion 1417 includes the SRAs around Middletown, Cobb, Loch Lomond, Hidden Valley Lakes, Jerusalem Grade, Lower Lake, and extending south and east to the Napa County line.

Battalion 1418 includes the SRA lands around Clearlake, Spring Valley, Clearlake Oaks, Nice, Lucerne, Upper Lake, Lakeport, Kelseyville, and Clear Lake Riviera, extending out to the Colusa County line on the east and the Mendocino County line to the west. Battalion 1418 also provides direct protection to the federal Bureau of Land Management properties at Cow Mountain, Black Forest, and Cache Creek.

There are four CAL FIRE stations located within Lake County, along with a fire lookout on Mt. Konocti and a Conservation Camp.

FIRE AGENCIES AND YOU

Kelseyville-Cobb Station 34

8948 Hwy. 175 Kelseyville, CA 95453
707-279-4924

Clearlake Oaks Station 40

140 Spring St. Clearlake Oaks, CA 95423
707-998-3711

Middletown Station 31

15522 Lake St. Middletown, CA 95461
707-987-3089

Boggs Mountain Helitack Base Station 32

500 Forestry Rd. Cobb, CA 95426

Konocti Conservation Camp

13044 Hwy. 29 Lower Lake, CA 95457
707-994-2441

Konocti Lookout Top of Mt. Konocti on Konocti Rd.

Kelseyville, CA 95453



USDA FOREST SERVICE, MENDOCINO NATIONAL FOREST

Within Lake County, the US Forest Service provides wildland fire protection on Mendocino National Forest (MNF) lands and private in-holdings within the boundaries of the Forest. MNF's service area includes the community of Lake Pillsbury. The MNF provides wildland fire protection in their 256,725-square-mile service area in Lake County. The MNF Upper Lake Ranger District has permanent fire staff and seasonal firefighters from March to November.

Upper Lake Ranger Station

10025 Elk Mtn. Rd. Upper Lake, CA 95485
707-275-1400

Crew Soda Creek Ranger Station

27355 Road M1, Potter Valley, CA 95469
707-743-1582

We Live in a Wildfire Environment

The beautiful and scenic landscapes of Lake County make this area an enticing place to live and it is understandable why many people have sought homes adjacent to or within woodland and back-country areas. The intermingling of human developments such as roads and houses with undeveloped wildlands, is known as the wildland-urban interface (or “WUI” for short). **It is critical that WUI residents are aware of their heightened vulnerability to damage from wildfire AND that they know what can be done to reduce their risk and prepare their homes against the threat of wildfire.** In California, it’s not a matter of IF a wildfire will happen, but WHEN.



Fire has traditionally been, and will continue to be, an integral part of Lake County’s landscapes which have adapted to and evolved with fire. Consequently, many native plants are adapted to burn periodically; they need fire to be healthy, reproduce, and survive. Many Native American tribes observed and understood the beneficial effects of fire on the environment and incorporated small, intentional burns in their landscape management. Such practices improved food and cultural resources, such as acorns, basketry material, and grasses favored by deer and elk, which were hunted for food. Agricultural settlers in the 1800s also used intentional burns to improve and maintain grasslands for pasture animals.

These more frequent, low-intensity fires helped keep forest ecosystems healthy by burning away dead vegetation, brush, and regeneration in the understory, which replenishes soil nutrients and prevents forests and shrublands from becoming too overcrowded. Overcrowding can make trees less vigorous and more vulnerable to insects and diseases, such as the species of pine bark beetles as well as the fungus that causes Sudden Oak Death.

A history of fire suppression since the early 1930s has interrupted the region’s natural cycle of fire, altering the the landscape and allowing the accumulation of dense vegetation and dead fuels in forest understories. These large amounts of combustible materials, known as high fuel loads, increase the likelihood that wildfires will burn at a high intensity, with extremely hot temperatures and fast rates of spread. Historic logging and land management practices, as well as urban and suburban development, have contributed to increased wildfire fuel loads in the WUI. Additional pressure is due to climate change, which is causing us to swing between too little and too much precipitation, as well as extreme temperatures. Excessive rain can lead to lots of grass and other flashy fuels (those that burn quickly). If rains are followed by hot, dry spells, it only takes a spark and some wind to create the scenario for another catastrophic fire.

Pine Bark Beetles

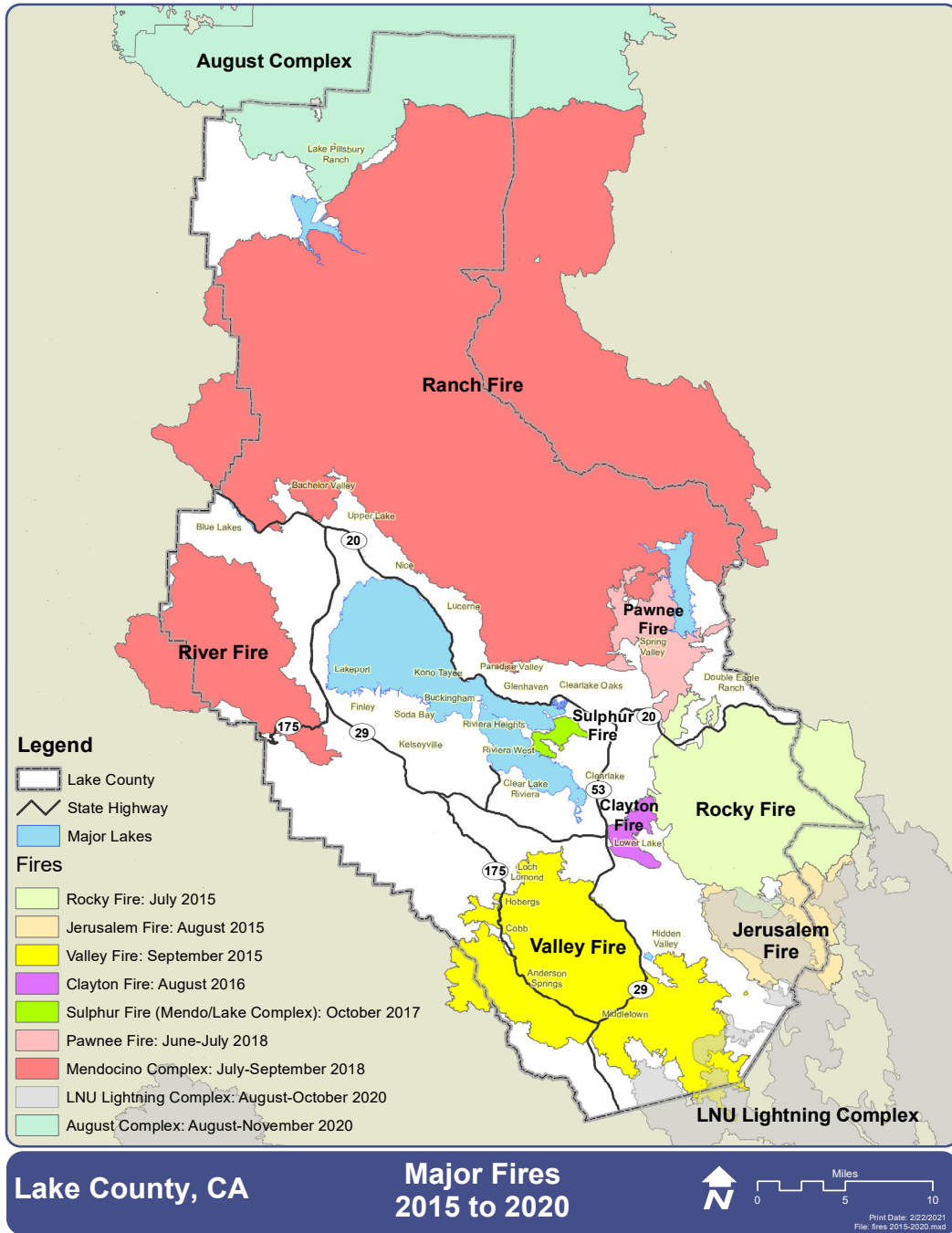
Bark beetles are tiny insects with hard, cylindrical bodies that reproduce under the bark of trees. Along the West Coast through the Rocky Mountains, bark beetles have affected tens of millions of acres of forest. While bark beetles are native to U.S. forests and play important ecological roles, they can cause extensive tree mortality and negative economic and social impacts. Climate change has led to an increase in these damaging effects, and forest ecologists are working to better understand bark beetle ecology and to improve forest management. For more information see <https://www.fs.fed.us/research/invasive-species/insects/bark-beetle.php>

Sudden Oak Death

Sudden Oak Death is a tree disease caused by the fungus-like plant pathogen *Phytophthora ramorum*. First recognized in the mid 1990s, the disease kills some oak species (primarily coast live oak, *Quercus agrifolia*, and an oak relative, tanoak, *Notholithocarpus densiflorus*) and has had devastating effects on coastal forests in California and Oregon. More information can be obtained from the California Oak Mortality Task Force: <https://www.suddenoakdeath.org/>

OUR LOCAL WILDFIRE ENVIRONMENT

Lake County Wildfires 2015-2020



Starting with a series of large fires in 2015, the Rocky, Jerusalem and Valley fires, Lake County has seen 65% of the county burn. At the time, the Valley Fire was the third most destructive fire in the State’s history, a record sadly overtaken by megafires throughout the state since then. Even though much of the county area has burned, this does not mean that it cannot burn again. Within a few years, new growth, especially of flammable brush will be susceptible to fire danger. As climate change continues to bring hotter and drier conditions to Lake County it become critical to implement the many best practices for fire prevention and mitigation outlined in this publication.

Hotter and Drier Weather Caused by Global Climate Change Are Driving Wildfire Increases

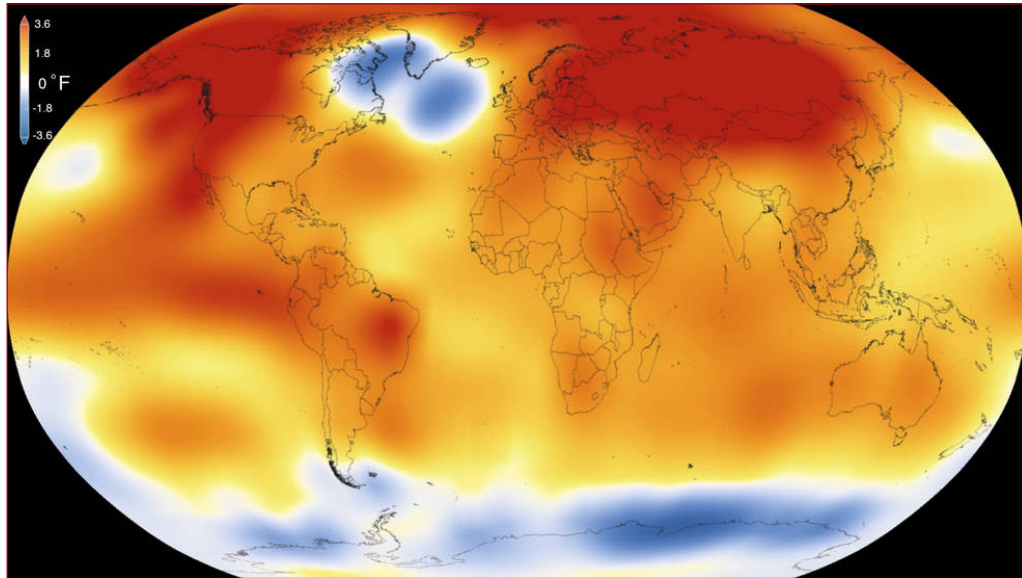


Image NASA <https://www.nasa.gov/sites/default/files/thumbnails/image/16-008.jpeg>

As can be seen in the map of recent wildfires in Lake County on page 13, which mirrors the situation in the entire State of California and truly, the entire western United States, the impact of wildfires has been increasing year by year. As documented in Scientific American magazine,

“The science is clear. Climate change plays an undeniable role in the unprecedented wildfires of recent years. More than half of the acres burned each year in the western United States can be attributed to climate change. The number of dry, warm, and windy autumn days—perfect wildfire weather—in California has more than doubled since the 1980s.”

- (<https://www.scientificamerican.com/article/climate-change-is-central-to-california-wildfires/>)

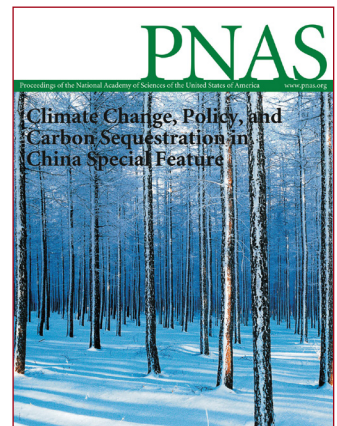
According to the Journal of Geophysical Research, without herculean efforts, current forecasts envision an increase of more than 78 percent in area burned by 2050. <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008jd010966>

The Proceedings of the National Academy of Sciences of the United States of America tells a similar story:

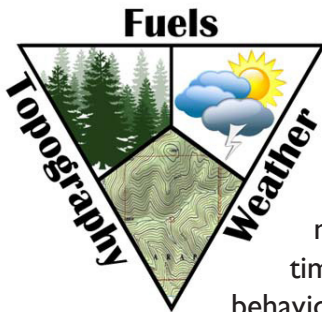
“If greenhouse gas emissions are not dramatically reduced, the devastating fire seasons of recent years (four million acres of California burned in 2020) may be remembered as relatively mild wildfire seasons.”

- <https://www.pnas.org/content/113/42/11770>

Reducing greenhouse gas emissions and reversing current climate change trends is an essential part of protecting our communities and ecosystems in the future.



Fire Behavior



How quickly a fire spreads, and in which direction (whether horizontally or vertically), how hot it burns, how long its flame lengths are, are all aspects of what's known as *fire behavior*. The faster, hotter, and bigger a fire becomes, the more difficult it is to control and more destructive it can be.

Knowing the attributes of fire behavior is important in order to communicate the various threats from any fire and the benefits of mitigation. Flame length, fire intensity, heat output, rate of spread, residence time, and whether it is a surface or a crown fire, are all aspects of fire behavior. This information helps us to understand fire's resistance to control, potential damage, and/or positive impacts.

There are three major contributing factors that affect fire behavior:

Weather, Topography, and Fuel



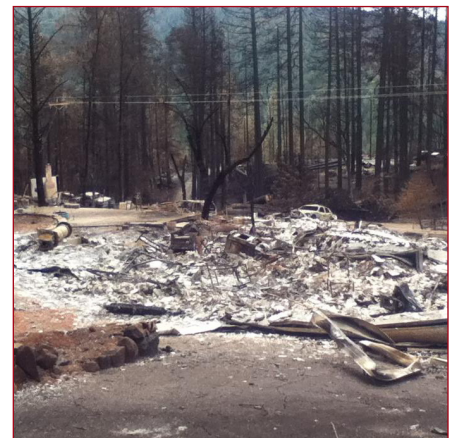
Weather characteristics such as wind, temperature, and relative humidity (i.e., moisture in the air) will influence the way a fire behaves. In general, strong, erratic winds, high temperatures, and low relative humidity will increase fire behavior.

Topography refers to characteristics of the landscape, including slope, aspect, and surface configurations—such as mountains, valleys, canyons, and drainages. Fire behavior tends to increase with steepness of the slope is, particularly in narrow canyons and drainages, which can create a chimney



effect, where a convection column of heat drives the fire quickly upwards. Fire behavior also tends to be greater on slopes with south and southwest aspects, because they receive more sun during the hotter part of the day, drying out fuels and make them more ignitable.

Fuels are any combustible materials. In regard to wildfire, fuels generally consist of living vegetation (trees, shrubs, grass) and dead plant material (dead trees, dried grass, fallen branches, pine needles, etc.). Homes in the path of a wildfire can become fuel too. The amount, size, moisture content, and arrangement of fuels have an influence on fire behavior. Drier fuels ignite more easily, and the more dense and continuous the distribution of fuels is, the more extreme the fire's behavior will be. Grass is considered a light, flashy fuel that burns quickly, while heavier fuels such as downed trees take longer to ignite and burn for longer periods of time. A fire burning through fuels that are spaced farther apart will not burn as quickly, while a fire burning through fuels that are crowded and continuous will tend to burn hotter and more rapidly.



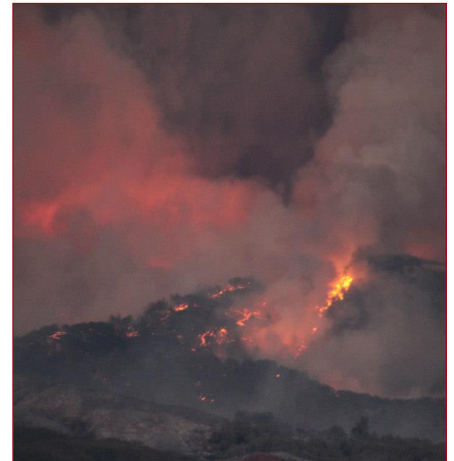
The Wildland-Urban Interface (WUI)

Human developments in the WUI create additional wildfire hazards. Vehicles, electrical wiring, appliances, chimneys, other potential ignition sources, and these developments put more values—such as lives, pets, property, and natural resources—at risk. People living in the WUI are at an increased risk of structure fires resulting from wildland fires and, vice versa, causing structure fires that ignite wildland fires. That is why it is especially important for residents living within the WUI to develop an understanding of fire behavior, fire risks, and how to take precautions to harden homes against destruction from wildfire. The pages that follow elaborate on these topics.



Extreme Fire Behavior

“Extreme” implies a level of fire-behavior characteristics that largely precludes methods of direct control. One or more of the following behaviors are usually involved: high rate of spread, prolific crowning and/or spotting ahead of the main fire, presence of fire whirls, and a strong convection column. Predictability is difficult because such fires often exert some degree of influence on their environment and behave erratically, sometimes dangerously. Fire suppression and control is almost impossible when a fire exhibits extreme behavior.



In recent years, some fires in California have exhibited extreme fire behavior. This is in large part due to weather and fuel conditions in California aligning to support rapid and extreme fire growth. It is imperative that anyone living in these conditions be prepared to evacuate quickly.

Ignition Sources, or How Do Fires Start?

Simply put, fire is a rapid combination of fuel, heat and air. When enough heat is applied to a fuel, the result is fire. Heat is necessary to begin the reaction. Once started, fire produces its own life-giving heat and the reaction becomes spontaneous. As long as there is fuel, air and heat present, the fire will continue to burn.

Summer storms – with or without rain – can produce lightning strikes, which have long been among the most common fire starters, or “ignition sources,” in Northern California. Many lightning-caused fires occur in remote, forested areas with few homesteads nearby; however, a single storm can generate numerous wildfires through multiple lightning strikes. Multiple, simultaneous wildfires can spread firefighting resources thin and limit suppression capabilities. However, even when wildfires are remote enough that they do not immediately threaten any human communities, the build-up of hazardous fuels from decades of dramatic fire suppression can produce high-intensity wildfires that have harmful effects on the environment.

Humans Cause 94% of Wildfires in California!

Today, the majority of wildfires are caused by humans. However, most human-caused fires are started by accident. This means that the number of wildfires started by humans can be significantly reduced with some prevention education and by increasing awareness of the actions and conditions that tend to spark accidental wildfires.

HUMANS ACCIDENTALLY CAUSE WILDFIRES BY...



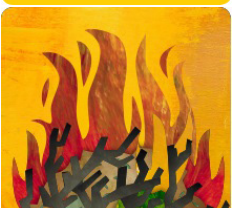
VEHICLES AND TOWING – For many of us, the vehicles we drive become second nature to us, and it is easy to forget that they are potentially dangerous machines that require constant vigilance. Vehicles can create sparks that can lead to wildfires in many ways, and it’s the driver’s responsibility to be mindful of and take action to prevent that from occurring. *See page 16 for more information on how to avoid vehicle-caused wildfire ignitions.*



EQUIPMENT AND MACHINERY USE – Lawn mowers, weed whackers, chainsaws, and other machinery are useful tools for managing vegetation on your property, among other tasks. However, it is important to always be mindful of fire hazard conditions when operating equipment and machinery outside. If it is a hot, dry or windy day, it is not a good time to mow your lawn. These conditions cause low moisture levels in vegetation, making them highly combustible, and all it takes is a single spark from your equipment to ignite a fire. Early morning, when the air is cooler and the wind is calmer, is a better time to use equipment during fire season. *See page 18 for more information on avoiding equipment and machine-caused wildfire ignitions.*



CAMPFIRES – Camping is a great way to enjoy and experience firsthand the scenic landscapes and natural resources Northern California has to offer. Campfires are an all-time favorite part of the camping experience, but it’s important to remember that summer—the most popular time for camping—is also fire season. Campfires are the 3rd leading cause of human-caused wildfires. Safe and responsible management of campfires is crucial to protecting yourself and others, as well as the natural surroundings you’re there to enjoy.



DEBRIS BURNING – Debris or pile burning is one way to dispose of debris from vegetation management on your property. However, there are sensible regulations on how and when this is done, and for good reason. Unattended or oversized burn piles can “escape” and cause wildfires that put homes and people directly at risk. *See pages 21, 27 and 36-42 for more information on how to pile burn safely.*

Unfortunately, not all human-caused fires start by accident...

Arson is a serious problem for some communities in this region. Grave consequences ensue for perpetrators who endanger countless lives and properties and cause potentially millions of dollars in damages. If you have information about arson behavior, or suspect someone of arson, don’t hesitate... Make a report!

Call the CAL FIRE Arson Hotline: 1-800-468-4408



OPEN CAMPFIRE SAFETY RULES

Campfire Safety to Prevent Wildfire

LEARN HOW TO BUILD AN OPEN CAMPFIRE, MAINTAIN IT DURING THE BURN TIME AND HOW TO EXTINGUISH AN OPEN CAMPFIRE WHEN FINISHED:

BUILD

TO BUILD AN OPEN CAMPFIRE:



SELECT A LEVEL, OPEN LOCATION AWAY FROM HEAVY FUELS SUCH AS LOGS, BRUSH OR DECAYING LEAVES AND NEEDLES.

5 FT

CLEAR AN AREA AT LEAST 5 FEET FROM FIRE'S EDGE (LOCAL REGULATIONS MAY VARY).



SCRAPE AWAY GRASS, LEAVES OR NEEDLES DOWN TO THE MINERAL SOIL.

1

CUT WOOD IN SHORT LENGTHS, PILE WITHIN CLEARED AREA AND LIGHT THE FIRE.



SCOOP A DEPRESSION IN THE CENTER OF THE CLEARED AREA IN WHICH TO BUILD THE FIRE AND PUT A RING OF ROCKS AROUND IT.



THE FIRE SHOULD BE BUILT NO LARGER THAN NECESSARY FOR COOKING OR PERSONAL WARMTH.



YOUR FIRE MUST NEVER BE LEFT UNATTENDED AND THE FIRE MUST BE EXTINGUISHED COMPLETELY BEFORE LEAVING.

BURN

THE FIRE IS BURNING



KEEP A SHOVEL AND BUCKET OF WATER NEARBY AT ALL TIMES.



WHILE THE FIRE IS BURNING, BE SURE THERE IS A RESPONSIBLE PERSON IN ATTENDANCE OF THE FIRE AT ALL TIMES.



NEVER LEAVE CHILDREN AROUND A FIRE UNATTENDED.

OUT

COMPLETELY EXTINGUISH AN OPEN CAMPFIRE



USE THE "DROWN, STIR AND FEEL" METHOD: DROWN THE FIRE WITH WATER, THEN STIR AROUND THE FIRE AREA WITH YOUR SHOVEL TO WET ANY REMAINING EMBERS AND ASH.



FEEL THE AREA WITH THE BACK OF YOUR HAND TO ENSURE NOTHING IS STILL SMOLDERING.



TURN WOOD AND COALS OVER AND WET ALL SIDES.



MOVE SOME DIRT ONTO THE FIRE SITE AND MIX THOROUGHLY TO FULLY SMOTHER IT.

ONE LESS SPARK
ONE LESS WILDFIRE

FOR MORE INFORMATION AND A PRINT-READY CAMPFIRE PERMIT VISIT:
PREVENTWILDFIRECA.ORG
[#PREVENTWILDFIRE](https://twitter.com/PreventWildfire) [#ONELESSSPARK](https://twitter.com/OneLessSpark)

BROUGHT TO YOU BY THE CALIFORNIA WILDLAND FIRE COORDINATING GROUP (CWCG)

ONE LESS SPARK ONE LESS WILDFIRE

ONE LESS SPARK ONE LESS WILDFIRE



CAUSED BY: VEHICLES

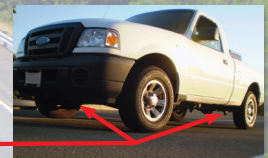
Safe Towing

Dragging chains will throw sparks. Never substitute parts when towing. Only use appropriate safety pins & hitch ball.



Nothing Dragging

Make sure your vehicle is properly maintained, with nothing dragging on the ground.



Be Wheel Safe

Check tire pressure. Driving on an exposed wheel rim throws sparks.



Only You Can Prevent Wildfires.



CARRY A FIRE EXTINGUISHER IN YOUR VEHICLE AND LEARN HOW TO USE IT.

California Wildfire Coordinating Group



Produced in cooperation with the USDA Forest Service, which is an equal opportunity service provider and employer.
Photography by Forest Service: Mark Thibideau and Ron Hodgson
ES-PW-000 June 2013

FREE
No Spark Tow Chain Cover Kit
Uses Recycled Fire Hose

This No Spark Tow Chain Cover Kit includes two 18" sections of used fire hose and installation instructions. Chain covers prevent sparks caused by metal chains dragging on pavement that could ignite dry roadside vegetation, leading to a wildfire while also helping our environment by recycling used fire hose.

Installation Instructions

Step 1: Measure chains and covers to ensure a proper fit.



Step 2: Slip covers over chains.



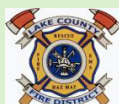
Step 3: Cross chains with covers for added safety.



Step 4: Attach the covered chains to trailer hitch.



Please tell your friends with trailers to watch for FREE No Spark Tow Chain Cover Kits at boat & equipment rentals, marinas, campgrounds, and hardware stores. This fire safety project idea is courtesy of Yuba County Fire Safe Council. To support this fire prevention program and other community based resilience and redevelopment efforts in Lake County, please go to SSCRA.org for more information, location of kits and to donate online. Contact SSCRA.org or Wendy Collins (707 245-2351) for more kits.



ONE LESS SPARK

ONE LESS WILDFIRE

ONE LESS SPARK

ONE LESS WILDFIRE

CAUSED BY: HOMEOWNERS

Use the Right Equipment

Use string vegetation trimmers to cut tall, dry grass.



Remove Rocks

Remove rocks from dry grass or weeds. Metal mower blades hitting rocks start wildfires.



Be Ready!

Have water and a fire extinguisher readily available.



Only You Can Prevent Wildfires.



HAVE WATER AND/OR A FIRE EXTINGUISHER AVAILABLE AND KNOW HOW TO USE THEM.



Produced in cooperation with the USDA Forest Service, which is an equal opportunity service provider and employer.
Photography by Forest Service: Mark Thibideau and Ron Hodgson July 2013



EQUIPMENT SAFETY

Practice Using Equipment Safely

LEARN HOW TO USE OUTDOOR EQUIPMENT PROPERLY TO HELP KEEP FROM SPARKING A WILDFIRE:

MOWING

MOW BEFORE 10 A.M., BUT NEVER WHEN IT'S WINDY OR EXCESSIVELY DRY.

LAWN MOWERS ARE DESIGNED TO MOW LAWNS, NOT WEEDS OR DRY GRASS.

METAL BLADES STRIKING ROCKS CAN CREATE SPARKS AND START FIRES.

SPARK ARRESTERS

IN WILDLAND AREAS, SPARK ARRESTERS ARE REQUIRED ON ALL PORTABLE GASOLINE-POWERED EQUIPMENT THIS INCLUDES TRACTORS, HARVESTERS, CHAINSAWS, WEEDEATERS AND MOWERS.

KEEP THE EXHAUST SYSTEM, SPARK ARRESTERS AND MOWER IN PROPER WORKING ORDER AND FREE OF CARBON BUILDUP.

6 C
Carbon 12.011

USE THE RECOMMENDED GRADE OF FUEL AND DON'T TOP IT OFF.

EQUIPMENT USE

KEEP A SHOVEL AND A FIRE EXTINGUISHER READY TO USE.

IN WILDLAND AREAS, GRINDING AND WELDING OPERATIONS REQUIRE A PERMIT AND 10-FOOT OF CLEARANCE.

DON'T DRIVE YOUR VEHICLE ONTO DRY GRASS OR BRUSH. HOT EXHAUST PIPES AND MUFFLERS CAN START FIRES THAT YOU WON'T EVEN SEE—UNTIL IT'S TOO LATE!

KEEP A CELL PHONE NEARBY AND CALL 911 IMMEDIATELY IN CASE OF FIRE.

TERRAIN

TO PROTECT WATER QUALITY, DO NOT CLEAR VEGETATION NEAR WATERWAYS TO BARE SOIL.

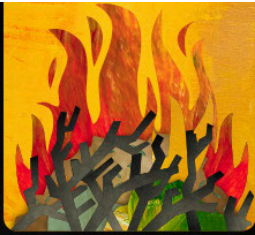
VEGETATION REMOVAL CAN CAUSE SOIL EROSION, ESPECIALLY ON STEEP SLOPES.

KEEP SOIL DISTURBANCE TO A MINIMUM.

FOR MORE INFORMATION AND A PRINT-READY CAMPFIRE PERMIT VISIT:
PREVENTWILDFIRECA.ORG
#PREVENTWILDFIRE #ONELESSSPARK

BROUGHT TO YOU BY THE CALIFORNIA WILDLAND FIRE COORDINATING GROUP (CWCG)

www.preventwildfireca.org



LANDSCAPE DEBRIS BURNING

Proper Debris Burning Prevents Wildfire

LEARN THE HOW, WHAT AND WHEN OF PREVENTING WILDFIRES FROM IMPROPER BURNING:

HOW



DON'T BURN UNLESS WEATHER CONDITIONS (PARTICULARLY WIND) ARE SUCH THAT BURNING CAN BE CONSIDERED SAFE.



KEEP A WATER SUPPLY AND SHOVEL CLOSE TO THE BURNING SITE.



A RESPONSIBLE ADULT IS REQUIRED BY LAW TO BE IN ATTENDANCE UNTIL THE FIRE IS OUT.

LANDSCAPE DEBRIS PILES MUST BE IN SMALL 4-FEET BY 4-FEET PILES.

4 FT



10 FT

CLEAR ALL FLAMMABLE MATERIAL AND VEGETATION WITHIN 10-FEET OF THE OUTER EDGE OF PILE.

WHAT



NO HOUSEHOLD TRASH OR GARBAGE CAN BE BURNED OUTDOORS AT RESIDENCES.



OK
DRY, NATURAL VEGETATION, GROWN ON THE PROPERTY CAN STILL BE BURNED OUTDOORS IN OPEN PILES, UNLESS PROHIBITED BY LOCAL ORDINANCES.

WHEN



DON'T BURN IF IT IS WINDY AND THE SURROUNDING VEGETATION IS VERY DRY.

PERMITS

BURNING CAN ONLY BE DONE AFTER OBTAINING REQUIRED PERMITS FOR PERMISSIVE BURN DAYS. CHECK BURN DAYS BY CONTACTING YOUR LOCAL AIR DISTRICT.

How to Safely Burn Landscape Debris

Burning yard waste is unfortunately a major cause of fire in our region. All burning requires a permit. Follow the requirements of your burn permit and the information below to safely burn your yard waste.

- ✓ On a burn day, yard waste piles for a Standard permit up to 4 feet and Non-Standard up to 10 feet, may be burned.
- ✓ Clear all flammable material and vegetation within 10 feet of the outer edge of the debris pile.
- ✓ Keep a water supply and shovel close to the burning site.
- ✓ A responsible adult is required by law to be in attendance until the fire is out.
- ✓ No burning shall be undertaken unless weather conditions (particularly wind) are such that burning can be considered safe.

It is important for residents to stay mindful of current weather conditions when burning. If it's windy and the surrounding vegetation is very dry, it may be best to wait and burn landscape debris another day.

Continued on page 27.



Burning is allowed only on Cal Fire-designated burn days, and with a burn permit. Burn permits are valid only on those days during which burning is not prohibited by the State Air Resources Board. Call: North County at (707) 263-3121 or South County at (707) 994-4444 for burn day status prior to igniting fire. See page 36-42 of this Resource Guide for more information on burn permits and air quality concerns.

ONE LESS SPARK
ONE LESS WILDFIRE

FOR MORE INFORMATION AND A PRINT-READY CAMPFIRE PERMIT VISIT:

PREVENTWILDFIRE.CA.ORG
#PREVENTWILDFIRE #ONELESSSPARK

BROUGHT TO YOU BY THE CALIFORNIA WILDLAND FIRE COORDINATING GROUP (CWC6)

How Homes Catch Fire

Three factors are required for fire: fuel, oxygen, and heat; together they comprise what we call the fire triangle. If any one of these elements is missing, a fire won't start; or should it start, it won't spread. Fuel is the one element of the fire triangle that we can modify. For this reason, the general principle behind making an area "fire safe" (making it as safe as possible for when a fire does pass through) is to reduce the amount of fuel that a fire could consume and to alter its arrangement and type. In other words, you do not want anything near your home that could ignite, burn, or spread fire. The fuels closest to a home – including the home itself – are often what make the difference between surviving a wildfire or not. Wildfire ignites homes through transferring heat in three ways: flying embers, radiant heat, or direct contact by flame.



Three Ways Your Home Can Be Exposed to Fire*

Burning Embers

Burning needles, leaves, branches and cones create embers or brands in a "blizzard" during a wildfire, and land on combustible materials on the home or enter the home through vents and other openings.

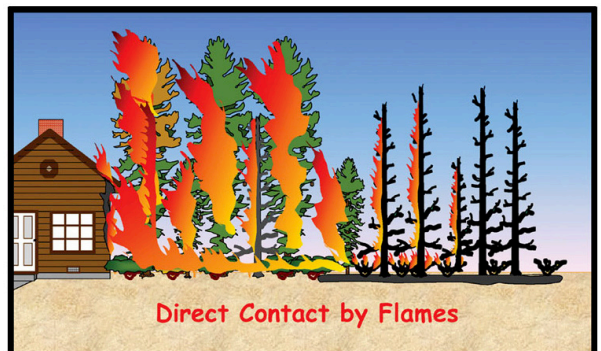
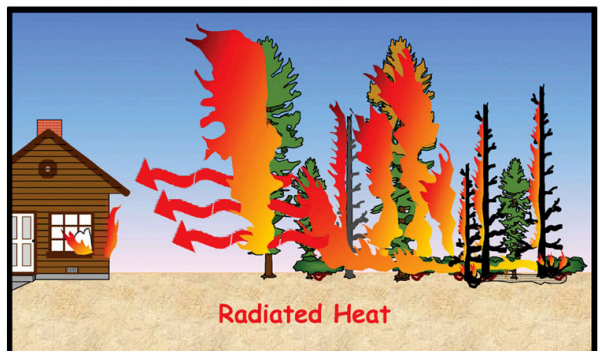
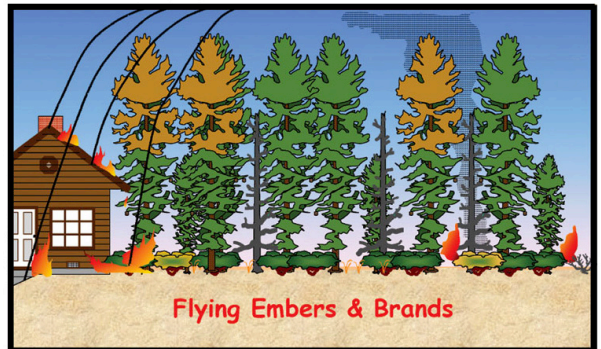
Radiated Heat

Heat from burning vegetation or structures ignites the home's roof, siding, decks, or porches, or breaks windows, allowing ignition of the interior of the home.

Direct Flame

Combustible fuels (e.g., grass, pine needles, dry leaves, woodpiles, furniture, doormats) on or immediately adjacent to the home ignite and spread the fire to the home itself. This is also referred to as "Flame Impingement," which is the transfer of heat through direct flame exposure.

* Reprinted from "Safer From the Start: A Guide to Firewise-Friendly Development," produced by the NFPA in cooperation with the US Forest Service. Available at: www.nfpa.org/-/media/Files/Training/certification/CWMS/SaferFromTheStart.ashx



Know the Law

Creating and Maintaining Defensible Space

In Lake County, most residents live in a State Responsibility Area (SRA) under the protection and jurisdiction of Cal Fire. An SRA includes those parts of the county that have not been incorporated, or everywhere in the county outside the cities of Lakeport and Clearlake. As a property owner in the SRA, you are responsible under state law for ensuring that your property is in compliance with California's building and fire codes that call for homeowners to take proactive steps to protect their property from a wildfire. Proactive steps include clearing out flammable materials such as brush or vegetation around their buildings to 100 feet (or the property line) to create a defensible space buffer. This helps halt the progress of an approaching wildfire and keeps firefighters safe while they defend your home.

Hardening Your Home

California law also requires new homes to be constructed with fire-resistant materials. By building your home with materials like fire-resistant roofing, enclosed eaves and dual-paned windows, you are hardening your home and giving it a fighting chance to survive a wildfire. By following the law, you will help prevent buildings from being ignited by flying embers, which can travel as much as a mile away from a wildfire.

Selling Your Home

Assembly Bill 38 established that on and after July 1, 2021 when you sell property that is located in a [high or very high fire hazard severity zone](#), you'll need documentation of a compliant Defensible Space Inspection. For more information on the Assembly Bill 38 legislation To see how the need for Defensible Space is affecting real estate, visit <https://storymaps.arcgis.com/stories/b2fc79e82aec4ecab4250987db7312cb>

To request an AB 38 inspection, visit:

<https://www.fire.ca.gov/programs/communications/defensible-space-prc-4291/>

Getting Help For Your Mitigation

Whether retrofitting your home with materials rated for fire resistance, or clearing brush and hazardous fire fuels from your roof or your property – and whether you are a new property owner or starting again after a difficult dry season or a period of high winds – you may discover that you need help with the associated costs.

For up to date information on grant and technical assistance that may be available at different times of the year, be sure to check the listings regularly in this booklet for any of the following:

- ✓ Lake County Fire Safe Council
- ✓ South Lake Fire Safe Council
- ✓ Nearby Firewise Community®
- ✓ Clear Lake Environmental Research Center (CLERC)
- ✓ Tribal Eco-Restoration Alliance (TERA)
- ✓ Local municipal advisory council
- ✓ Lake County Community Risk Reduction Authority
- ✓ Your homeowner or property owners association manager

Separate listings for your County Supervisor or tribal environmental manager can be found online or in a phone directory.



Winners & Losers?

Firefighters used to use the terms “winners” and “losers” – preferable terms now are “defendable” and “not defendable” – to distinguish between those houses with defensible space versus those that do not have it. In a larger emergency situation (where many homes are threatened), homes without defensible space may get passed over in favor of protecting those with defensible space, which have a greater chance of survival and offer firefighters a safer environment. Firefighter safety is often more threatened in structure protection (i.e., homes and buildings), than in wildland situations. Homeowners should provide an inviting condition; after all, firefighters may be your friends, neighbors, or relatives. If it is too dangerous for firefighters to get in and out of an area, they are instructed not to risk their lives and equipment to save something that is not defensible.



Being Ready—Preparing Your Home and Property for Wildfire

Being ready for wildfire starts with maintaining an adequate defensible space and by hardening your home by using ignition-resistant building materials.* Defensible space is the buffer you create by removing dead plants, grass and weeds. This buffer helps to keep the fire away from your home. Hardening your home means using construction materials that can help your home withstand flying embers finding weak spots in the construction, which can result in your house catching fire. It takes the combination of both defensible space and the hardening of your home to really give your house the best chance of surviving a wildfire.

Hardening Your Home

Flying embers can destroy homes up to a mile from a wildfire. “Harden” your home now before a fire starts by using ember-resistant building materials.

Here are some things you can do to harden your home and make it more fire resistant.

Roof

The roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire.

- Build your roof or re-roof with materials such as composition, metal or tile.
- Block any spaces between roof decking and covering to prevent embers from catching.

Vents

Vents on homes create openings for flying embers.

- Cover all vent openings with 1/8-inch mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Protect vents in eaves or cornices with baffles to block embers (mesh is not enough).

Eaves and Soffits

Eaves and soffits should be protected with ignition-resistant* or non-combustible materials.

Windows

Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start fires inside. Single-paned and large windows are particularly vulnerable.

- Install dual-paned windows with one pane of tempered glass to reduce the chance of breakage in a fire.
- Consider limiting the size and number of windows that face large areas of vegetation.

Walls

Wood products, such as boards, panels or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas.

- Build or remodel your walls with ignition-resistant* building materials, such as stucco, fiber cement, wall siding, fire-retardant-treated wood, or other approved materials.
- Be sure to extend materials from the foundation to the roof.

Decks

Surfaces within 10 feet of the building should be constructed with ignition-resistant,* non-combustible, or other approved materials.

- Ensure that all combustible items are removed from underneath your deck.

Rain Gutters

- Screen or enclose rain gutters to prevent accumulation of plant debris.

Patio Cover

- Use the same ignition-resistant* materials for patio coverings as a roof.

***Ignition-resistant building materials** are those that resist ignition or sustained burning when exposed to embers and small flames from wildfires. Examples of ignition-resistant materials include “non-combustible materials” that don’t burn, exterior grade fire-retardant-treated wood lumber, fire-retardant-treated wood shakes and shingles listed by the State Fire Marshal (SFM) and any material that has been tested in accordance with SFM Standard I2-7A-5.

Hardening Your Home, cont'd

Chimneys

- Cover your chimney and stovepipe outlets with a non-combustible screen.
- Use metal screen material with openings no smaller than 3/8 inch and no larger than 1/2 inch to prevent embers from escaping and igniting a fire.

Garage

- Have a fire extinguisher and tools such as a shovel, rake, bucket, and hoe available for fire emergencies.
- Install weather stripping around and under the garage door to prevent embers from blowing in.
- Store all combustible and flammable liquids away from ignition sources.

Address

- Make sure your address is clearly visible from the road. See “Reflect to Protect” program on page 57.

Water Supply

- Have multiple garden hoses that are long enough to reach all the way around your home and other structures on your property.
- If you have a pool or well, consider getting a pump to reach all areas of your home and other structures on your property.
- If you have a pool or well, consider getting a pump.



Useful Links

There are many great online resources for fire-safe construction. The two below are a few from the University of California, Berkeley.

Their Homeowner Wildfire Assessment is a simple questionnaire to assess your home's general preparedness. Their Homeowner's Wildfire Mitigation Guide is an easy-to-use guide showing the different areas of your home and what you can do to make each one fire safe.

1. Homeowner Wildfire Assessment: http://firecenter.berkeley.edu/homeassessment/home_assess_intro.html
2. Homeowner's Wildfire Mitigation Guide: <http://ucanr.edu/sites/Wildfire/>

Fences

- Consider using ignition-resistant* or non-combustible fence materials to protect your home during a wildfire.

Driveways and Access Roads

- Driveways should be built and maintained in accordance with state and local codes to allow fire and emergency vehicles to reach your home. Consider maintaining access roads with a minimum of 10 feet of clearance on either side, allowing for two-way traffic.
- Ensure that all gates open inward and are wide enough to accommodate emergency equipment.
- Trim trees and shrubs overhanging the road to allow emergency vehicles to pass.

What is a Hardened Home?



“Fire hardened” means your home is more secure from wildfire threats. It does NOT mean fireproof; rather that you have protected the weakest parts of your home's vulnerabilities with proven building materials and/or techniques to resist some heat and flame along with the ember storm that accompanies large wildfires. A common misconception is that buildings burn randomly during wildfire events, this is not the case. It is the most vulnerable homes, those built or retrofitted without consideration for fire-safe construction, that have the greatest likelihood of burning.

Part of learning to live with wildfire is cultivating an understanding that we have much control regarding how we address this vulnerability, and how we can prepare and manage for fire in our individual communities. Hardened-home features are mandatory for new construction, yet these suggested standards are also useful when remodeling or making improvements to your home to enhance its fire safety. Three priority considerations and target areas for hardening your home to wildfire are: the roof, the vents, and materials immediately surrounding the home.

Visit **Wildfire Protection Building Construction**, <http://osfm.fire.ca.gov/codedevelopment/wildfireprotectionbuilding-construction> for detailed legal requirements in California.

Maintaining Defensible Space Around Your Home

Protect Your Family, Home, and Property by Creating and Maintaining Defensible Space Now

CAL FIRE defines defensible space as: "...the buffer you create between a building on your property and the grass, trees, shrubs, or any wildland area that surrounds it. This space is needed to slow or stop the spread of wildfire and it protects your home from catching fire—either from direct flame contact or radiant heat. Defensible space is also important for the protection of firefighters defending your home."



Defensible space is your property's front-line defense against wildfire..

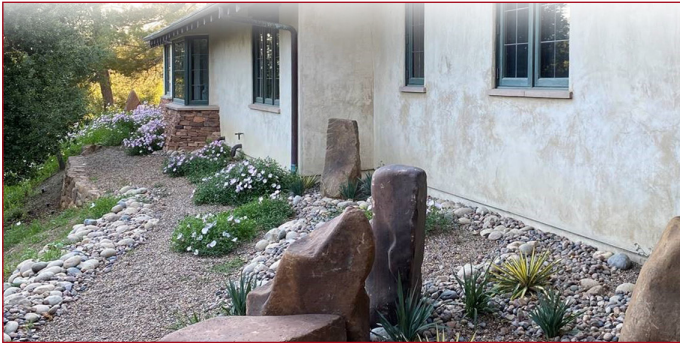
Creating and maintaining defensible space around your home can dramatically increase your home's chance of surviving a wildfire and improves the safety of firefighters defending your property. One hundred feet of defensible space is required by law.

Defensible space and clearing does not mean that you denude or clearcut your property. Rather, your goal is to remove the most flammable materials. Balance your fire-safety actions with general ecosystem health. Don't disturb the ground around streams or you will cause erosion that will harm fish. If you have the good fortune to live along a stream or river with fish in it, make sure you stay at least 100 feet away from the stream or outside of the Streamside Management Area in your clearing activities. It's okay to remove some dead vegetation there (like pruning in your garden); however, don't take out live vegetation—especially trees—near streams or rivers. Always maintain a dense shade canopy for fish. Finally, many species of wildlife—such as bear, fox, bobcat, songbirds, and others—use streams as corridors in which to move from one area to another. Leave them some cover to be able to do this without disturbing you, or vice versa. If you feel that more intensive treatment may be necessary near a stream (as may be the case in some instances), contact the County of Lake Community Development Department to determine if a Special Permit is required for work within the Streamside Management Area. County CDD may be reached by calling the general number at (707) 263-2221, or emailing cdd@lakecountyca.gov, or visiting http://www.lakecountyca.gov/Government/Directory/Community_Development.htm

Defensible Space Basics

You will learn how to create your defensible space in the following pages. Here is a summary of some of the basics to keep in mind.

- ✓ Provide a minimum 100 feet of clearance of flammable materials around your home. Clearance does not mean dirt or gravel—it's about flammability—so remove things that are easily ignitable from this area. If you live on a hill, you should extend this up to 200 feet, depending upon the steepness of the slope and the presence of surrounding fuel.
- ✓ Landscape your defensible space with fire-resistant plants. While no plant is immune to fire, certain plants do exhibit traits that can slow or reduce the spread of fire. Most deciduous trees and shrubs are fire-resistant. Fire-resistant plants generally look green (not brown), healthy, and vibrant. In addition, they have:
 - Leaves that are moist and supple;
 - Little dead wood, and tend not to accumulate dry, dead material within the plant;
 - Sap that is water-like (versus thicker or stickier) and does not have a strong odor.
- ✓ Keep your gutters and roofs clean of vegetation and debris, especially redwood, Douglas-fir, and/or pine needles.
- ✓ Move all flammable materials (such as firewood or propane tanks) at least 30 feet from homes or structures.
- ✓ Remember the other species that share the land. Leave a vegetation buffer around streams and other wild-life corridors.



Continued from page 21.

What to Do with the Materials from your Defensible Space Activities

More on Landscape Debris Burning

What can be burned?

Dry, natural vegetation, grown on the property can still be burned outdoors in open piles, unless prohibited by local ordinances. No household trash or garbage can be burned outdoors at residences.

When can you burn?

Burning is allowed only on Cal Fire-designated burn days, and with a burn permit. Burn permits are valid only on those days during which burning is not prohibited by the State Air Resources Board. Call: North County at (707) 263-3121 or South County at (707) 994-4444 for burn day status prior to igniting fire. See page 36-42 of this Resource Guide for more information on burn permits and air quality concerns.



Defensible Space Zones

Two zones make up the required 100 feet of defensible space.

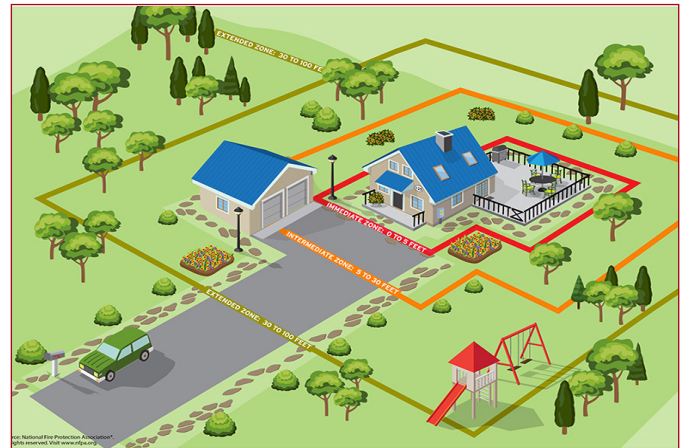
Zone 0 extends 5 feet from buildings, structures, decks, etc.

The ember-resistant zone is currently not required by law, but science has proven it to be the most important of all the defensible space zones. This zone includes the area under and around all attached decks, and requires the most stringent wildfire fuel reduction. The ember-resistant zone is designed to keep fire or embers from igniting materials that can spread the fire to your home. The following provides guidance for this zone, which may change based on the regulation developed by the Board of Forestry and Fire Protection.

- 1** Use hardscape like gravel, pavers, concrete and other noncombustible mulch materials. No combustible bark or mulch
- 2** Remove all dead and dying weeds, grass, plants, shrubs, trees, branches and vegetative debris (leaves, needles, cones, bark, etc.); Check your roofs, gutters, decks, porches, stairways, etc.
- 3** Remove all branches within 10 feet of any chimney or stovepipe outlet
- 4** Limit plants in this area to low growing, nonwoody, properly watered and maintained plants
- 5** Limit combustible items (outdoor furniture, planters, etc.) on top of decks
- 6** Relocate firewood and lumber to Zone 2
- 7** Replace combustible fencing, gates, and arbors attach to the home with noncombustible alternatives
- 8** Consider relocating garbage and recycling containers outside this zone
- 9** Consider relocating boats, RVs, vehicles and other combustible items outside this zone

Zone 1—extends 30 feet out from buildings, decks, and other structures

- 10** Remove all dead plants, grass and weeds.
- 11** Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- 12** Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- 13** Remove dead branches that hang over your roof. Keep branches 10 feet away from your chimney.



- 14** Relocate exposed woodpiles outside of Zone 1 unless they are completely covered in fire-resistant material.
- 15** Remove or prune flammable plants and shrubs near windows.
- 16** Remove vegetation and items that could catch fire from around and under decks.
- 17** Create separation between trees, shrubs and items that could catch fire, such as patio furniture, swing sets, etc.

Zone 2—extends 30 to 100 feet from buildings and other structures

- 18** Cut or mow annual grass down to a maximum height of 4 inches.
- 19** Create horizontal spacing between shrubs and trees. (See diagram next page.)
- 20** Create vertical spacing between grass, shrubs and trees. (See diagram next page.)
- 21** Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 4 inches if erosion control is an issue.

All Zones—0 to 100 feet from buildings and other structures

- 22** Mow before 10 a.m., but never when it's windy or excessively dry.
- 23** Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.

Plant and Tree Spacing in Your Defensible Space

The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfires. The spacing needed is determined by the type and size of brush and trees, as well as the slope of the land. For example, a property on a steep slope with larger vegetation requires greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

Vertical Spacing

- ✓ Remove all tree branches at least 6 feet from the ground.
- ✓ Allow extra vertical space between shrubs and trees. Lack of vertical space can allow a fire to move from the ground to the brush to the tree tops, like a ladder.

Minimum Vertical Spacing Between Trees and Shrubs

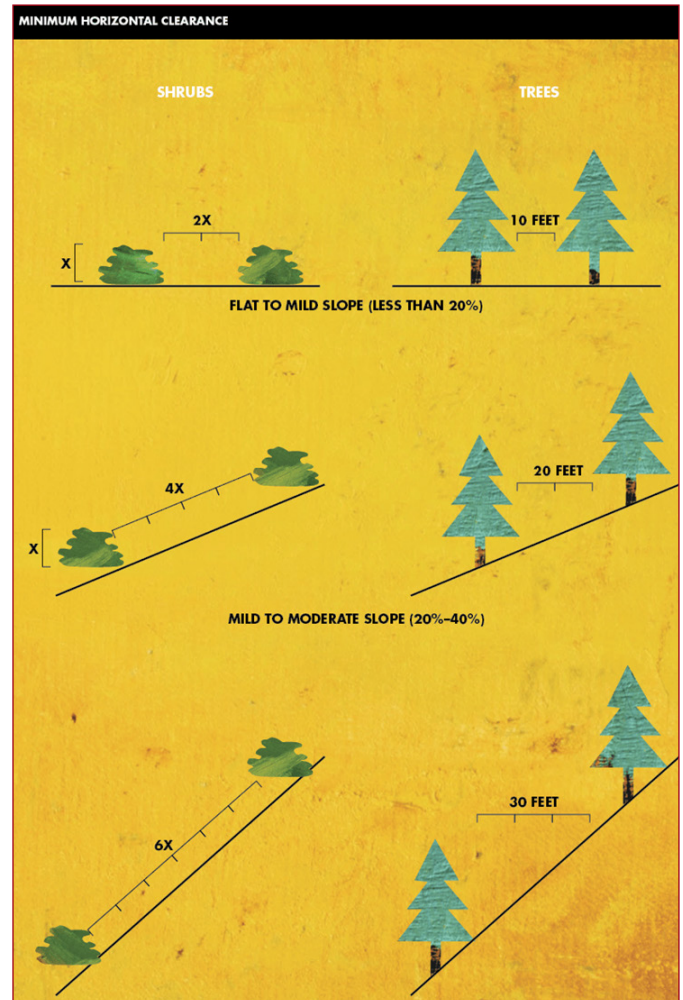
- ✓ For the proper vertical spacing between shrubs and the lowest branches of trees, create at least three times the shrub height in space between the top of the shrub and the bottom of the tree.

Example: A five-foot shrub is growing near a tree.
 $3 \times 5 = 15$ feet of clearance needed between the top of the shrub and the lowest tree branch.



Minimum Horizontal Spacing for Trees and Shrubs

Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. Check the diagram below to determine spacing distance.



Fire-Resistant Landscaping

A fire-resistant landscape isn't necessarily the same thing as a well-maintained yard. A fire-safe landscape uses fire-resistant plants that are strategically planted to resist the spread of fire to your home. The good news is, you don't need a lot of money to make your landscape fire safe. And you will find that a fire-safe landscape can increase your property value and conserve water while beautifying your home.

Choose Fire-Resistant Plants and Materials

- ✓ Create fire-safe zones with stone walls, patios, decks and roadways.
- ✓ Use rock, mulch, flower beds and gardens as ground cover for bare spaces and as effective firebreaks.
- ✓ There are no "fire-proof" plants. Select high-moisture plants that grow close to the ground and have a low sap or resin content.
- ✓ Choose fire-retardant plant species that resist ignition such as rockrose, ice plant and aloe.
- ✓ Select fire-resistant shrubs such as hedging roses, bush honeysuckles, currant, cotoneaster, sumac and shrub apples.
- ✓ Plant hardwood, maple, poplar and cherry trees that are less flammable than pine, fir and other conifers.
- ✓ Check your local nursery, landscape contractor or county's UC Cooperative Extension service for advice on fire-resistant plants that are suited for your area.



Fire-Resistant Plant Characteristics*

Remember, any plant can burn under the right conditions. For all plants, make sure to trim back and remove any dead vegetation and litter. When choosing species to plant or keep when performing fuel modification, look for plants with fire-resistant characteristics:

- ✓ Able to store water in leaves and stems
- ✓ Produce limited dead and fine material
- ✓ Extensive, deep root systems for controlling erosion
- ✓ Maintain high moisture content with limited watering
- ✓ Low-growing or prostrate form
- ✓ Open loose branches with a low volume of total vegetation
- ✓ Low levels of volatile oils or resins
- ✓ Ability to re-sprout after a fire
- ✓ Slow growing with little maintenance needed
- ✓ Not considered invasive.

The moisture content of plants is important because high levels of plant moisture can lower fire risk and act as a heat sink, reducing the intensity and spread of fire.

Characteristics of Flammable Plants

Consider removing plants from your property and avoid purchasing new plants that tend to retain large amounts of dead material within the plant, produce a large volume of litter, and contain volatile substances such as oils, resins, wax, or pitch.

For More Information:

- ✓ Cal Fire

[Fire-Resistant Landscaping - Ready for Wildfire](#)

- ✓ [California Native Plant List .pdf](#) from five organizations. Automatic download.

[Fire-Resistant Plant List](#)

- ✓ Lake County Master Gardeners

[UCCE Lake County Master Gardener Program - Lake County](#)

- ✓ University of California Cooperative Extension

[Preparing Home Landscaping - Fire in California](#)

Consult with local garden nurseries and landscapers.

Water Needs to Protect your Home from Fire

Prepare to Put Out Fires Fast!

If you find yourself faced with a fire emergency, be it a barbeque tipped over into dry grass, a nearby vegetation fire, an ember storm from a wildfire, or a fire in your home, you need to be prepared to act fast. Always call 911 first to alert firefighters. Then, if it's safe and you have the skills and proper gear, you can try to put the fire out on your own.

Water is your best weapon when you need to quickly put out a fire. To save precious time when fighting a fire around your home it's a good idea to have $\frac{5}{8}$ - or $\frac{3}{4}$ -inch garden hoses attached to faucets with enough hose length to reach both inside and around your home and outbuildings.

Good-quality, variable stream garden hose nozzles are adequate.

A high-flow "fireman's" nozzle is better.

A nearby hose with a nozzle can quickly be grabbed to put out a small grass fire caused by a tipped-over barbeque, for example. This could prevent a fire that could easily get out of control if time had to be spent finding a hose and hooking it up.

Always keep strategically placed fire extinguishers in your home.



High-flow fire nozzle.

Ensure Firefighters Can Make Good Use of Your Emergency Water Supply

A fire engine's water tank will often need to be filled several times during a firefighting event. If your home is not included in a community water/hydrant system, it is important to maintain a water supply reserved **ONLY** for fire protection. **Firefighters need to be able to quickly and safely find your water source and get close enough to transfer the water from your tank to theirs.** Some basic guidelines for your fire water storage are:

✓ **Have a clearly marked source of firefighting water near your home or driveway.** If you are not on a community water system, the law requires you have a water tank with at least 2,500 gallons of water available for fire suppression. The two common installations of fire water storage are: 1) an elevated tank with a water line delivering pressurized water to the home site, or 2) a fire water "suction tank" near the home that can be pumped out of by a fire truck.

✓ **An elevated pressure tank** should ideally be at least 100 feet in elevation above the home to give adequate pressure at the standpipe to directly connect fire hoses to fight the fire or fill a fire engine. Because of the cost of larger pipes, the supply line from the tank to the house site is usually a 1½- or 2-inch-diameter pipe leading to a standpipe located 50 feet or more from the house. The standpipe/hydrant is equipped with a "fire valve" with a 1½-inch or 2½-inch National Hose Thread (NHT) discharge outlet. Some landowners buy their own lightweight 1½-inch fire hose, usually 100 feet or more, with a variable stream fire nozzle. One hundred feet of such hose with a nozzle fits nicely into a 5-gallon waterproof bucket. For isolated rural residents, this can give serious firefighting capacity until a local fire department engine can arrive. In some areas it can take a ½ hour or more for a fire engine to arrive – long enough for a fire to dramatically increase in size and intensity.



Fire valve.

to arrive – long enough for a fire to dramatically increase in size and intensity.

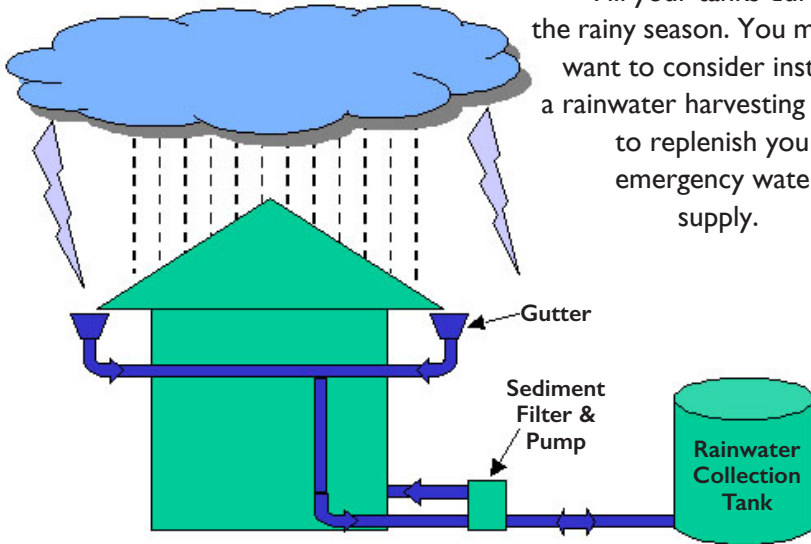
✓ **A "suction" tank** should be sited no closer than 50 feet from the house, and 4 to 12 feet from a place where a fire engine can park, to effectively pump water from the tank. For maximum flow to the fire engine, 3- to 4-inch pipe should be used for the short distance to connect between the 2½-inch fire valve standpipe/hydrant and the tank.

✓ Clean water from nearby streams, ponds, and swimming pools can also be used for firefighting, as long as a fire truck can get close enough to pump water (the water source must be 7 to 12 feet from a firm parking surface).



BE PREPARED: MAKE YOUR HOME FIRE SAFE

✓ Make sure the area around your water source is clear of flammable vegetation. Finally, make sure that your emergency water system is maintained and tested several times a year. Finding an empty water tank or water that cannot be easily accessed can seriously hinder firefighters' ability to save your home!



Fill Your Tanks in the Rainy Season

Do your part to keep water flowing in streams and rivers during the critical dry season.

Fill your tanks during the rainy season. You may even want to consider installing a rainwater harvesting system to replenish your emergency water supply.

Help Firefighters Find Your Water!

Emergency water supplies must be easily seen and visibly signed from the nearest road.

Here are some tips to help:

- ✓ Install round blue reflectors on your address post and leading to your water supply.
- ✓ Paint the word FIRE or FIRE WATER in large letters on a sign near where firefighters can hook up their hoses. You can even write FIRE right on your water tank. For odd-sized tanks and underground cisterns, mark how many gallons they hold.
- ✓ Let your local fire department and CAL FIRE personnel know where your water supply is, long before they might need to use it.

Find Out About Emergency Water Standards

Consult your local fire department, CAL FIRE, and your local County Planning and Building Department when developing water supplies for firefighters to ensure you are complying with local building standards and that your system's fittings are compatible with the needs of local fire engines. Some types of new development require emergency water supplies to meet very specific local standards. Contact your local planning and building department for details: http://www.lakecountyca.gov/Government/Directory/Community_Development.htm



Water Theft

Water theft is a sad reality, especially in times of drought. If you feel it is necessary to hide, fence, or lock up your firefighting water supply, please consult with your fire department and CAL FIRE to make sure they can still find and access your water.

Target Grazing to Treat the Landscape

Grass and brush left to grow unchecked form highly flammable and well-connected fuel loads and, in the presence of live embers and high winds, can become an immediate hazard to life and property. But using mechanical means to cut back these hazardous fire fuels can also be very costly, especially on difficult or wide landscapes like ranges and sloped forests.

Many livestock owners are surprised to learn that when properly managed, their livestock can be used not only for providing food and manure, but they can also be used to create and maintain fire fuel breaks, or gaps in fire-prone landscapes that can slow the path of an oncoming wildfire or wildland fire. The practice is most cost-effective when used on large land tracts of five acres or more.

Grazing livestock through trees can be particularly helpful in suppressing tangled forest undergrowth and preventing “ladder fuels” from forming and conducting any wildfire into the tree canopy. Timing is a critical aspect of the approach as the animals must be able to feed on the target vegetation during the time that it is highly combustible and often before it has gone to seed. Also, the appeal of the plant as a food can change during the course of its life-cycle.

Goats, for example, will enjoy poison oak and brambles that otherwise entwine with the trees, become traps for live embers, and pose hazards to humans trying to eradicate these plants. They will also eat highly flammable broom plants but only in their season of bloom and only then if there is nothing else much more appealing in the area.

Over time, this approach, when applied regularly and with attention to a few precautions, can decrease the number of wildfires in an area and either prevent deadly fire cycles from forming in the long run or reduce the intensity of the fires.

Discuss with your livestock contractor the terrain to be covered, type of vegetation to be consumed, availability and size of the animals, as well as available fencing to protect any desirable trees and shrubs in the area that will be treated.



Goat Busters:

<https://www.facebook.com/Goat-Busters-125145867550874/>

Tour a Wildfire-Ready Home

Home Site and Yard: Ensure you have at least a 100-foot radius of defensible space (cleared vegetation) around your home. Note that even more clearance may be needed for homes in severe areas. This means looking past what you own to determine the impact that a common slope or neighbor's yard will have on your property during a wildfire.

Cut dry weeds and grass before noon when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low growing.

Keep woodpiles, propane tanks, and other combustible materials a minimum of 30 feet away from your home and other structures, such as garages, barns, and sheds.

Ensure that trees are far away from power lines.

Roof: Your roof is the most vulnerable part of your home because it can easily catch fire from wind-blown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with fire-resistant materials such as composition, metal, or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

Vents: Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with 1/8-inch or smaller metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.

Install dual-paned windows with the exterior pane of tempered glass to reduce the chance of breakage in a fire.


Limit the size and number of windows in your home that face large areas of vegetation.

Inside: Keep working fire extinguishers on hand. Install smoke alarms on each level of your home and near bedrooms. Test them monthly and change the batteries twice a year.

Address: Make sure your address is clearly visible from the road.

Walls: Wood products, such as boards, panels, or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas. Build or remodel with fire-resistant building materials, such as brick, cement, masonry, or stucco. Be sure to extend materials from foundation to roof.

BE PREPARED: MAKE YOUR HOME FIRE SAFE



Garage: Have a fire extinguisher and tools, such as a shovel, rake, bucket and hoe, available for fire emergencies.

Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

Chimney: Cover your chimney and stovepipe outlets with a non-flammable screen of ¼-inch wire mesh or smaller to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

Driveways and Access Roads:

Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house.

Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to a minimum of 13 ½ feet to allow emergency vehicles to pass.

Non-Combustible Boxed-In Eaves:

Box in eaves with non-combustible materials to prevent accumulation of embers.

Rain Gutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Water Supply: Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property. If you have a pool or well, consider a pump.

Deck/Patio Cover: Use heavy timber or non-flammable construction material for decks.

Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing underneath.

Keep your deck clear of combustible items such as baskets, dried flower arrangements, and other debris.

The decking surface must be ignition-resistant if it's within 10 feet of the home.

Non-Combustible Fencing: Make sure to use non-combustible fencing to protect your home during a wildfire.

Prescribed Fire/Controlled Burning: USING FIRE AS A TOOL

Prescribed fire, or controlled burns, is one of the tools used to remove unhealthy and dangerously overgrown vegetation for ecosystem restoration, to improve the growing conditions of native plants, enhance wildfire habitat, and prevent catastrophic wildfire.

Prescribed fire can be complex in nature. Successful implementation requires careful planning, adherence to specific weather conditions, public support, and compliance with the laws and regulations designed to protect public health. Prescribed fire practitioners navigate these planning and permitting steps to protect communities from wildfire and restore cultural resources.

Regulators at the federal, state, and local levels, and prescribed burners continue to explore workable solutions to address the increased fuels, costs, and severity of wildfire, while still protecting the public.

As concerns increase about the destructive potential



of wildfire in California, the use of prescribed fire is an important tool to reduce hazardous fuels around communities and prepare for managing

wildfires differently.

How is a prescribed fire burn implemented?

A prescribed fire project is only ignited if all conditions – weather, fuel, equipment, personnel, and regulatory compliance – designated in the burn plan are met. Fire engines and crews must be available to monitor and manage the burn. It can't be too hot or windy, and humidity levels must be within prescribed limits. How the burn is ignited can significantly affect fire behavior and fire effects on the landscape and vegetation. Some



Will Harling, a leader in prescribed fire, igniting a fire with his drip torch.

projects can be ignited from the ground using fairly simple devices such as drip torches. Large or complex burns can be ignited from specially equipped helicopters.

What are the benefits and drawbacks of prescribed burns?

Benefits:

✓ By reducing the risk of destructive wildfires, prescribed fire reduces the threat to life, property, and natural resources.



✓ Prescribed burns also increase firefighter safety by creating defensible space from which bigger blazes can be battled.

✓ Controlled burning can improve native plant and animal habitat, stimulate the growth of culturally significant plants, restore productivity of grazing lands, and control the spread of noxious and invasive weeds.

✓ Appropriate burning conditions can be chosen, which can result in less impacts to air quality and public health as compared to wildfire.

Drawbacks:

✓ Smoke is often the main complaint against prescribed burning. However, while wildfires can burn for weeks generating heavy smoke, prescribed burning allows the practitioner to choose the time, location and weather conditions that will minimize smoke impacts. Most prescribed burn projects only last one or two days.

✓ Fire is difficult to control. Even with all the planning, preparation, and staffing that is part of a prescribed fire project, fires can escape.

Prescribed Fire Training Exchange (TRES) events throughout the larger region have improved our ability to manage prescribed fire. See TERA info, p. 61.



Lake County Prescribed Burning Association

Lake County is not keeping up with the fuel load made by the annual accumulation of fire-prone vegetation. Like other counties in northern California, we have founded our own Lake County Prescribed Burning Association, or LCPBA, a cooperative arrangement between local tribes, landowners, and other interested parties. We pool our equipment, knowledge, and experience to conduct prescribed burns as necessary, and to train new members in safe burning techniques.

Indigenous people and long-established settler families in our county have been burning for decades. However, for people who are transplants to the rural life or for people who do not have a family tradition of burning, learning to how burn safely can be intimidating. Without guidance and assistance, it can be a daunting prospect to set fire to one's land, hoping that fires will remain under control.

Formed in 2020, the Lake County Prescribed Burn Associations (LCPBA) seeks to bridge this knowledge gap by delivering hands-on training necessary to employing prescribed fire safely and effectively. Our



objectives are two. First, we train “citizen burners” (especially young people) in wildfire ecology and the various techniques of applying “good fire” to the land. Second, we use the expertise of our trained members to conduct a substantial number of prescribed burns each year. We teach people how to use McLeods, drip torches, and other tools to construct control lines around burn units.

Anyone interested in becoming a citizen burner should email Michael Jones at mjones@ucdavis.edu or Peter Hess at petermhess@gmail.com. You can also join our Lake County Prescribed Burning Association Facebook group: <https://www.facebook.com/groups/247655476955484>, from which we will add you to our Google Group and its email list for announcing upcoming prescribed burns and training events. If all proceeds as planned, the LCPBA will build over the coming years a community of engaged citizens who connect with each other on controlled burning and other land management issues.

Burn Permits and Smoke Management Plans

Burn Permits and Smoke Management Plans

Burn Permits are available during burn season, which starts when CalFire declares an end to fire season.

Cal Fire and the Lake County Air Quality Management District (LCAQMD) work in tandem on burn permits.

Start by contacting your local Fire Protection District or go on their website for office hours and purchase options to get your burn permit. Follow all instructions carefully.

Residential, agriculture, and temporary approval for lot-clearing permits are all available.



Burn Days and Burn Day Status

Burn permits in Lake County, California are valid through April 30th, though some exemption burns may be authorized after May 1. Burn permits are valid only on those days during which burning is not prohibited by the State Air Resources Board. Check on burn day status prior to igniting fire, and call: North County at **(707) 263-3121** or South County at **(707) 994-4444**.

Residential Burn Permits

Available for residents with a 1.0 acre lot of record or more with a one or two-family dwelling to conduct burning of hazardous vegetation. Permit valid with proof of payment. Burning allowed on days approved by Lake County Air Quality Management District (LCAQMD). Burn hours are confined **9am to 3pm on designated burn days**. Cost as of this writing is \$29.

Agricultural Burn Permits

This permit is typically for residents with larger properties and business owners (>1 acre), commercial burners, and land managers. At a minimum, it allows the burning of one 4-foot-diameter burn pile at a time, during burn hours from **9am to 3pm on designated burn days**. Cost as of this writing is \$29. Permits are reviewed by staff prior to issuing. Additional conditions and/or a smoke management plan may be required by the Lake County Air Quality Management District (LCAQMD).

Land Development and Lot-Clearing Permit

One-time permit for Property Owners with 'VACANT' lots requiring clearing prior to the construction of a structure. Temporary approval by LCAQMD for 'VACANT' lots impacted by the Valley Fire of less than an acre, will be allowed to use this permit for the 2021/2022 burn season to clear off vegetation 'NOT LARGER THAN 12 INCHES IN DIAMETER.' Check with your local Fire Protection District for any extensions of this permit beyond the 2021/2022 burn season.

Notifications and Questions

The CAL FIRE Battalion Chief must be notified at (707) 963-1599 prior to ignition for all burning on extended burn days, burning near roadways, and/or high visibility burns.

Questions on Fire Permits - please call (707) 987-3089.

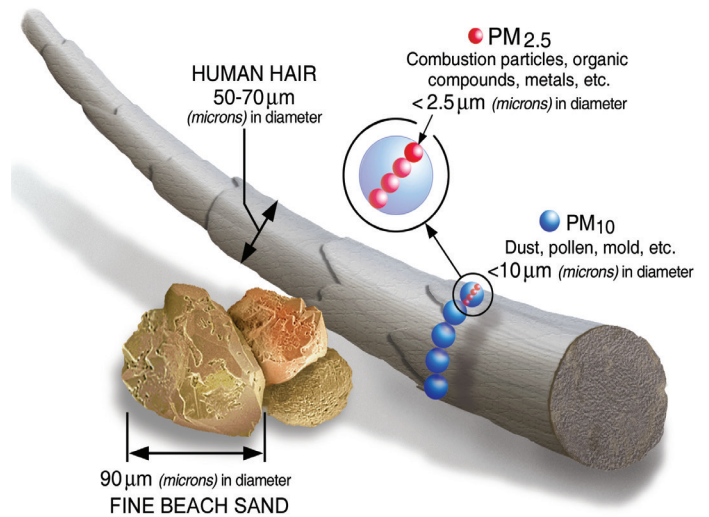
Burn Permits and Smoke Management Plans, cont'd

Smoke Management Plan (SMP)

Smoke Management Plans are for larger burns such as and including: prescribed fire, overnight burning, and sites that are likely to have or have previously received complaints, orchard removals, large land conversions, vineyard removals, standing brush, forest understory, multi-day and multi-location burns.

A Smoke Management Plan from the Lake County Air Quality Management District (LCAQMD) is required for any of the following:

- 1) Complaint History
- 2) Fire Agency Request
- 3) Multi-Day or Overnight Burning
- 4) Smoke Impact Potential
- 5) Tule Burning
- 6) Non-Adjacent Parcels
- 7) More than 1 Acre of Standing Vegetation, Whole Vines or Whole Trees



Particulate matter size comparison.

You must schedule an appointment with LCAQMD to purchase a Smoke Management Plan. Call 707-263-7000 to schedule an appointment.

Air Quality Guide	
Air Quality	Protect Your Health
Good	None
Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion.
Unhealthy for Sensitive Groups	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion.
Unhealthy	People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion.
Very Unhealthy	People with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
Hazardous	Everyone should avoid all physical activity outdoors; people with heart or lung disease, older adults, and children should remain indoors and keep activity levels low.

Smoke Effects from Open Burning and Wildfires

Smoke from wildfires and structure fires contains harmful chemicals, especially fine particulate matter (PM2.5) that can affect your health, both in the short-term and long-term. The federal Environmental Protection Agency developed the Air Quality Index (AQI) to report levels of ozone, particle pollution, and other common air pollutants on the same scale. An AQI reading of 101 corresponds to a level that is above the national air quality standard. The higher the AQI rating, the greater the health impact.



✓ Pay attention to local air quality reports. Watch and listen for LCAQMD Public Service Announcements (PSA), Air Quality Advisories, and Alerts in the news, or on the LCAQMD website: <https://www.lcaqmd.net/>.

- Public Service Announcements provide general information regarding air quality and alert the public to the potential for decreased air quality.
- Air Quality Advisories may be issued when the air quality in certain areas is forecast to be in the “Unhealthy” range.
- Air Quality Alerts may be issued when the air quality in certain areas is forecast to be “Hazardous.”

✓ For regional Air Quality Index notifications, call 1-866-BURNDAY (1-866-287-6329).

✓ Track smoke and weather with various interactive online services. Keep in mind that sites with national coverage may be slow to load if there are many wildfires occurring at once.

- gispub.epa.gov - Follow recommendations for the Hazardous category. Additional information on reducing exposure to extremely high levels of particle pollution is available.

How to Manage Your Smoke Exposure

IF	You Are:		OR	You Have:
Distance You Can See	A Healthy Adult, Teenager, or Older Child	Age 50 and Over, Pregnant, or a Young Child		Asthma, Respiratory Illness, Lung or Heart Disease
>10 Miles	Watch for changing conditions and moderate outdoor activity based on personal sensitivity.			
5-10 Miles	Moderate outdoor activity.			Minimize or avoid outdoor activity.
< 5 Miles	Minimize or avoid outdoor activity.			Stay inside or in a location with good air quality.

Smoke Effects from Open Burning and Wildfires, cont'd

- [AirNow.gov](https://www.airnow.gov) - Provides Air Quality Index and whether air quality is getting better or worse

- [Weather.gov](https://www.weather.gov) - National Weather Service provides smoke forecast

✓ Children, the elderly, pregnant women, and people with heart and lung problems are most vulnerable to wildfire smoke. Stay indoors and avoid prolonged activity. Those with lung (including asthma) or heart disease, should regularly monitor their health and follow any medical plans closely.

✓ Schools, coaches, and event coordinators, check with the Lake County Office of Education at <https://www.lakecoe.org/> or your local school district.

✓ Keep indoor air as clean as possible. Close all windows and doors. Use the recirculation setting for air conditioning in the home or car. Avoid using swamp coolers if smoke is visible outside.

✓ Use common sense. If it is smoky outside, minimize or stop outdoor activities, especially exercise. Consider leaving the area until smoke conditions improve if you have repeated coughing, shortness of breath, difficulty breathing, wheezing, chest tightness or pain, palpitations, nausea, unusual fatigue, or lightheadedness.

✓ Air cleaners can help—but buy them before a wildfire! Choose indoor air cleaners with HEPA filters to help reduce particulate levels indoors. For more information about air cleaners, go to [epa.gov/iaq/pubs/residair.html](https://www.epa.gov/iaq/pubs/residair.html).

✓ Only a mask called a “particulate respirator” and labeled NIOSH “N95” or “P100” can protect you from fine particulates in smoke. Purchase in hardware stores and online. Dust masks, surgical masks, or bandanas are not designed to protect your lungs from wildfire smoke.



The Vegetation Management Program (VMP)

CAL FIRE conducts a Vegetation Management Program (VMP), a cost-sharing program with landowners that focuses on the use of prescribed fire and mechanical means for addressing wildfire fuel hazards and other resource management issues on State Responsibility Area (SRA) lands. Although acres treated under the program have decreased in recent years, it remains a means of controlling invasive weeds, improving wildlife habitat, and maintaining strategic fuel breaks where the practice is physically possible and socially acceptable.

How is a VMP prescribed burn planned?

After an interested landowner contacts CAL FIRE, the Department takes the following steps:

1. *Evaluates the feasibility of the project.* Will it meet our goals? What is the size of the project? What are the potential problems, such as homes in the area? What type of vegetation and terrain are in the area? What are the expected weather conditions, costs, etc.?
2. *Gathers information from other involved agencies.*

All prescribed burns are developed in compliance with state and federal rules and regulations including the California Environmental Quality Act (CEQA), and California and Federal Clean Air and Rare and Endangered Species Acts. Pages 34-35 contain additional information regarding required air quality burn permits for all burn projects.

3. *Designs a prescription, or detailed burn plan, for the project.*
4. *Signs a contract with the landowner.*
5. *Notifies the community of the project.*
6. *Submits plan to local air quality district and obtains approval.*
7. *Implements the burn when conditions meet the prescription.*

Because there is a risk of prescribed fires escaping control, the state assumes liability for an escaped fire when conducting prescribed burns with private landowners through the VMP program. Landowners who contract with CAL FIRE for prescribed burns are thoroughly briefed on the potential for an escape. This includes an assessment of risk of an escape compared to the risk of leaving hazards untreated on the landscape.

Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) of the US Department of Agriculture works in partnership with the Lake County Resource Conservation District to make available various assistance programs in our county. NRCS administers the Environmental Quality Incentives Program (EQIP), a voluntary, conservation program that can provide financial and technical assistance to landowners on a cost-share basis to install conservation practices that address natural resource concerns.

For more information about EQIP, including program eligibility and how to apply, contact

Korinn Woodard,
NRCS District Conservationist,
(707) 263-4180 x 104,
korinn.woodard@ca.usda.gov.



The Evolution of Smokey Bear

Nearly everyone has heard of Smokey Bear and his decades-old campaign to prevent wildfire. Perhaps less familiar is the story of his origins and how his message evolved.

During World War II, fire-prone parts of our country suffered from a lack of firefighters. After a Japanese attack on an oil field along the California coast, people feared that fire could be used as a war weapon. In response, the US Forest Service (USFS) sought to prevent forest fires using *The Co-operative Forest Fire Prevention Campaign*. This campaign used slogans like *Forest Fires Aid the Enemy*, and *Our Carelessness, Their Secret Weapon*.



nutrients to feed the forest floor. Native peoples had known this forever and had historically used fire as a management tool. But by then, Smokey had convinced the general public to fear fire, and fire suppression was a full-fledged industry entrenched in land management business and culture.

In the 1990s, Smokey's message changed subtly to *Only You Can Prevent Wildfire*, still implying that *preventing* wildfire is the ultimate goal.

By the 2000s, recognizing that fire is inevitable and responding to increased development in the wildland-urban interface, or WUI, the USFS joined the *Fire Adapted Communities* program to encourage people who live in the WUI to protect their homes.

Western forests are now so stressed and packed with fuel that they are prone to bigger and more destructive blazes. With so many homes located in a direct path of danger, personal responsibility now includes making one's home in the WUI fire safe.

Today, Smokey's official website – though still highlighting prevention – has many pages dedicated to understanding that fire can be beneficial and necessary. Promoting prescribed fire under controlled conditions, Smokey is starting to change his tune.

For the public to support prescribed fire or wildfire managers allowing certain fires to burn, we will need to see a cultural shift away from fear of all fire. Perhaps Smokey's evolving message will help with this transformation as he encourages increased commitment to creating fire-resilient communities and shifts from *Only You Can Prevent Wildfires* to *Learning to Live with Wildfire*.

Into this atmosphere of fear, Smokey Bear entered, a stern-faced cartoon character created in 1944 to give severe public warnings about the dangers of forest fires. By 1947, Smokey's primary slogan – *Only You Can Prevent Forest Fires* – promoted a sense of individual responsibility.



A few years later, a bear cub survivor of a New Mexico wildfire became the first real-life Smokey. This increased Smokey's notoriety to such a degree that by the 1960s he received so much mail that he had his own zipcode at the National Zoo in Washington, DC.

With the public love of Smokey, resultant fear of fire, timber companies anxious to protect their investments, and the availability of post-war equipment, the USFS and other agencies increased their capacity and intention to put out all fires. Smokey began saying *This Shameful Waste Weakens America*.

This increased dedication and capacity for fire suppression quickly altered the ecological integrity of western forests. As early as the 1970s and '80s, forest ecologists recognized that fire exclusion wasn't good for our forests. Research clearly showed how fire is a necessary force in our forested lands, creating openings in the canopy, promoting new growth and diversity, and supplying needed



Reddy the Squirrel

In 2002, an environmental watchdog group, Forest Service Employees for Environmental Ethics, introduced a new mascot named *Reddy the Squirrel*. Reddy, a cheeky squirrel in work boots and hard hat, carrying a rake, says: *Forest Fires Happen. Be Ready!* Reddy was a fire mascot with a new attitude. She encouraged homeowners to trim trees and clear brush. *Preparation not Prevention*, says Reddy, is the key. This icon unfortunately never caught hold in American popular culture the way Smokey did.





GET READY, GET SET, GO!

Wildfire Is Coming. Are You Ready?

GET PREPARED FOR WILDFIRE BEFORE IT STRIKES BY FOLLOWING THE READY, SET GO! GUIDE:

BEING READY



CREATE DEFENSIBLE SPACE. 100-FEET OF DEFENSIBLE SPACE IS REQUIRED AROUND YOUR HOME. LEARN HOW TO MAINTAIN THE TWO ZONES OF DEFENSIBLE SPACE NEEDED.

HARDEN YOUR HOME. FLYING EMBERS CAN DESTROY HOMES UP TO A MILE FROM WILDLAND AREAS. LEARN HOW TO PROTECT AND HARDEN YOUR HOME FROM A WILDFIRE THREAT.

GETTING SET



PREPARE YOUR HOME AND FAMILY FOR THE POSSIBILITY OF HAVING TO EVACUATE.

1. WHAT
2. HOW
3. WHO
4. WHEN

CREATE A WILDFIRE ACTION PLAN.



ASSEMBLE AN EMERGENCY SUPPLY KIT.



FILL OUT A FAMILY COMMUNICATION PLAN.

BEING READY TO GO



PRE-EVACUATION STEPS: PREPARE BOTH THE INSIDE AND OUTSIDE OF YOUR HOUSE FOR EVACUATION. GET THE CHECKLISTS.



REVIEW YOUR EVACUATION PLAN CHECKLIST.

GO!

EVACUATION STEPS: WHEN IMMEDIATE EVACUATION IS NECESSARY, GET READY TO GO!



ENSURE YOUR EMERGENCY SUPPLY KIT IS IN YOUR VEHICLE.



COVER-UP TO PROTECT AGAINST HEAT AND FLYING EMBERS. WEAR LONG PANTS, LONG SLEEVE SHIRT, HEAVY SHOES/BOOTS, CAP, DRY BANDANNA TO COVER FACE, GOGGLES OR GLASSES. 100% COTTON IS PREFERABLE.



LOCATE YOUR PETS AND TAKE THEM WITH YOU.

ONE LESS SPARK
ONE LESS WILDFIRE

FOR MORE INFORMATION AND A PRINT-READY CAMPFIRE PERMIT VISIT:
PREVENTWILDFIRECA.ORG
#PREVENTWILDFIRE #ONELESSPARK

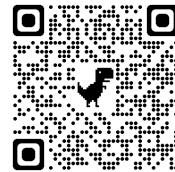
BROUGHT TO YOU BY THE CALIFORNIA WILDLAND FIRE COORDINATING GROUP (CWCG)

Wildfire Is Coming Are You Ready?

The geography, weather patterns, and number of wildland-urban interface communities in California make it a state particularly threatened by devastating wildfire. To help educate property owners and residents in areas most at risk, CAL FIRE has developed a communications program called "Ready, Set, Go!" that breaks down the actions needed to be ready for wildfire.

Get prepared for wildfire before it strikes by following Ready, Set, Go!

- ✓ **Be Ready:** Create and maintain your defensible space and harden your home against flying embers, as shown in the *Be Prepared* section, pages 20-36.
- ✓ **Get Set:** Prepare your family and home ahead of time for the possibility of having to evacuate.
- ✓ **Be Ready to GO!** Take the evacuation steps necessary to give your family and home the best chance of surviving a wildfire.



You can dramatically increase your safety and the survivability of your property by preparing well in advance of a wildfire.

GET SET

Prepare now for the possibility of having to evacuate

Many wildfire casualties were the result of people getting stuck in their cars while trying to evacuate in unsafe conditions. Once your home is ready with defensible space that you created, prepare yourself, your family, and your animals for potential evacuation.

Sign up to receive

EMERGENCY NOTIFICATIONS

from your

County Office of Emergency Services (OES)

in the Sheriff's Department

LakeCoAlerts

It is important that you sign up with LakeCoAlerts to be notified about the activation of your emergency evacuation zone

<http://www.lakesheriff.com/About/OES/Lake-CoAlerts>

Follow the County Office of Emergency Services on Facebook

www.facebook.com/lakecountyOES

Follow the Lake County Sheriff on Facebook

www.facebook.com/lakesheriff or Twitter at https://twitter.com/lake_sheriff

ZoneHaven - Know your path to safety.

<https://community.zonehaven.com/>

at (707) 262-4200 to ask.

Emergency notifications

Be informed about a wildfire as soon as possible and make a big difference in your ability to keep yourself and your family out of harm's way. Note and register with several reliable notification sources. During an actual emergency it is possible that the various forms of notification can become unavailable and you will need other means to get dependable information.

✓ Emergency alert sirens - The South Lake Fire Protection District (SLFPD) has installed emergency sirens in Middletown, Anderson Springs, Cobb, and Loch Lomond. Homeowner associations have installed additional emergency sirens in Hidden Valley Lake and the Kelseyville Riviera. When the sirens are heard outside of a scheduled test, community members should take shelter, be vigilant, and look for further information and instructions from LakeCoAlert, Nixle, and reliable news sources on radio and social media. The sirens may not be heard depending on topography, natural and manmade noise, if residents are indoors, or potentially too far away from the sirens.

The SLFPD conducts monthly 30 second tests on the first Monday of the month to ensure the functionality of their sirens. February's test is currently set for a full three-minute test to ensure residents know what the siren will sound like in the event of an emergency. Questions about the homeowner association sirens should be directed to the respective association managers.

✓ LakeCoAlerts - The Lake County Sheriff's Office issues all emergency notifications. The Sheriff encourages all residents of Lake County to sign up for LakeCoAlerts at: <http://www.lakesheriff.com/About/OES/LakeCoAlerts> and follow both the Office of Emergency Services and the Lake County Sheriff on Facebook at www.facebook.com/lakecountyOES and www.facebook.com/lakesheriff. Alerts, notifications, and updates will be posted on Twitter as well; follow the Lake County Sheriff at https://twitter.com/lake_sheriff

READY, SET, GO!

✓ Nixle – This notification service and similar services often cover the entire country. <https://www.nixle.com/> Even if you have signed up with one of these services, you will still need to sign up with LakeCoAlerts to know which evacuation zones have been activated in Lake County.

✓ ZoneHaven – Know your path to safety. In a mass emergency, local officials will order evacuations using pre-determined zones to keep households safe. Check the Zonehaven map at <https://community.zonehaven.com/>. Members of the community that don't have Internet access can call the Lake County Sheriff's office at (707) 262-4200 to ask about their zones. During the fire season, information about how to know the zones will be published on both the Sheriff's Facebook page, <https://www.facebook.com/lakesheriff>, and the official website, www.lakesheriff.com.

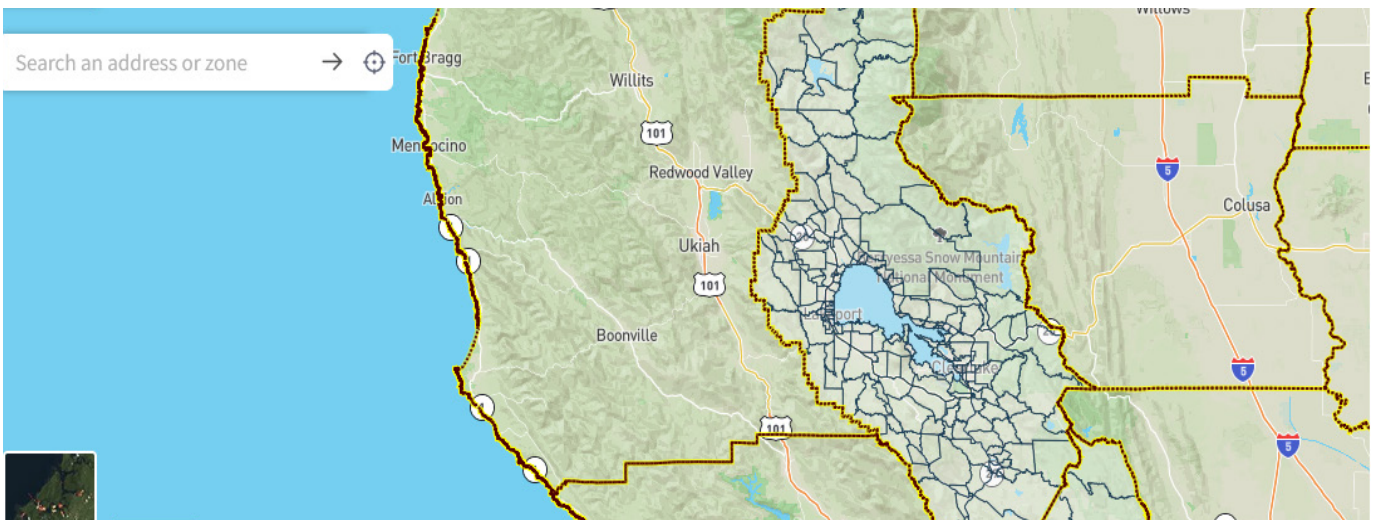
Zone Haven Tips

In a wildfire emergency, it can be the case that cell towers go down and internet access is spotty or unavailable. To make sure you have access to your Zone information while checking with various news sources (radio, texts, etc.), follow the tips below:

Tip 1: Check the Sheriff's website for an automated download of a pdf file for Lake County.

Tip 2: From your computer view of the map, enlarge the map to show your area, click Print Screen (Prt Sc) AND PRINT OUT THE IMAGE to keep with you and your evacuation kit. A printout is important to keep with your kit in case you have to make a run and will not have easy access to the internet later. This way you will know the zones around yours, and can listen for news while having your zone map handy for reference. If you are not sure how to print, open Paint or similar program and click Paste or Ctrl+V, then print.

Tip 3: On your smartphone, enlarge the map to show your area, take a screenshot, AND BE SURE TO DOWNLOAD THE IMAGE ONTO THE PHONE in addition to any auto-upload into the Cloud. Assuming you have charged your phone before evacuating, then you will still be able to see what the zones are around yours. You may not get current information on your phone, but you may be able to listen to a radio and can have your map handy for reference. Know how to access the screenshot file on your smartphone before an emergency starts.



Evacuation Readiness Starts Now

During wildfire events, and especially during “declared emergencies”, community evacuation sites will be established where residents can go to survive a wildfire. The location of these sites is made by the Emergency Operations Center, along with fire and law enforcement personnel. The importance of being prepared and evacuating early during extreme wildfire events cannot be overemphasized.



Three-Tier Evacuation Notification System

The Lake County Sheriff's Office and its Office of Emergency Services use the following terms, from high to low danger :

Evacuation Order: an immediate threat to life. This order is given pursuant to Penal Code Section 409.5, and is lawfully enforceable. You are legally required to leave the area, and your life is in danger.

Evacuation Warning: a potential threat to life and/or property. Those who need additional time to evacuate should do so. Also the time to make last minute preparations to evacuate in the event an Evacuation Order is given.

Shelter in Place: evacuation is not needed but may include directions for people to go indoors, shut and lock their doors and windows, and to prepare to self-sustain until further notice.

Use of these terms helps first responders understand each other during the event and will help you know what to do next.

Start evacuating early if:

You or members of your household:

- Are senior citizens and/or have disabilities
- Have access and/or functional needs

You have:

- Small children
- Livestock or pets

Your home is in an area with:

- No alternate egress (one way in/ one way out)
- Very high fire risk

Follow these steps to get ready to GO!

- Review your Wildfire Action Plan (pg 49)
- Ensure your Emergency Supply Kit (pg 49) is in your car
- Cover up to protect against heat and flying embers, Wear long pants, long-sleeved shirt, heavy shoes/boots, cap, bandana for face cover, goggles or glasses, 100% cotton best
- Locate your pets and take them with you

Evacuation Readiness Starts Now

Go Early!

By leaving early, you give your family the best chance of surviving a wildfire. You also help fire-fighters by keeping roads clear of congestion, enabling them to move more freely and do their job.

🚶 When to Leave

- Leave early enough to avoid being caught in fire, smoke, or road congestion.
- Don't wait to be told by authorities to leave. In a quickly moving wildfire, they may not have time to knock on every door.
- If you are advised to leave, don't hesitate!

🚶 Where to Go

- Go to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.).

🚶 How to Get There

- Have several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment.
- Choose an escape route away from the fire whenever possible.

🚶 What to Take

- Take your Go Bag containing your family and pet's necessary items. See the Go Bag checklist on the inside back cover.

Give your family the best chance of surviving a wildfire by being ready to go and evacuating early. Remember: When immediate evacuation is necessary, follow these steps as soon as possible to get ready to GO!

- Review your Evacuation Plan.
- Ensure your Go Bag is in your vehicle.
- Cover up to protect against heat and flying embers. Wear long pants, long-sleeve shirt, heavy shoes/boots, cap, dry bandana for face cover, goggles or glasses. 100% cotton is preferable.
- Call 911 as early as possible if you are unable to evacuate without assistance.
- Locate your pets and take them with you.

For a helpful evacuation checklist, see: [DisasterSafety.org/ibhs/ibhs/ast-MinuteWildfire-Checklist/](https://www.DisasterSafety.org/ibhs/ibhs/ast-MinuteWildfire-Checklist/)



GET SET: As the Fire Approaches

- Evacuate as soon as you are set! Alert family and neighbors.
- Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots).
- Have goggles and a dry bandana or particle mask handy.
- Ensure that you have your Emergency Supply Kit on hand that includes all necessary items, such as a battery-powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- Stay tuned to your TV or local radio stations and social media for updates, or check the fire department website.
- Remain close to your house, drink plenty of water, and keep an eye on your family and pets until you are ready to leave.

INSIDE CHECKLIST

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades and curtains and close metal shutters.
- Remove lightweight curtains.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter. Turn off pilot lights.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning.



OUTSIDE CHECKLIST

- Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- Turn off propane tanks.
- Don't leave sprinklers on or water running – they can waste critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

IF YOU ARE TRAPPED: SURVIVAL TIPS

- Shelter away from outside walls. www.readyforwildfire.org/What-To-Do-If-Trapped
- Bring garden hoses inside house so embers don't destroy them.
- Patrol inside your home for spot fires and extinguish them.
- Wear long sleeves and long pants made of natural fibers, such as cotton.
- Stay hydrated.
- Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- Fill sinks and tubs for an emergency water supply.
- Place wet towels under doors to keep smoke and embers out.
- After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- Check inside the attic for hidden embers. Patrol your property and extinguish small fires.
- If there are fires that you cannot extinguish with a small amount of water or in a short period of time, call 911.

Evacuation Planning for Pets

- ✓ Plan ahead. Know where you will take or leave your pets. In case you are not home when disaster strikes, arrange in advance for a neighbor to check on or transport your pets. Make sure your neighbors have your contact numbers (cell phone, work, home, etc.). In the event of evacuation, pets may not be allowed inside human emergency shelters – have an alternate prearranged location to take your animals.
- ✓ Make sure your pets are always wearing properly fitted collars with personal identification, rabies, and license tags.
- ✓ Each animal should have its own pet carrier. Birds, rodents and reptiles should be transported in cages. Cover cages with a light sheet or cloth to minimize their fear.
- ✓ Store vaccination/medical records, veterinary contact information, proof of ownership, a current photo, and an Emergency Supply Kit in one location.

Pet Emergency Supply Kit

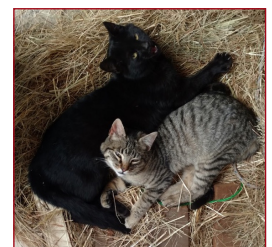
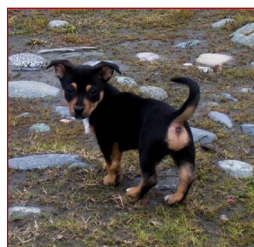
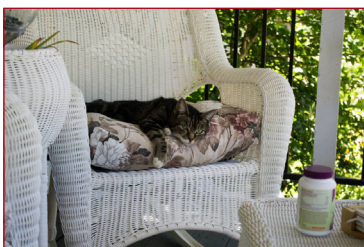
- Pet carrier for each pet
- Two-week supply of food and water
- Non-spill food and water bowls
- Pet first-aid kit
- Medications and dosing instructions
- Leashes/collars/harnesses
- Cat litter box and litter or newspaper
- Plastic bags for waste disposal
- Paper towels
- Disinfectants
- Blankets
- Toys and treats



If You Must Leave Your Pet

- ✓ Bring them indoors. NEVER leave pets chained outdoors!
- ✓ Use a room with no windows and adequate ventilation, such as a utility room, garage, bathroom, or other area that can be easily cleaned. DO NOT tie pets up!
- ✓ Leave only dry foods and fresh water in non-spill containers. If possible, open a faucet to let water drip into a large container or partially fill a bathtub with water. Do not leave vitamin treats, which could be fatal if over-eaten.
- ✓ House cats and dogs separately, even if they normally get along.
- ✓ Leaving your pets is NOT recommended and should never be done unless it is the last possible resort.

The time to do your planning is now. Do not wait until the last minute to start evacuating!

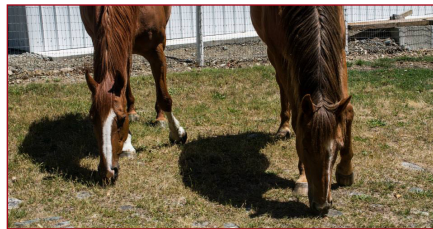
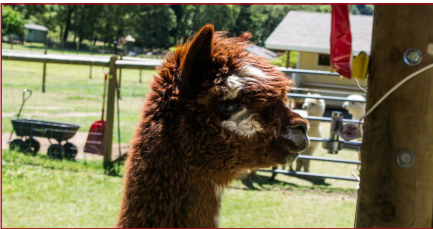


Evacuation Planning for Large Animals

- ✓ Clear defensible space around your barns and pastures, just as you do your home. California law (PRC 4291) requires clearance around all structures on your property.
- ✓ Plan ahead, know where you would evacuate the animals. Contact your local fairgrounds, stockyards, equestrian centers, friends, etc., about their policies and ability to take livestock temporarily in an emergency. Have several evacuation routes in mind. If you don't have your own truck and trailer, make arrangements with neighbors or local companies before disaster strikes. Make sure your neighbors have your contact numbers.
- ✓ Have vaccination/medical records, registration papers, and photographs of your animals (proof of ownership) and your Disaster Preparedness Kit.

Large Animal Emergency Supply Kit

- Hay, feed and water for three days
- Non-nylon leads and halters (embers can easily melt or ignite nylon materials)
- First-aid items
- Wire cutters and a sharp knife
- Hoof pick
- Leg wraps
- Shovel
- Water buckets
- Plastic trash barrel with a lid
- Portable radio and extra batteries
- Flashlights



If You Must Leave Your Large Animals

- ✓ Leave them in a preselected, cleared area.
- ✓ Leave enough hay/feed and water for 48 to 72 hours. DO NOT rely on automatic watering systems. Power may be lost.
- ✓ Leaving your horses and livestock is not recommended and should never be done unless it is the last possible resort.

The time to do your planning is now. Do not wait until the last minute to start evacuating!

For more information on evacuating pets and large animals, see the following resources:

- ✓ Wildland Fire Safety For Your Livestock And Pets: www.readyforwildfire.org/Animal-Evacuation
- ✓ Ready – Pet and Animal Emergency Planning: www.ready.gov/animals
- ✓ ASPCA – Disaster Preparedness website: www.asPCA.org/pet-care/general-pet-care/disaster-preparedness

Lake Evacuation & Animal Protection (LEAP) is our county's animal disaster response group. It is made up of two different groups of people: the Animal Care & Control staff, as well as a group of highly trained volunteers. All volunteers have completed the necessary applications and submitted copies of their driving records.

LEAP Activation

During times of significant tragedy or disaster, the first responders (Fire Crews or Law Enforcement) can activate our services. **ONLY FIRST RESPONDERS CAN PUT LEAP INTO ACTION.** Our group does not exist until such time as we are requested by these key players.

For more information, check the LEAP page on the County's website: http://www.lakecountyca.gov/Government/Directory/Animal_Care_And_Control/LEAP.htm

To volunteer, please call the animal shelter at (707) 263-0278 Mon-Fri 8AM-5PM, or email Veronica at leapvolunteergroup@gmail.com.

For program questions, contact Director of Animal Control, Jonathan Armas, at: Jonathan.Armass@lakecountyca.gov

Check Your Insurance Before a Wildfire

Wildfire preparedness includes knowing in advance what your insurance company will cover in the case of mass disasters, whether you are a homeowner or a renter. Having the right amount and type of insurance and well-organized records makes a world of difference after a disaster.

1. Check your policy for disaster-related additional living expenses, or disaster ALE. The terms for mass disaster-related additional living expenses can vary from the regular policy regarding individual disasters. Ask your agent what your maximum allowable rate is, and what living expenses are covered. Eligibility for government housing assistance for mass disasters is contingent on income/tax returns and may last only 18 months.
2. Compare the limits of each policy category with what you actually own now. If you happen to have acquired several pieces of kitchen equipment or many books, jewelry, or pieces of art, the limit of the categories may not be enough to cover the replacement value of the items.
3. Document your property, particularly anything of value. Insurance companies tend to provide for generic replacements, so if you have a specialty or custom item of any kind, take a picture of it being used in your house, and keep receipts.

Insurance Discounts for Fire-Hardened Homes and Communities

The number of residential property insurance companies offering insurance discounts for fire-hardened homes and communities has increased slowly. Several companies offer both community-wide discounts (for example, a home in a Firewise or a Shelter-In-Place community) and home-specific discounts (for example, maintaining defensible space or home-safety measures against wind-blown embers). In some cases, these discounts can be combined. Because discounts and eligibility differ by company, we urge you to contact the insurance company directly to find out if your property qualifies.

An extensive list of insurance companies that are currently offering discounts on insurance premiums for fire-hardened homes and/or communities can be found at the California Insurance Commissioner's website:

http://www.insurance.ca.gov/01-consumers/105-type/95-guides/03-res/Insurers-Currently-Offering-Discounts.cfm?mc_cid=4ae3081148&mc_eid=2a687965c6

Additional Consumer Help

County residents who have experienced a wildfire disaster have often found themselves struggling with serious and unexpected gaps in their insurance coverage and a claim process that has often been adversarial.

The United Policyholders, a nationwide insurance consumer advocacy group, provides free educational materials and tools that are drawn from more than twenty five years of post-disaster recovery work and from monitoring the insurance marketplace and related public policy and legal matters. Check with a neighborhood resilience center to see if they carry any brochures or other information from United Policyholders.

Be cautious about hiring insurance “fixers” who offer to negotiate on your behalf with your insurer for a fee.

If you have been dropped by your insurer, or are just looking to be better prepared for wildfire, the information and help they can provide in sorting out insurance issues cannot be underestimated. Visit them at <https://uphelp.org/preparedness/>.

What To Expect After A Wildfire Returning Home

Coming home after a wildfire can be difficult. The damage is often unknown until the homeowner returns days or weeks later. ALWAYS check with officials before attempting to return to your home. Once home, check for the following:

- ✓ Check grounds for hot spots, smoldering stumps, and vegetation.
- ✓ Check the roof and exterior areas for sparks or embers.
- ✓ Check the attic and throughout your house for any hidden burning sparks or embers.
- ✓ Check for fire damage to your home, turn off all appliances, and make sure the meter is not damaged before turning on the main circuit breaker.
- ✓ Check the well or pump-house to ensure it is in working order.
- ✓ Contact 911 if any danger is perceived.
- ✓ Consult local experts on the best way to restore and plant your land with fire-safe landscaping.

Find out more about what to do before, during and after a wildfire at <https://www.fire.ca.gov/media/5414/before-during-after.pdf> and when returning home after a wildfire at <https://www.fire.ca.gov/media/11473/returning-home-after-a-wildfire.pdf>

Watershed Impacts After a Wildfire

The after-effects of a wildfire on a watershed can be drastic, causing immediate issues and long-term effects. Rates of erosion and runoff can increase to dangerous levels following wildfires in California. Normally trees, shrubs, grass and other protective groundcover help prevent soil detachment and allow rainfall to infiltrate into the soil. The extreme heat of a wildfire can bake the soil to the point that water is unable to penetrate, which later can cause excessive run-off in a post-wildfire area.

Before leaving a burned area, CAL FIRE will implement post-fire repair efforts. This work includes:

- ✓ Installing waterbars (ridges installed at an angle across the road to divert water).
- ✓ Removing soil and organic debris from streams where fire lines crossed.
- ✓ Bringing road drainage structures back to pre-fire condition.
- ✓ Removing hazards like burned trees from roads and power lines.
- ✓ Installing straw-waddle dams on hillsides.
- ✓ Straw-mulching to help stabilize soil and reduce stormwater runoff.
- ✓ Creating structural protection using sandbags and K-walls.

Learn more at: <http://albertawater.com/how-wildfires-impact-a-watershed> and www.fs.fed.us/pnw/research/fire/fire-effects.shtml.

Working with your neighbors is important before, during, and after a wildfire. See the next section on *Communities Working Together* for more information and examples of how your neighbors are collaborating to prepare for wildfire.



Lake County Fire Safe Council

The Lake County Fire Safe Council was conceived of by the County's Board of Supervisors as the principal organization charged with planning, coordinating, and implementing activities, programs, and resources for the on-going development, maintenance, monitoring and updating of the Community Wildfire Protection Plan, and any plans, coordination, and implementation of activities, programs and resources that are in accordance with the Firewise Communities® Program, including to the extent allowable, implementation of the Community Wildfire Protection Plan. The Council seeks alternative sources of funding to secure resources that will sustain and enhance its efforts in implementing the County Community Wildfire Protection Plan.



Watershed Research and Training Center prescribed fire.

Mission

Empowering Lake County residents and businesses with the information, knowledge, and support to protect their family and property from wildfire.

Vision

The vision of the Lake County Fire Safe Council is to foster a fire wise county developed through ongoing public education, training and community collaboration.

Community participation in the Lake County Fire Safe Council is critical to any success in affecting wildfire behavior.

To get involved,
visit <https://firesafelake.org/>
or contact



FIRE SAFE LAKE
LAKE COUNTY FIRE SAFE COUNCIL

Laurie Hutchison,
Project Coordinator,
PO Box 62, Lakeport, CA 95453,
(707) 262-7093,
FireSafeLC@yahoo.com

Follow the Lake County Fire Safe Council on Facebook at <https://www.facebook.com/lcfscc>

South Lake Fire Safe Council



The South Lake Fire Safe Council was incorporated in July 2001 as a 501(c) (3) organization for the purpose of helping residents and property owners within the South Lake Fire Protection District decrease wildfire hazards through fuel reduction and education.



Since its incorporation twenty years ago, the SLFSC has:

- Created a Supporting Membership Program
- Provided Low-cost Chipping to more than 1200 properties
- Created more than 11 miles of Shaded Fuel Breaks
- Presented Fire Safety Information to Elementary Schools
- Supported and Assisted local communities in becoming Firewise Communities®
- Assisted the Volunteer Firefighters Reflective Address Sign Program "**REFLECT TO PROTECT**"
- Attended and participated in Community Events throughout the District
- Provided Fire Safety Information requested by Community Members

Contributions can be made out to
South Lake Fire Safe Council
P.O. Box 1773,
Middletown, CA 95461

Council meetings are held the first Wednesday of the month at 2 pm at the Fire Station on Hwy 175 in Middletown, CA.

Follow the South Lake Fire Safe Council at
<https://www.facebook.com/SouthLakeFSC/>

100% of donations and grants are used for the above programs. Council Members and Board Members are all volunteers.



Lake County Community Risk Reduction Authority



The Lake County Community Risk Reduction Authority Joint

Powers Agreement (RRA) was originally created in 2018 and amended in 2019, by the County of Lake, the Lakeport Fire Protection District, the Northshore Fire Protection District, the South Lake County Fire Protection District, the Kelseyville Fire Protection District, and the Lake County Fire Protection District.

The RRA was formed to support the entire Lake County community through the effective use of the authority of local governments, implement programs offering low-or no-cost risk reduction resources to the public, the development of funding to implement and maintain such programs, and to provide informational

and educational resources to the public so that they are better able to assess and manage these risks.

The RRA seeks to make Lake County the epicenter of Fire Science and Research, putting Lake County at the forefront for fire and water sciences and limnology, leading to the establishment of a world-class multi-disciplinary sciences facility here in Lake County.

To support its mission, the RRA intends pursuing grant funding and donations, along with prospective alliances with the California Earthquake Authority, the Blue Ribbon Commission and local tribes. The RRA will serve as a funding clearinghouse which conducts outreach and invites other groups to become members.

For additional information, visit <http://www.lakecountycal.gov/Government/Boards/RRA.htm>

Lake County Disaster Council

The County of Lake Disaster Council is an official advisory body to the County of Lake Board of Supervisors. The Disaster Council's purpose is to lead ongoing efforts to improve preparedness countywide and provide oversight for critical disaster functions. It does not cover fire fuel reduction activities per se. The Council reviews and approves the county Emergency Operations Strategy.

The Council is comprised of two County Supervisors, the Director of Emergency Services (currently the Sheriff fills this role in addition to regular duties), the Deputy Director of Emergency Services (currently a Sheriff's Lieutenant fills this role in addition to regular duties), the Emergency Services Manager, the Assis-

tant for the Office of Emergency Services, the Health Services Director, the City Manager/Emergency Service Manager of the City of Lakeport, the City Manager/Emergency Service Manager of the City of Clearlake, the Public Works Director, County Special Districts Administrator, the Chief of the Lake County Protection District, the Chief of the Lakeport Police Department, and a representative from the California Highway Patrol.

The Council meets quarterly. The Sheriff's Department posts the meeting notices, agenda, and minutes of the Disaster Council. Additional Council information can be obtained by calling **(707) 262-4090** or visiting <https://www.lakesheriff.com/About/OES/council.htm>

Clear Lake Environmental Research Center - CLERC

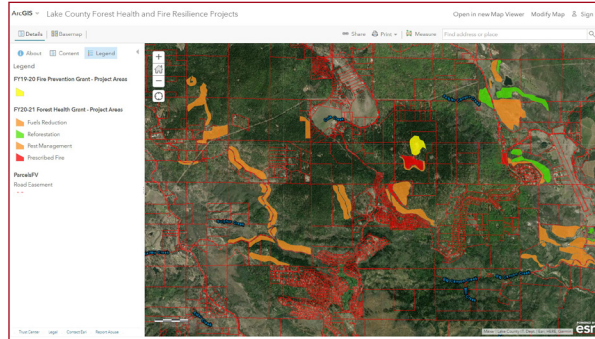
The Clear Lake Environmental Research Center (CLERC) coordinates projects throughout Lake County to help combat the impacts of wildfire, promote positive regeneration of burned areas, and preserve the forest and woodlands that have not been destroyed by fire.

Two principal areas of focus for CLERC are

COMMUNITY PROJECTS:

CLERC has successfully received a series of community-wide grants for fuel reduction, reforestation, prescribed fire, planning, workforce development, and community involvement. Community-wide projects increase the scope of work that can be completed by including multiple community partners. This increases the total

funding coming into Lake County while also making funding available to individuals that may lack capacity to obtain grants on their own.



COST SHARE PROGRAMS:

These are programs for which landowners can apply, either individually or in small groups, that address forest health and fire resilience needs. Cost-share programs usually do not cover 100% of costs. These programs are well suited to landowners who have experience performing or managing work on their own land.

One of the programs also includes technical assistance for those who might have a lower level of experience. For more information see <https://www.clerc.co/>

Tribal EcoRestoration Alliance - TERA

The Tribal EcoRestoration Alliance is a cross-cultural, multi-organizational collaborative based in Lake County in the ancestral territories of Eastern Pomo, Southeastern Pomo, Lake Mikow and Wappo people, that works to revitalize ecology, economy, and culture through indigenous-led stewardship. TERA works together towards a vision of healing our land and communities.



TERA aims to

- Connect tribal members with meaningful livelihoods and culturally relevant work in their ancestral territories
- Build tribal capacity to engage in ecological restoration work that mitigates the impacts of climate change and reduces the risk of uncharacteristic wildfire
- Support Native American voices and worldview to play a central role in land stewardship
- Regenerate the ecosystems of the North Coast ranges

TERA programs include a 140-hour training program

that brings together restoration ecology and traditional knowledge, preparing trainees for meaningful careers in land stewardship. Ecological literacy, cultural study, land stewardship skills, and vocational training are offered in an experiential way, connecting students with critical thinking, practical skills, and a respect of the land.

TERA hires students from these trainings to become full-time employees of a hand crew that provides restoration and land stewardship services in Lake, Mendocino, Yolo, Napa, Colusa, and Sonoma Counties. Read about our services and how to hire our crew.

For more information see <https://www.tribalecorestoration.org/>



MUNICIPAL ADVISORY COUNCILS IN LAKE COUNTY

The California Government Code Section 31010 allows a County Board of Supervisors, by resolution, to establish a municipal advisory council (MAC) for any unincorporated area in the County. MAC's are a principal mechanism that local communities can use to self-organize mutual aid efforts and plan for the future, including forest health and fire safety as well as other matters of public health, safety, welfare, public works, planning, and land use. The Lake County Board of Supervisors has established several MAC's to advise the Board on matters of concern to the various communities.

Middletown Area Town Hall (MATH) formed in 2006 - The Middletown Area Town Hall was formed to operate as a true town hall, with everyone participating and voting. MATH bylaws specify that the board makes decisions based on a vote of everyone present. The board encourages all members to give their opinions and vote on every matter before the assembly. The purpose of MATH is to increase the participation of the Middletown area residents in the decision-making processes that affect their community. MATH meetings are generally held on the second Thursday of each month.

The Cobb Area Council (CAC) formed in 2016 Following the Valley Fire of 2015, it became apparent that the Cobb communities needed a forum for public discussion, and to plan for fire recovery and future community development. The purpose of CAC is to increase the participation of the Cobb area residents in processes that affect their community. The CAC works with the Board of Supervisors and other entities and agencies to provide grassroots input, direction, and guidance on issues related to the community. CAC meetings are generally held on the third Thursday of each month. For more information, including current and archived agendas and minutes see www.cobbarea-council.org.

East Region Town Hall (ERTH) formed in 2016 to increase the participation of the residents of the East



Region of Lake County Supervisorial District 3: Paradise Cove East to the County Line and North to the High Valley area. All ERTH meetings are open to the public and there are no membership requirements; however, to take part in any action taken by ERTH, persons must reside within the ERTH boundaries.

Lucerne Area Town Hall (LATH) formed in 2017 to increase the participation of the residents from Lucerne community growth boundary in the decision-making processes that affect their area. The Council provides citizen input, direction and guidance on issues related to the unincorporated area within the community growth boundary. One key focus of LATH is the conduct and practice of treated water delivery as experienced by the residents of Lucerne.

Western Region Town Hall formed in 2017 to increase the participation of the residents of the Western Region of District 3 including Upper Lake, Nice, Blue Lake, Bachelor Valley, and Lake Pillsbury.

Scotts Valley Advisory Council (SCAC) formed in 2017 Although not a formal Municipal Advisory Council the SVAC functions similarly - to advise the Board of Supervisors on matters which relate to the Scotts Valley community.

Firewise Communities® USA Recognition Program



The Firewise Communities/USA Recognition Program teaches people living within the wildland-urban interface (WUI) how to adapt to living with wildfire by preparing for a fire before it occurs. This program empowers communities with tools and resources for reducing their wildfire risk and encourages neighbors to work together to take action to minimize losses from wildfire. Some preparedness actions include creating and

maintaining defensible space around structures by reducing vegetation and removing debris, and hardening homes with fire-resistant construction materials and landscaping techniques. For more information, visit: www.firewise.org.

Using a five-step process, community residents collectively develop an action plan that identifies their wildfire hazard risks and guides action to reduce those risks.

The Five Steps to Becoming Firewise

- ✓ Create a Community Wildfire Risk Assessment with assistance from a state forestry agency and/or local fire department;
- ✓ Form a board or committee and create an action plan based on the Community Assessment;
- ✓ Conduct a “Firewise Day” event;
- ✓ Invest a minimum of \$2 per capita in local Firewise actions for the year; and
- ✓ Submit an application and subsequently an annual report to the state Firewise liaison.

Some of the many ways communities benefit from Firewise:

Framework for Action – Get organized and find direction in the spirit of taking annual, systematic action to reduce the risk of damage and loss from wildfire.

Learning About Wildfire – Learn about community wildfire risks and the simple things that can be done to reduce them. Connect with experts to learn more – local firefighters, state forestry professionals, and national researchers.

Peace of Mind – See results quickly and know that the best information is being used to guide action. Having a plan helps with staying calm and being prepared to act quickly in the face of wildfire threats.

Community-Building – Build a strong bond with neighbors while rallying around a common cause for the good of the community. Strong community ties benefit residents in many ways – especially during an emergency.

Citizen Pride – Take pride in earning recognition. Neighbors work hard to plan action and reduce wildfire hazards and deserve the satisfaction from the difference they make in the safety of their community.

Publicity – Shine the spotlight on community efforts. Post Firewise signs, place the recognition plaque where it can be seen, and publicly celebrate successes. Publicity can attract the attention and participation of more neighbors as well as spread the message of wildfire safety to a larger number of people.

Access to Funding and Assistance – Show funders that your community is ready for action. All things being equal in the competitive world of grants, Firewise recognition is a demonstration of foresight and a level of organization in which funders can have confidence.

Potential Insurance Rate Reductions – Some insurance companies have been offering discounts on fire insurance to homes located in certified Firewise Communities®



Firewise Communities® in Lake County

As of the publication of this document in Spring of 2022 there are fifteen certified Firewise Communities in Lake County. For an updated list, see the interactive map at the Firewise Community website: <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wild-fire/Firewise-USA>.

Hidden Valley Lake Firewise Community is located in Hidden Valley Lake, CA. Their participation in the national Firewise USA® recognition program began 8/17/2015.

Anderson Springs Firewise Community is located in Middletown, CA. Their participation in the national Firewise USA® recognition program began 3/27/2020.

Jones Creek Crossing Firewise Community is located in Cobb, CA. Their participation in the national Firewise USA® recognition program began 03/15/2019.

Cobb Mountain Group 2 Firewise Community is located in Cobb, CA. Their participation in the national Firewise USA® recognition program began 12/12/2018.

Cobb View Firewise Community is located in Cobb, CA. Their participation in the national Firewise USA® recognition program began 12/31/2018.

Bottle Rock Corridor Firewise Community is located in Kelseyville, CA. Their participation in the national Firewise USA® recognition program began 07/23/2021.

Seigler Springs Firewise Community is located in Loch Lomond, CA. Their participation in the national Firewise USA® recognition program began 8/23/2018.

Noble Ranch Firewise Community is located in Lower Lake, CA. Their participation in the national Firewise USA® recognition program began 03/01/2021.

Clearlake Riviera Community Association Firewise Community is located in Kelseyville, CA. Their participation in the national Firewise USA® recognition program began 12/30/2015.

Riviera West Firewise Community is located in Kelseyville, CA. Their participation in the national Firewise USA® recognition program began 12/30/2014.

Riviera Heights HOA Firewise Community is located in Kelseyville, CA. Their participation in the national Firewise USA® recognition program began 1/17/2017.



Firewise Communities® in Lake County, cont'd



Clearlake Oaks Keys Property Owners Association Firewise Community is located in Clearlake Oaks, CA. Their participation in the national Firewise USA® recognition program began 03/27/2020.

Clearlake Oaks Hillside Firewise Community is located in Clearlake Oaks, CA. Their participation in the national Firewise USA® recognition program began in Winter 2022.

Wolf Creek Firewise Community is located in Clearlake Oaks, CA. Their participation in the national Firewise USA® recognition program began 12/12/2018.



Pitney Elk Firewise Community is located in Upper Lake, CA. Their participation in the national Firewise USA® recognition program began in Winter 2022.

Fire Station Auxiliaries

Northshore Fire Fund

info@northshorefirefund.org
<http://www.northshorefirefund.org/>



The Northshore Fire Fund is a 501(c)3 nonprofit created to help with funding equipment, gear, technology, & training to help the Northshore Fire Protection District continue to provide the best care and response to the north shore communities of Lake County, California while maintaining their own safety.



South Lake County Fire Sirens

firesirens@outlook.com



The South Lake County Fire Sirens is an auxiliary of the South Lake County Fire Protection District. Our mission is to raise money to purchase life-saving equipment for the Fire District and to assist them as we are able.



Mitigation vs Prevention vs Preparedness

Prevention is often used more broadly, especially outside of the mitigation field, to include mitigation activities, but in emergency management and textbook definitions, they are very clearly separate elements of risk reduction, with prevention reducing the probability of fire occurrence and mitigation reducing the consequences when fires occur. The approaches for each are fundamentally different. Prevention primarily involves asking people NOT to do something most people already do not want to do, namely accidentally starting a fire or inadvertently letting one escape. Mitigation primarily involves asking people to DO something, often many things, that they are not doing already and that they may have many other obstacles to overcome in order to accomplish.



- **Mitigation** - Modifying the environment or human behavior to reduce potential adverse impacts from a natural hazard.
- **Prevention** - Activities directed at reducing the incidence of human caused fires through public education, rules and regulations and law enforcement.
- **Preparedness** - A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response.

– USFS Community Wildfire Management Best Practices

Forest Management Plans

A Forest Management Plan (FMP) outlines the landowners’ vision for their forest, describes the current forest condition as well its history, and outlines a plan of action to achieve their management goals. For private forest owners, an FMP will often be required as part of an application for state or federal funding to help with fire prevention and mitigation projects. A Forest Management Plan will generally be prepared by a certified professional, such as a “Registered Professional Forester” (RPF).

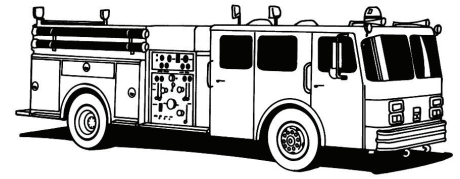
For each specific parcel and the specific management objectives, the FMP is used to address many types of issues, including any significant fire and fuels management issues, such as existing fuel accumulation, fire emergency access, probable ignition points, stand level fuels treatment, and feasible fuel break construction.

For more detail on FMPs see https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/technical/cp/tsp/?cid=nrcs144p2_064056

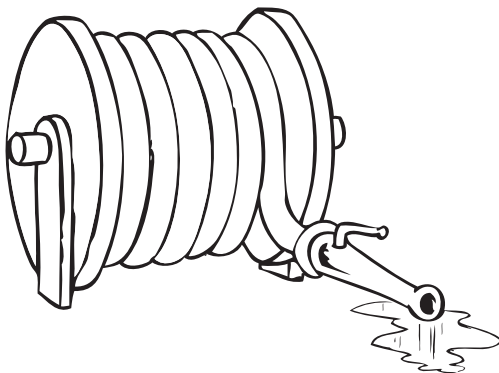
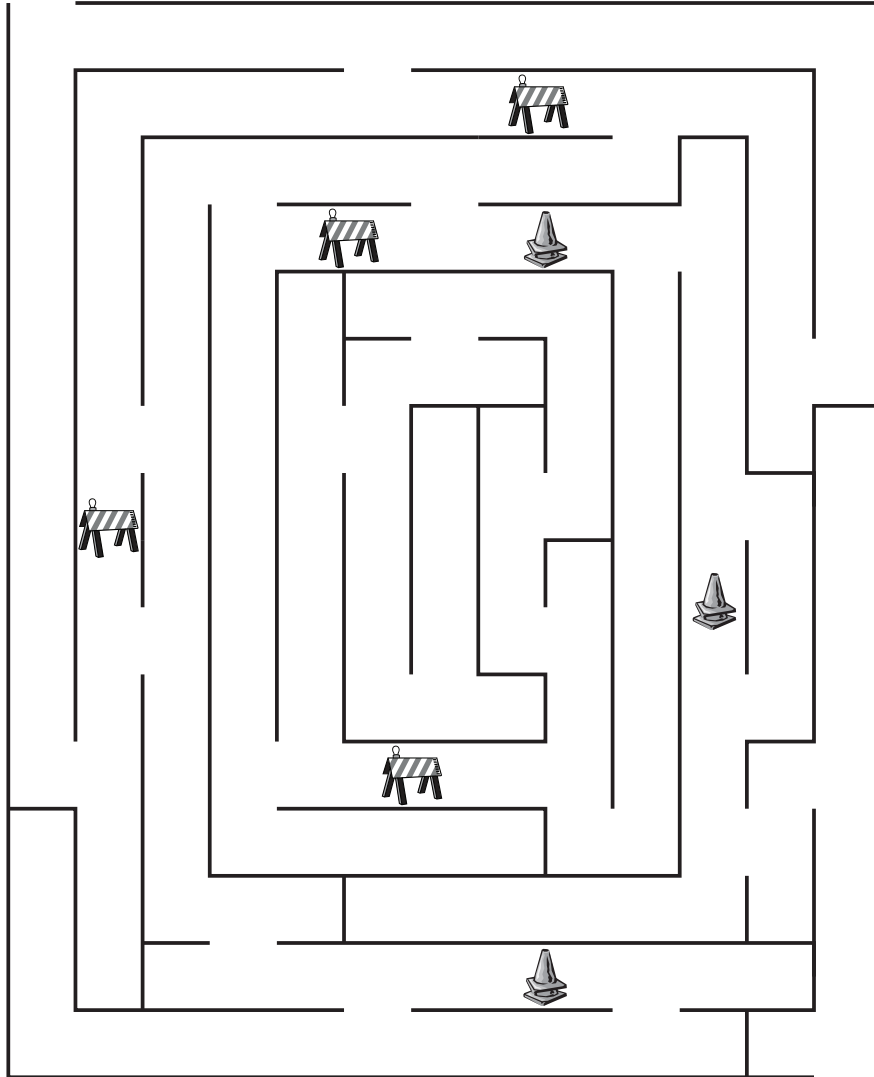


Help Firefighter Kim!

Help Firefighter Kim by giving her directions to the burning house.
Beware, there is a lot of construction going on!



START



Fire Safety Word Search

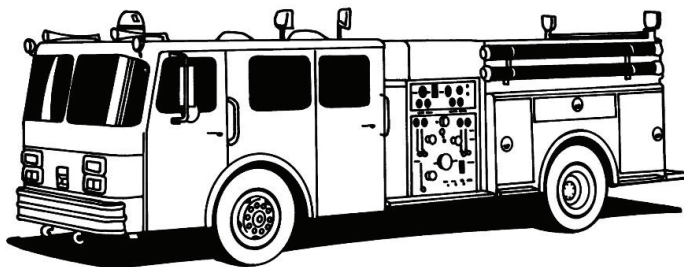
Find all of the words and circle them



Smokey's Fire Safety Tips

- ✓ Stay away from hot objects.
- ✓ Never play with matches, lighters, or candles.
- ✓ Have at least one smoke alarm per level in your house.
- ✓ Test smoke alarms once a month.
- ✓ Change batteries in smoke alarms every six months.
- ✓ Create and Practice an Escape Plan in case of a fire at your house.
- ✓ If there is a fire in your house, leave as fast as you can, **do not stop to pick up toys.**
- ✓ If there is a fire in your house, always test the door to see if it is hot. If it is, leave through the window.
- ✓ Always crawl under smoke.
- ✓ If your clothing or hair catches on fire, **STOP, DROP and ROLL.**

- | | | | |
|-------------|-------------|--------------|----------------|
| Boots | Fire Safety | Mask | Stop Drop Roll |
| CAL FIRE | Heat | Nine One One | Water |
| California | Helmet | Practice | |
| Escape Plan | Help | Smoke Alarm | |
| Fire Engine | Hose | Smokey | |
| Firefighter | Ladder | Sparky | |



For more fun stuff for kids, see: <https://smokeybear.com/en/smokey-for-kids>

Smokey's Secret Message

Use the letter key to uncode Smokey's Message.

A	B	C	D	E	F	G	H	I	J	K	L	M
2	4	6	8	10	12	14	16	18	20	22	24	26


N	O	P	Q	R	S	T	U	V	W	X	Y	Z
25	23	21	19	17	15	13	11	9	7	5	3	1

 23 25 24 3 3 23 11 6 2 25

 21 17 10 9 10 25 13 12 23 17 10 15 13

_____ !
 12 18 17 10 15

Find the Fire Helmets

How many  can you find in the picture below?



NOTES

The first edition of this document, which provided significant text, pictures, and design elements was collaboratively produced and funded by the County of Humboldt, Six Rivers National Forest, and CAL FIRE Humboldt–Del Norte Unit, under the guidance of the Humboldt County Fire Safe Council. It was edited and designed by ForEverGreen Forestry, Contributors and collaborators in that edition included:

CAL FIRE, Humboldt-Del Norte Unit

County of Humboldt, Public Works Department:

Del Norte County Fire Safe Council

Humboldt County Fire Safe Council:

Mid Klamath Watershed Council

NFPA Firewise Communities Program

North Coast Unified Air Quality Management District

Trinity County Fire Safe Council

Southern Humboldt Fire Safe Council

University of California Cooperative Extension, Humboldt-Del Norte

US Forest Service, Six Rivers National Forest

Willow Creek Fire Safe Council

Additional Fire Safety Resources

To learn more about wildfire and how you can enhance your personal fire safety, see the following resources.

- California Fire Safe Council: www.cafiresafecouncil.org
California Fire Science Consortium: www.cafiresci.org
California Native Plant Society – Native Plants and Fire Safety: www.cnps.org/cnps/conservation/fire_fuels.php
Homeland Security – Ready for Wildfires: <https://www.ready.gov/wildfires>
Fire Adapted Communities: <https://fireadapted.org/>
Fire Adapted Communities Learning Network: <https://fireadaptednetwork.org/>
Fire, Fuel, and Smoke Science Program: <https://firelab.org/>
Fire Resistant Gardening: <https://berkeleyhort.com/gardening-suggestions/fire-resistant-gardening/>
UC Extension Fire Resources and Information: ucanr.edu/sites/Wildfire
Home Survival in Wildfire-Prone Areas: Building Materials and Design Considerations:
<https://anrcatalog.ucanr.edu/pdf/8393.pdf>
Incident Information System – InciWeb: <https://inciweb.nwcg.gov/>
Insurance Institute for Business & Home Safety – Wildfire: <https://disastersafety.org/wildfire/>
Joint Fire Science Program: www.firescience.gov
National Fire Protection Association – Safety Information: <https://www.nfpa.org/Public-Education>
Northern California Prescribed Fire Council: <http://www.norcalrxfirecouncil.org/>
Only YOU Can Prevent Wildfires: <https://smokeybear.com/wildfires.asp>
Prevent Wildfire California: <https://www.readyforwildfire.org/prevent-wildfire/>
Ready for Wildfire (Ready, Set, Go! Evacuation Guide): <https://www.readyforwildfire.org/>
Red Cross – Home Fire Safety: <https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/fire.html>
Safe Kids Worldwide – Fire Safety: <https://www.safekids.org/fire>

About the Seigler Springs Community Redevelopment Association



SSCRA is a 501(c)3 nonprofit corporation established in Lake County, California in the aftermath of the 2015 Valley Fire. SSCRA focuses on community-building, helping disaster-vulnerable communities of 3-5,000 people self-organize the full range of their resources and assets to plan for and realize a sustainable, resilient and regenerative development program. This work is backed by whole-systems thinking and field theories in ecology, community organizing, architecture, healing, intentional community and group process and the most advanced community development practices.

Visit: <http://sscra.org/index.html>

Follow us on Facebook: [@seigerspringslakecounty](https://www.facebook.com/seigerspringslakecounty)

Write up your Wildfire Action Plan and post it in a location where every member of your family can see it. Rehearse it with your family.

My Personal Wildfire Action Plan

During High Fire Danger days in your area, monitor your local media for information on brush fires and be ready to implement your plan. Hot, dry and windy conditions create the perfect environment for a wildfire.

Important Phone Numbers:

Out-of-State Contact: _____ Phone: _____

Work: _____

School: _____

Other: _____

Evacuation Routes: _____

Where to go: _____

Location of Emergency Supply Kit: _____

Notes: _____



California Department of Forestry and Fire Protection
If you have an emergency, call 911
CAL FIRE: 916-653-5123
www.fire.ca.gov