



Solano County

LIVING WITH WILDLAND FIRES





1> Fire Agencies and You

- 1 From Suisun Fire Protection District Chief Alfred Abruzzini
- 2 Solano County Fire Agencies
- 3 Solano County Fire Departments & Protection Districts
- 4 Our CAL FIRE Sonoma-Lake-Napa (LNU) Unit

6> Our Local Wildfire Environment

- 6 We Live in a Wildfire Environment
- 8 Hotter and Drier Weather Caused by Global Climate Change is Driving Wildfire Increases
- 9 Fire Behavior

11> One Less Spark

- 11 Our Responsibility for Wildfire Prevention
- 15 Water Needs to Protect Your Home from Fire

17> Be Prepared: Make Your Home Fire Safe

- 17 Fire Safety and How Homes Catch Fire
- 18 Preparing Your Home for the Eventuality of Wildfire
- 20 Preparing Your Home for Wildfire: Your Legal Responsibility
- 22 Hardening Your Home
- 24 Preparing Your Home: Defensible Space—Zone Zero
- 26 Fire-Smart Landscaping
- 28 Plant and Tree Spacing in Your Defensible Space

29> Hazardous Fuel Mitigation

- 29 A Do-It-Yourself Primer to Thinning a Young Forest
- 31 Prescribed Grazing

32> Beneficial Uses of Fire

- 32 Prescribed Fire/Controlled Burning: Using Fire as a Tool
- 34 Legal Requirements for Burn Piles
- 35 Prescribed Burn Association
- 36 Solano County Ag Pass Program

- 36 Natural Resources Conservation Service (NRCS) Cost Share Programs

- 37 Bay Area and Yolo-Solano Air Quality Management Districts

- 38 Agricultural Burning vs. Rural Yard Burning

- 39 Smoke Effects from Open Burning & Wildfires

42> Ready, Set, Go!

- 42 Are You Fire-Ready?

- 43 Notifications & Evacuation

- 44 Emergency Notification Language

- 47 Evacuation Readiness

- 48 Your Wildfire Action Plan Checklist

- 50 GET SET: As the Fire Approaches

- 51 If You Are Trapped

- 51 After the Fire Has Passed

- 52 Evacuation Planning for Pets & Large Animals

- 55 Check Your Insurance Before a Wildfire

- 57 What To Expect After A Wildfire

58> Communities Working Together

- 58 The Solano County Community Wildfire Protection Plan

- 59 Solano County Fire Safe Council

- 60 Local Fire Safe Councils

- 61 Firewise USA®

- 62 Solano Resource Conservation District (RCD)

63> Additional Resources

- 63 Additional Fire Safety Resources

64> Acknowledgments Page

- 64 Acknowledgments & Thank You

65> Local Fire District Information

- 65 Help Solano County Firefighters Help You

Fire Agencies and You

From Suisun Fire Protection District Chief Alfred Abruzzini



Welcome to Solano County, California, a vibrant community celebrated for its scenic beauty and rich natural resources. The county features stunning landscapes, including the picturesque Suisun Valley, the largest grape-growing region in the area. It also boasts vast expanses of tourist destinations, wildlands, rolling hills, and the largest marshlands in California.

As our region continues to grapple with the challenges of climate change, the threat of wildfires has become more significant than ever. Prolonged dry conditions and increasingly severe fire seasons mean that both natural and human-caused wildfires pose a substantial risk to our homes, communities, and cherished natural areas.

In this handbook, we aim to provide valuable resources and information to help mitigate the risk of wildfire losses for individuals and communities alike. Collaborating closely with CAL FIRE, as well as state and federal partners, we are committed to delivering top-notch wildfire protection services to safeguard our residents, visitors, and precious resources.

Through education and collaboration with local partners, including Fire Departments, Fire Districts, Officials, and Fire Safe Councils, we strive to empower residents and visitors with the knowledge and tools needed to coexist safely with wildfire. Fire is an inherent part of our environment, and by taking proactive measures, we can adapt to this reality and minimize its impact.

We extend our heartfelt appreciation to the dedicated individuals and groups who work tirelessly to reduce the threat of wildfire and protect our communities. Your efforts make a difference, not only in safeguarding homes and properties but also in preserving our natural heritage.

Each of us plays a crucial role in building resilient communities and minimizing the potential negative impacts of wildfires. By coming together and implementing fire-safe practices, we strengthen our collective ability to confront this shared challenge.

Thank you for taking the time to engage with the wildfire safety information provided in this publication. We encourage you to keep it readily accessible for reference during emergencies as we work together to make Solano County a safer place for all.

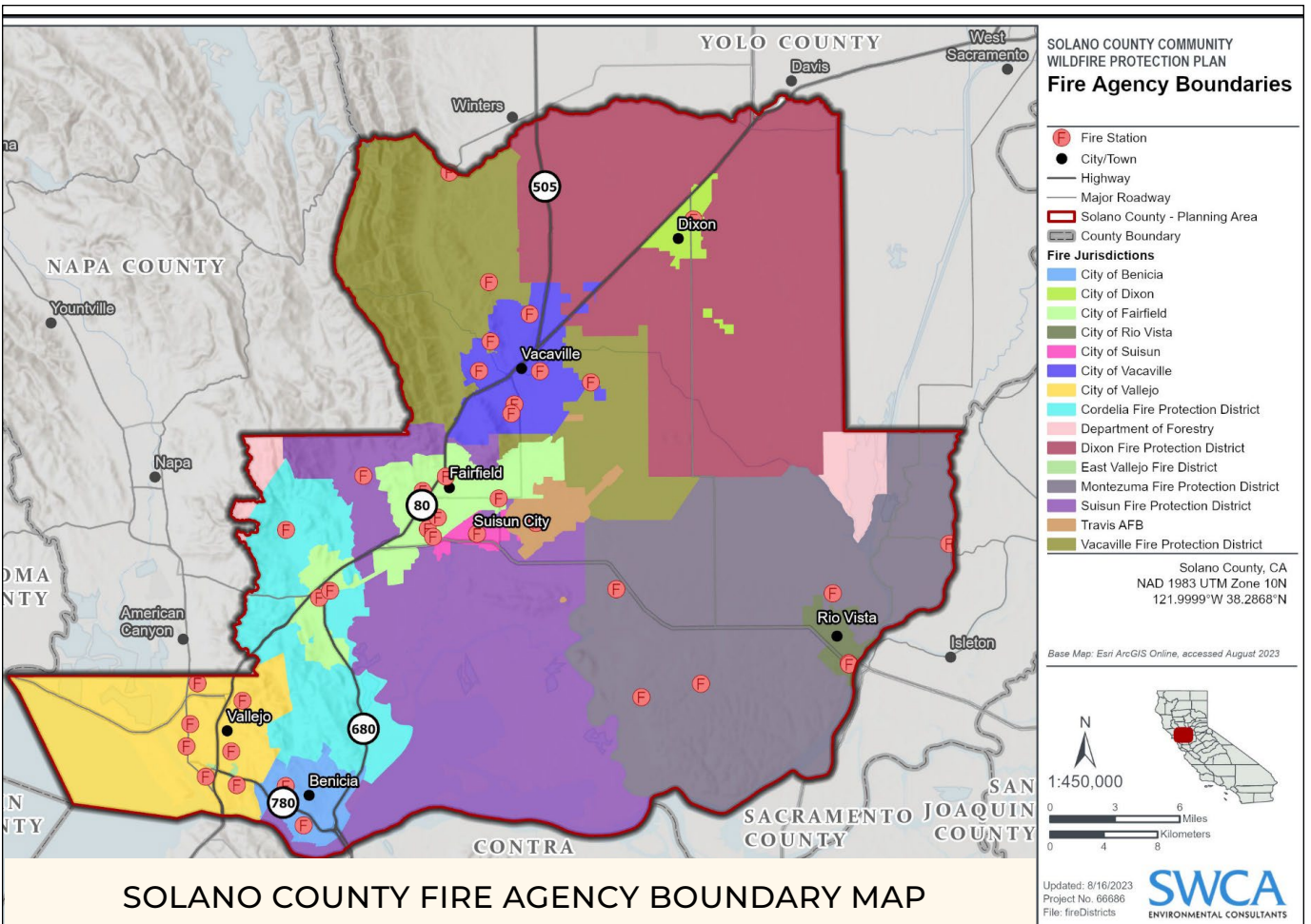


Sincerely,
Alfred Abruzzini / Fire Chief
Suisun Fire Protection District



Fire Agencies and You

Solano County Fire Agencies



Fire Agencies and You

Solano County Fire Departments & Protection Districts

IF YOU HAVE AN EMERGENCY—CALL 911!

911 CALLING TIPS

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

SOLANO COUNTY FIRE DEPARTMENTS & PROTECTION DISTRICTS

Benicia Fire Department

150 Military West, Benicia, CA 94510
(707) 746-4275
ci.benicia.ca.us/fire

Dixon Fire Department

205 Ford Way, Dixon, CA 95620
(707) 678-7060
cityofdixon.us/departments/fire

Fairfield Fire Department

(Cordelia Fire Protection District contracts with Fairfield Fire Department for services)
1200 Kentucky Street, Fairfield, CA 94533
(707) 428-7375
fairfield.ca.gov/government/city-departments/fire

Rio Vista Fire Department

350 Main Street, Rio Vista, CA 94571
(707) 374-2233
riovistacity.com/fire

Montezuma Fire Protection District

21 N 4th Street, Rio Vista, CA 94571
(707) 374-5962
montezumafiredistrictsolano.ca.gov

Suisun Fire Protection District

444 Jackson Street, Fairfield, CA 94533
(707) 425-3605
solanofirechiefs.org/20-chiefs-directory/80-suisun-fire-protection-district

Suisun City Fire Department

621 Pintail Dr., Suisun City, CA 94585
(707) 421-7205
suisun.com/departments/fire-department

Vacaville Fire Department

630 Merchant Street, Vacaville, CA 95688
(707) 449-5452
cityofvacaville.gov/government/fire-department

Vallejo Fire Department

970 Nimitz Avenue, Vallejo, CA 94592
(707) 552-3285
cityofvallejo.net/our_city/departments_divisions/fire_department

Vacaville Fire Protection District

420 Vine Street, Vacaville CA 95688
(707) 447-2252
vfpd.net

Fire Agencies and You

Our CAL FIRE Sonoma-Lake-Napa (LNU) Unit

The CAL FIRE Sonoma-Lake-Napa Unit, or LNU for short, is one of 21 CAL FIRE administrative units and one of the largest. Encompassing almost 4.5 million acres (6,800 square miles) north of the San Francisco Bay Area from the Pacific Ocean to the Interstate-5 corridor, the counties of Colusa, Lake, Napa, Solano, Sonoma, and Yolo come together to form the LNU CAL FIRE Unit.

The Unit was created in January 1997 when the Sonoma Ranger Unit and the Lake-Napa Ranger Unit merged into one. LNU has primary responsibility for 2,016,200 acres of State Responsibility Area (SRA)—the most of any Unit—and a vast range of vegetation types, populations, and political climates.

Nearly 1.4 million people live within the Sonoma-Lake-Napa Unit, with the majority of the population clustered in the urban areas of Santa Rosa, Vallejo, Vacaville, Napa, and Davis. The Unit includes many small rural towns centered around farming and ranching, along with mid-sized communities throughout the area.

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. Along the coastline you will find larger timber stands of redwoods, Douglas fir, pine, alder, and mixed oaks.

LNU is characterized by steep slopes and valleys with the main ridges oriented north-northwest to south-southeast. LNU contains several prominent ridges that affect weather, fuels, and fire behavior. Some of those ridges include but are not limited to: Walker Ridge, Creighton Ridge, Black Mountain Ridge, Blue Ridge, Rocky Ridge, Clark Ridge, Bear Valley Buttes, Telegraph Ridge, and Cortina Ridge. The Unit's watersheds drain into three hydrologic regions: North Coast, San Francisco Bay, and Sacramento River. The lowest elevation in the Unit is at sea level at the ocean and peaks at 7,055 feet atop Snow Mountain in Lake County. The Unit's population density and land use centers primarily around agriculture and tourism, with millions of visitors coming to enjoy the region's wine industry, commercial fishing and recreation, hospitality, agriculture, manufacturing, and healthcare.

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.



Fire Agencies and You

Our CAL FIRE Sonoma-Lake-Napa (LNU) Unit (cont.)

Operationally, LNU is divided into four divisions and 10 field battalions.

LNU personnel during peak fire season include approximately 330 permanent personnel and another 250 seasonal personnel on the suppression side. They staff 21 fire stations, 31 state engines, six bulldozers, operate two conservation camps, have one fuel reduction crew based in Davis, a firefighter hand crew housed at the Hood Mountain Fire Center in Sonoma County, one helitack base in Lake County, one air attack base in Sonoma County and many other support staff professionals.

A typical fire station will house between 3-12 firefighters on a given day. The 31 state fire engines in operation during peak staffing levels are the most of any CAL FIRE Unit, giving LNU the ability to cover such a large responsibility area and have the capacity to send aid elsewhere immediately.

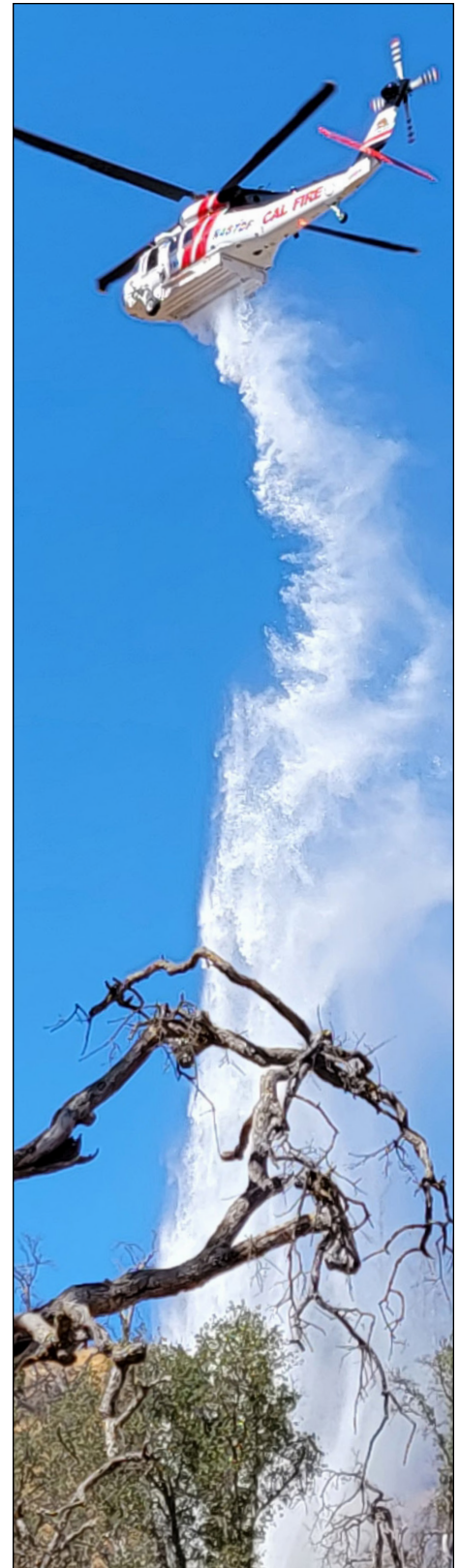
LNU has two categories of operations: “Schedule A” and “Schedule B”.

Schedule B is the state funded wildland fire protection mission in State Responsibility Area (SRA). LNU has the largest Schedule B contingent of any Unit in the state.

In addition to the state-funded wildland fire protection mission, CAL FIRE LNU is contracted to provide personnel and services for the Napa County Fire Department, the South Lake County Fire Protection District (FPD), and the North Sonoma Coast Fire Protection District. These contracts are known as “Schedule A” agreements and benefit both the state and local government agencies in different ways.

The state benefits by having a diverse group of employees trained and experienced to mitigate any scale or scope of an emergency incident. Local governments benefit by having support and management services provided by an all-risk fire agency respected all over the world.

The California Department of Corrections and Rehabilitation (CDCR) and CAL FIRE collaborate to sustain effective and efficient fire crews with the expectations to construct hand line, mop-up, post-fire patrols and assist with fire line suppression repair. LNU has two Conservation Camps located in Solano and Lake Counties that currently support three inmate crews at Delta Camp and two crews at Konocti Camp.



Our Local Wildfire Environment

We Live in a Wildfire Environment

The beautiful and scenic landscapes of Solano County make it an enticing place to live, which is why many people have sought homes adjacent to or within woodland and back-country areas. This intermingling of human developments, such as roads and houses, with undeveloped wildlands is known as the Wildland-Urban Interface (WUI) ([*see "The Wildland-Urban Interface \(WUI\)" on page 10*](#)). It is critical that WUI residents are aware of their heightened vulnerability to wildfire damage and know what can be done to reduce their risk and prepare their homes

resources, such as acorns, basketry material, and grasses favored by deer and elk. Understory burns in oak woodlands play an important role in reducing insect pests in acorn harvests. Agricultural settlers in the 1800s also used intentional burns to improve and maintain grasslands for pasture animals.

These more frequent, low-intensity fires help 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, as well as more vulnerable to the droughts that frequently occur in California.

A history of fire suppression since the early 1930s has interrupted the region's natural cycle of fire, altering 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.



against this threat. In California, it's not a matter of if a wildfire will happen, but when. For some residents that live in the "WUI", they may only have one way in and out from their residence. This just makes preparation of the utmost importance.

Fire has always been, and will continue to be, an integral part of Solano 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. Indigenous peoples have used fire as a management tool and cultural practice since time immemorial. Such practices improve food and cultural

Our Local Wildfire Environment

We Live in a Wildfire Environment (cont.)

FIRE AND PLANT DISEASES

As trees die succumbing to fungal pathogens, what were formerly lush forests can transform into stands of hazardous fuels.

Humans are often responsible for moving these pathogens from one place to another, usually unintentionally, but sometimes with major environmental and financial consequences. Clean tools, equipment, boots, and vehicles regularly to avoid spreading plant diseases, and never transport firewood beyond the area where it was harvested.



SUDDEN OAK DEATH

Sudden Oak Death (SOD) is caused by the microscopic pathogen *Phytophthora ramorum*. This invasive plant pathogen affects a wide variety of plant species, including oaks and *tanoaks*, leading to significant tree mortality. The pathogen spreads through water, soil, and infected plant material, making it challenging to control. This tree disease was first identified in California in the mid-1990s and has since spread to multiple counties. It is believed to have originated in Asia and spread globally through the trade of infected ornamental plants.



INVASIVE PESTS

Insect pests such as Mediterranean Oak Borers can introduce fungal spores after they tunnel into a tree to lay their eggs. These fungal “gardens” provide food for the colony and result in death of the tree. Mediterranean Oak Borers have been found in neighboring counties after being transported through firewood, and pose a grave risk to Solano County’s oak woodlands if they become well-established in this area.

General land-management practices that are beneficial for fuel-hazard reduction may help reduce the infestation and spread of sudden oak death and other pests.

THESE INCLUDE BUT ARE NOT LIMITED TO:

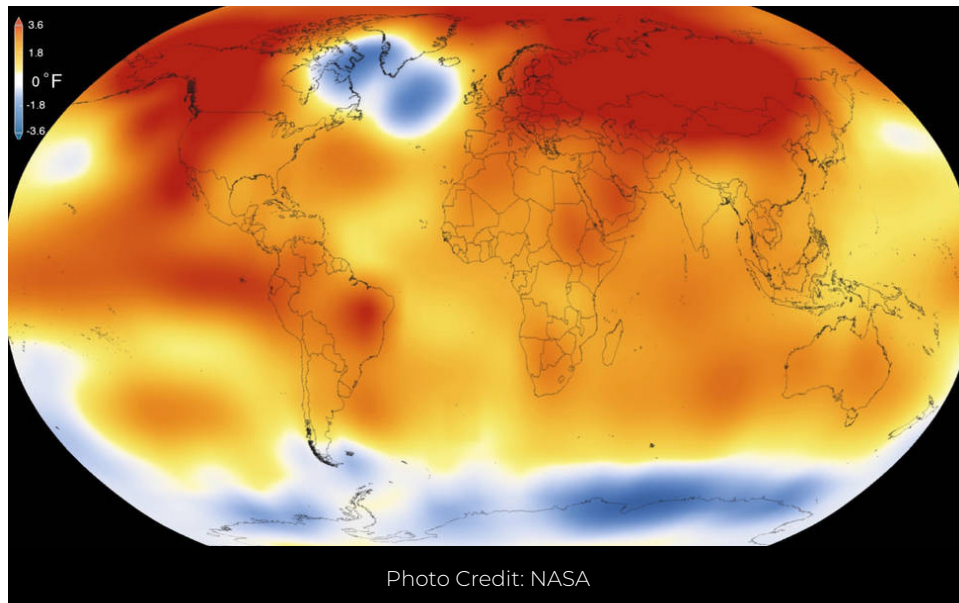
- Thinning the understory of oak woodlands.
- Removing dead and dying trees.
- Reducing ladder fuels.
- Reintroducing fire through prescribed burning.

Our Local Wildfire Environment

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

"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."

[scientificamerican.com/article/climate-change-is-central-to-californias-wildfires](https://www.scientificamerican.com/article/climate-change-is-central-to-californias-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."*

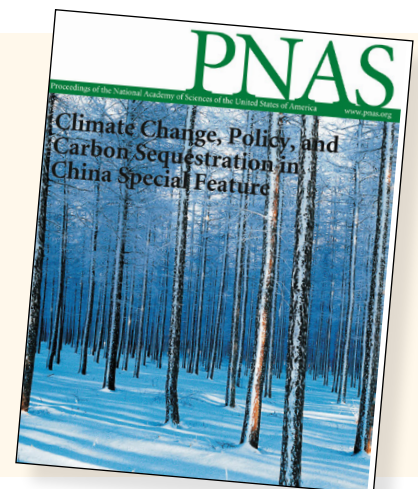
agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008jd010966

The Proceedings of the National Academy of Sciences of the United States of America tell 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."

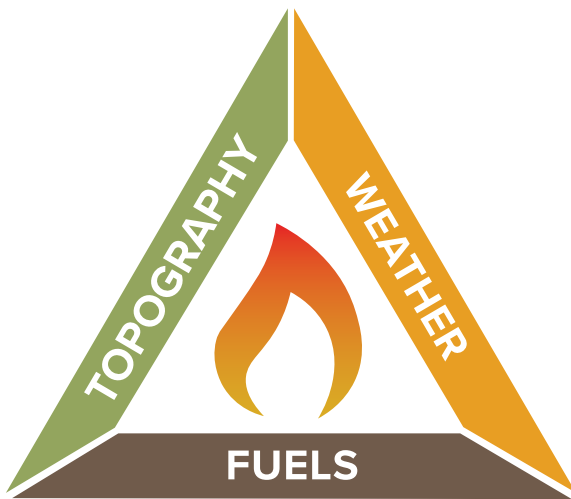
pnas.org/content/113/42/11770

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



Our Local Wildfire Environment

Fire Behavior



HOW DO FIRES REALLY BEHAVE?

How quickly a fire spreads (rate of spread) and in which direction, how hot it burns (heat output), fire intensity, flame length, residence time (the time for a flame to pass), and whether it is a surface (on the ground) or a crown (in the trees) fire—these are all aspects of what’s known as fire behavior.

The faster, hotter, and bigger a fire becomes, the more difficult it is to manage or “fight,” and the more destructive it can be.

Knowing the attributes of fire behavior is important for communicating a fire’s possible threats and benefits, as well as for identifying post-fire actions.

THREE MAJOR FACTORS AFFECT FIRE BEHAVIOR:

FUELS are all combustible materials. In the wildland, they generally consist of living vegetation (trees, shrubs, grass) and dead plant material (dead trees, dried grass, fallen branches, pine needles, etc.). Your home and any dead fuels around it can affect the fire behavior.

The amount, size, moisture content, and arrangement of fuels influence fire behavior. Drier fuels ignite more easily; the more dense and continuous the distribution of fuels, the more likely fire behavior will be extreme. Grass is a light, flashy fuel that burns quickly, while heavier fuels such as downed trees take longer to ignite and burn for longer. A fire burning through fuels that are spaced farther apart may not burn as quickly, while a fire burning through crowded and continuous fuel will tend to burn hotter and more rapidly. This is why it is important to create your defensible space.

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 slope steepness, and is particularly rapid and erratic in narrow canyons and drainages, which can create a chimney effect whereby a convection column of heat drives fire quickly upwards. Fire behavior also tends to be greater (more extreme) on slopes with south and southwest aspects, because they receive more sun during the hottest part of the day, drying out fuels and making them more ignitable.

WEATHER can have the greatest influence on fire behavior. Characteristics such as wind, temperature, and relative humidity (i.e., moisture in the air) will influence fuels, making them more or less receptive to fire, and often creating conditions for increasing fire behavior, such as seen in wind-driven conflagrations. In general, strong erratic winds, high temperatures, and low relative humidity will increase fire behavior. **One of the most dangerous winds for Solano County are those that are from the north, that tend to be stronger and drier.**

For information about fire weather, fire danger, fire analysis, fuels conditions, and more, visit: gacc.nifc.gov/oncc/predictive/weather or fs.usda.gov/research/fire/firebehavior.

Our Local Wildfire Environment

Fire Behavior (cont.)

EXTREME FIRE BEHAVIOR

“Extreme” implies fire behavior characteristics that largely preclude direct attack fire suppression. One or more of the following behaviors are usually involved: high rate of spread, prolific crowning (fire in treetops) and/or spotting (burning pieces of firebrand, or embers, being transported to new areas and igniting) ahead of the main fire, presence of fire whirls (sometimes called fire tornados) ahead of the main fire, and a strong convection

column. Predictability is difficult because such fires often create their own weather patterns, becoming erratic and dangerous. Fire suppression is almost impossible when a fire exhibits extreme behavior. In California, recent extreme fire behavior is in large part due to weather and fuel conditions aligning to support rapid and extreme fire growth. Anyone living in these conditions should be prepared to evacuate quickly.



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, conversely, 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.

One Less Spark

Our Responsibility for Wildfire Prevention



Fire is a chemical reaction, resulting from an ignition source, with the necessary combination of heat, fuel, and oxygen. When enough heat is applied to a fuel, the result is fire. Heat is required to begin the reaction. Once started, fire produces its own combustion-sustaining heat, and the chain reaction continues until any one of the elements of fuel, heat, or oxygen is removed.

Natural ignition sources such as summer thunderstorms can produce lightning strikes, which have long been the most

common natural fire ignition source in Northern California. Many lightning-caused fires occur in remote, forested areas; however, a single storm can generate numerous lightning strikes, resulting in multiple fires that occur simultaneously. Multiple wildfires within the same geographic region can spread firefighting resources thin and limit suppression capabilities. Sometimes when these fires are ignited in remote areas, human detection may not happen right away, allowing fires to grow large. **Fire can and will create its own weather!**

MOST WILDFIRES IN CALIFORNIA ARE CAUSED BY HUMANS!

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.



One Less Spark

Our Responsibility for Wildfire Prevention (cont.)



VEHICLES AND TOWING—For many of us, the vehicles we drive become second nature to us, and it is easy to forget they are potentially dangerous machines require constant vigilance. Vehicles can create sparks which 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. Ensure all chains are secured prior to towing. (*see "Vehicle Safety" on page 14*) for more information.



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. It is always good to have a hose nearby that you can use to douse the flames early if needed.



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. You should always ensure that before leaving your campsite any fires are extinguished. You can also have a bucket of water or a shovel handy to put out a fire that may have gotten out of control.



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. It is important to know how to obtain a "Burn Permit" which will be discussed later in this handbook. (*see "Burn Permits and Smoke Management Plans" on page 37*) for more information on how to pile burn safely.

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! If you see something, say something!

**IF YOU SUSPECT AN ARSON-CAUSED FIRE
CALL OUR ANONYMOUS HOTLINE: 1-800-468-4408**

ONE LESS SPARK ONE LESS WILDFIRE



CAUSED BY: HOMEOWNERS

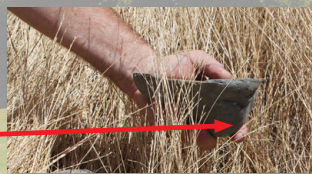
Use the Right Equipment

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.



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 Thibodeau 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.



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

EQUIPMENT USE



KEEP A SHOVEL AND A FIRE EXTINGUISHER READY TO USE.



10 FT

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.

ONE LESS SPARK
ONE LESS WILDFIRE

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



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.

Scan this QR code with your mobile device to visit PreventWildfireCA.org



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

R5-PR-030

June 2013

Water Needs to Protect Your Home from Fire

WATER CONSIDERATIONS TO BE PREPARED TO PUT OUT FIRES FAST!

In the event of a fire emergency—whether it's a barbecue tipping over into dry grass, a nearby vegetation fire, an ember storm from a wildfire, or a fire in your home—it's crucial to act quickly.

Always call 911 first to alert firefighters. If it's safe and you have the necessary skills and equipment, you can then attempt to extinguish the fire yourself.

Water is your best weapon when you need to quickly put out a wildfire. To save precious time it's a good idea to have 5/8 or 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 “firefighter” type nozzle is better.

A nearby hose with a nozzle can quickly be grabbed to put out any small grass fires. 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. As previously discussed, having a shovel nearby is also helpful.

In addition to water, always keep strategically placed fire extinguishers in your home. Typically, one on each floor of your home and in the kitchen are good places to house extinguishers.

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 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, it is recommended that 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. Familiarizing your local fire department with your water system can help them later during a major fire.
- 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. 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 or 2½-inch National Hose Thread discharge outlet. Some landowners buy their own lightweight 1½-inch fire hose, usually 100 feet or more, with a variable-stream fire nozzle; 100 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 engine can arrive. In some areas it can take a half hour or more for a fire engine to arrive—long enough for a fire to dramatically increase in size and intensity.
- A **“suction” tank** should be located 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

Water Needs to Protect Your Home from Fire (cont.)

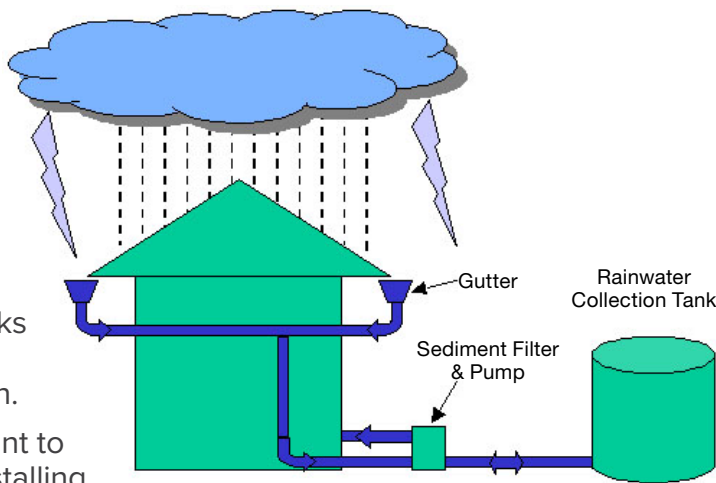
the tank. For maximum flow to the fire engine, 3 to 4-inch pipe should be used for the short distance to connect between the 2½-inch fire valve standpipe/hydrant and the tank. Always make sure that you give fire vehicles enough room to get where they need to.

- 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).
- 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 want to consider installing a rainwater harvesting system to replenish your emergency water supply.



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 agency and CAL FIRE to make sure they can still find and access your water.

BURY YOUR WATER LINES!

Ensure that you will have water for firefighting when you need it by burying any unprotected plastic water supply lines at least six (6) inches deep.

HELP FIREFIGHTERS FIND YOUR WATER!

Emergency water supplies must be easily seen and visibly signed from the nearest road. Here are some tips:

- 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.
- Allow your local fire department and CAL FIRE personnel onto your property so that they know where your water supply is, long before they might need to use it.



Be Prepared: Make Your Home Fire Safe

Fire Safety and 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, there is a general principle behind making an area defensible. This is to reduce the amount of fuel that a fire would require

and to alter its arrangement and type. In other words, you do not want anything near your home that could ignite easily, burn quickly, and/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 can create embers or brands in a wildfire, landing on your home's combustible materials or entering the home through vents and other openings, including an open window or door. They can travel more than a mile in front of a wildfire and create spot fires.

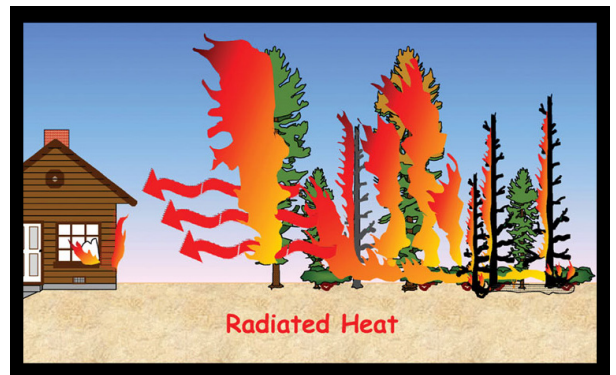
Embers cause the majority of wildfire home ignitions by directly igniting a structure, or by igniting vegetation or materials on or near a structure, resulting in flames touching the house or creating a high-heat exposure that may break window glass.

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. However, with good defensible space and home hardening, your home can survive the fast-moving passage of the flame front.



Be Prepared: Make Your Home Fire Safe

Preparing Your Home for the Eventuality of Wildfire

WHAT IS A HARDENED HOME?

“Hardening” your home and creating “defensible space” are essential to improve your home’s chance of surviving a wildfire. Research and analysis of past fires show that eliminating or reducing ignitable fuels from the house itself and the first five feet surrounding it are critical for reducing the probability of home ignition.

The vast majority of homes burned in wildfires ignited from windblown embers landing in a “receptive fuel bed,” or vulnerable spot(s), and not from a wall of flames. Proper defensible space (managing the vegetation and other fuels surrounding the structures) will preclude the likelihood of a wall of flame reaching the house, which allows firefighters the option to defend the home. It will also allow them to stay with the defense longer if they are threatened and must consider evacuating themselves.

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 around your home is required by law. Defensible space, in conjunction with home hardening, is your property’s front-line defense against wildfire!

“Fire hardened” means your home is as secure as possible from wildfire threats. It does NOT mean fireproof; rather, you have protected the weakest parts of your home, or your home’s vulnerabilities, with proven building materials and/or techniques to resist some heat and flame along with the ember storm that accompanies wind-driven wildfires. A common misconception is that buildings burn randomly during wildfire events, but 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 some control regarding how we address this vulnerability, and how we can prepare for and manage fire in our individual communities. Some hardened-home features are mandatory for new construction, and 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.

IGNITION-RESISTANT BUILDING MATERIALS

Ignition-resistant building materials are those that resist ignition or sustained burning. 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, such as fiber cement siding, composition tile roofing, or other retardant-treated wood lumber that is listed by the Office of the State Fire Marshal (SFM) and any material that has been tested in accordance with SFM Standard 12-7A-5. See SFM Building Materials Listing: osfm.fire.ca.gov/what-we-do/fire-engineering-and-investigations/building-materials-listing. Information will be listed under the Wildland Urban Interface (WUI) Listed Products Handbook section of this website.

ADDITIONAL DEFENSIBLE SPACE AND HOME HARDENING RESOURCES:

readyforwildfire.org
disastersafety.org/wildfire

ucanr.edu/sites/fire
anrcatalog.ucanr.edu/pdf/8393.pdf

Be Prepared: Make Your Home Fire Safe

Preparing Your Home for the Eventuality of Wildfire (cont.)

DEFENSIBLE SPACE BASICS

Please see [readyforwildfire.org/prepare-for-wildfire/defensible-space](https://www.readyforwildfire.org/prepare-for-wildfire/defensible-space).

SOME OF THE PRINCIPLES TO KEEP IN MIND INCLUDE:

- ✓ Keep your gutters and roofs clean of all leaves and needles.
- ✓ Focus on what is immediately around your home. Surround your home and deck with a 5-foot non-combustible zone that will not support ignition from wind-blown embers. This zone can include rock mulch, stone pavers, cement, bare earth, gravel, or sand. Low-combustibility materials can work, such as an irrigated and maintained lawn (less than 5 inches in height), or irrigated, non-woody herbaceous plants under 5 inches in height. Leaves, needles, or other vegetation that falls in this 5-foot zone must be removed during fire season.
- ✓ Keep all flammable material (e.g. firewood or propane tanks) at least 30 feet from homes or structures. During a wildfire event, also move anything else that can burn—such as patio furniture—beyond this zone.
- ✓ Consider the combustibility of your plant choices. While no plant is immune to fire, certain plants are less flammable. [readyforwildfire.org/prepare-for-wildfire/fire-smart-landscaping](https://www.readyforwildfire.org/prepare-for-wildfire/fire-smart-landscaping) can help you find the right items to have around your property.

Choose and maintain plants that have:

- Leaves that are moist and supple.
- Little dead wood, and tend not to accumulate dry, dead material within the plant.
- ✓ Within 100 feet surrounding your home, be sure to maintain clearance between vegetation branches and prune each individual plant. Clearance does not mean dirt or gravel—it's about limiting the flammability around your home,

so remove things that are easily ignitable from this area.

- ✓ If you live on a hill, you might extend this up to 200 feet, depending upon the steepness of the slope, and the presence of surrounding fuel.
- ✓ In order to reduce the intensity and rate of spread of an approaching wildfire, reduce the overall volume of fuel, and modify their structure (by focusing removal on the smaller, kindling-like fuels) and arrangement (by breaking up their continuity both horizontally and vertically).
- ✓ Remember the other species that share the land. Leave a vegetation buffer around streams and other sensitive areas.

WHAT ARE LADDER FUELS?



A ladder fuel is a continuous line of vegetation from the ground into the canopy (or upper branches) of trees, which allows fire to climb up into the tree canopy.

Defensible space is best achieved when your vegetation-management actions remove the lower live and dead fuels (e.g. limbs, shrubs, grass, etc.) so a wildfire cannot easily climb, or step up to, the canopy of trees, or even directly to your home. If your deck extends out over vegetation such as thick grass, shrubs, or limbs, wildfire can progress to ignite the deck and eventually your home.

Breaking up the continuity of fuels in both vertical and horizontal directions is a very important aspect of your defensible-space preparation.

Be Prepared: Make Your Home Fire Safe

Preparing Your Home for Wildfire: Your Legal Responsibility

CREATING AND MAINTAINING DEFENSIBLE SPACE

If you live in the Wildland-Urban Interface or WUI (see "*The Wildland-Urban Interface (WUI)*" on page 10), you are responsible for ensuring that your property complies with California's building and fire codes which require homeowners to take proactive steps to protect their property from a wildfire. These steps include reducing flammable materials such as brush or vegetation around 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.

California is divided into areas where local, federal, or state (i.e. CAL FIRE) agencies have primary financial responsibility for the prevention and suppression of wildland fires. If you live in a "State Responsibility Area" (SRA) there are important requirements to protect yourself and your property from wildfire.

California law (Public Resources Code 4291) requires that property owners' control and maintain vegetation 100 feet around their property or to the property line if less than 100 feet. Reducing the combustible live and dead vegetation in this zone will help slow the progress of an approaching wildfire and provide a safe place for firefighters to defend your home. It also helps to keep a fire that starts on your property from spreading to your

neighbors. To achieve this reduced-fuel zone, start by managing the fuels closest to your home and work outward toward the 100-foot zone (or further on steep slopes) or the property line.

FIRE-RESISTANT MATERIALS

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. See readyforwildfire.org/prepare-for-wildfire/fire-smart-landscaping that discusses these types of materials.

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: storymaps.arcgis.com/stories/b2fc79e82aec4ecab4250987db7312cb

To request an AB 38 inspection, visit: fire.ca.gov/dspace.



Be Prepared: Make Your Home Fire Safe

Preparing Your Home for Wildfire: Your Legal Responsibility (cont.)

WHAT CAN I DO ABOUT MY NEIGHBOR'S PROPERTY?

Contact your local fire agency, Fire Safe Council, and neighbors to develop a strategy to ensure that unmaintained vegetation is abated on parcels that pose a wildfire threat to nearby homes.

- Start by reaching out to the property owner(s) with the goal of helping them understand the fire danger and the importance of working across property lines to reduce wildfire hazards. If there are many properties of concern, consider organizing a neighborhood meeting to discuss the issue; invite CAL FIRE, local fire department representatives, and/or Fire Safe Council/Firewise® community representatives to help educate property owners.
- Request assistance from the local fire agency (for vacant properties, if there is a local ordinance) or CAL FIRE (for properties with a structure) and ask for an inspection.
- As a last resort, send a certified letter that describes the hazard, including photos, and states that if a fire originates on their property and spreads to yours, they could be legally liable.
- Contact your countywide Fire Safe Council for more details and examples of how to address this situation.



IS YOUR HOME DEFENDABLE?

Firefighters use the terms “defendable” and “not defendable” to distinguish between houses with defensible space and those that do not have it.

During large fires (where many homes are threatened and firefighters need to make in-the-moment decisions), more defensible homes will have priority over homes with less defensible space. Defensible space supports firefighter safety and leads to a greater chance of structure survival.

Firefighters risk their safety protecting us and our homes, so please keep first responder safety at the forefront of your efforts—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 defendable.

Be Prepared: Make Your Home Fire Safe

Hardening Your Home

Use the suggestions below to “harden” your home by reducing its vulnerability. Keep in mind that developing wildfire resilience is more than having a metal roof or stucco siding. Ember-resistant construction relies on awareness of the small details that can make your home vulnerable to embers, in addition to building with appropriate materials and carrying out regular home and property maintenance. It takes the combination of both defensible space and hardening of your home to give your house the best chance of surviving a wildfire.

For more, visit: ucanr.edu/sites/wildfire/side_of_house/eaves.

BELOW ARE SOME THINGS YOU CAN DO TO HARDEN YOUR HOME AND MAKE IT MORE FIRE RESISTANT.

Your top 3 priorities should be your roof, vents, and near-home vegetation.

ROOF

The roof is the most vulnerable part of your home and has the greatest exposure to embers.

- Inspect and repair, or replace your roof with materials that meet “Class A” standards such as asphalt shingles or metal.
- Plug gaps between your roof covering and sheathing to prevent ember entry.

VENTS



Vents are important for moisture management, but they can also allow embers to enter the attic, soffit, or foundation.

- Upgrade all vent openings with 1/8- inch metal mesh, or install new vents that resist embers and/or flames.

EAVES AND SOFFITS

With open-eave construction, inspect and plug gaps around rafter roof tails and blocking.

- Upgrade to soffit eave design if possible.

WINDOWS

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

- Install or upgrade to multi-pane tempered glass.
- Remove vegetation or other combustible materials outside a window.

SIDING

Siding is vulnerable if exposed to flames or radiant heat for extended periods of time.

- Inspect all siding and plug or caulk gaps and joints.
- Maintain 6 (six) inches of vertical noncombustible space above the ground, in addition to the horizontal 5-foot noncombustible zone around your home, to reduce flame penetration.
- Replace wood shingle or shake siding with something ignition resistant.
- Where a neighboring home or outbuilding is less than 30-feet away, the use of noncombustible or ignition-resistant materials is recommended.

DECKS

- Decks are vulnerable to fires from embers igniting vegetation or materials stored below the deck.

Be Prepared: Make Your Home Fire Safe

Hardening Your Home (cont.)

- ❑ Ensure that all combustible items are removed from underneath, on, or next to your deck.



RAIN GUTTERS

Embers can easily ignite leaves and needles caught in a gutter. These fires often get under the roof and enter the attic.

- ❑ Inspect and clean gutters regularly to reduce accumulations of leaves or needles.
- ❑ Use gutter guards to reduce caught debris.

CHIMNEY

- ❑ Cover your chimney and stovepipe outlets with a non-combustible screen.

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.
- ❑ Know how to operate your garage door when the power is out.

FENCES

- ❑ When a fence or gate connects to a house or outbuilding, use metal or other non-combustible fence materials within 5-feet of the building to prevent the fence from burning right up to 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.

- ❑ Maintain access roads with a minimum of 10-feet of clearance on either side, allowing for two-way traffic.
- ❑ Ensure that all gates open to accommodate emergency equipment. If there is a code to get into the property ensure firefighters have that code.
- ❑ Trim trees and shrubs overhanging the road to allow emergency vehicles to pass.

ADDRESS

- ❑ Make sure your address is clearly visible from the road and any signage is non-combustible.
- ❑ If your address is not visible from the road, consider dropping off a map at your local fire station showing your property location

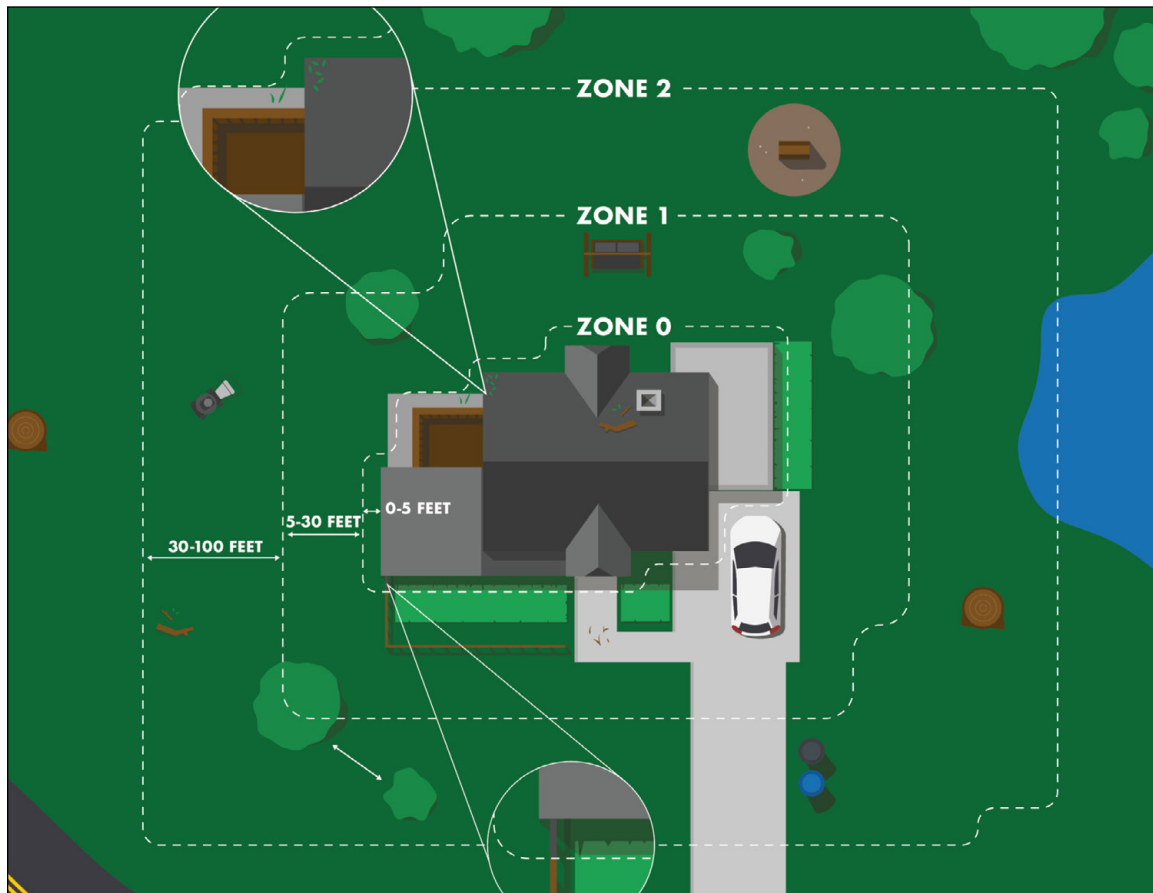
WATER SUPPLY



- ❑ Consider having multiple garden hoses that are long enough to reach all areas of your home and other structures on your property.
- ❑ If you have a pool or well, consider getting a pump with a back-up generator.
- ❑ Best practices are to provide a 2-1/2-inch water line from your tank to a standpipe fitted with 1-1/2-inch fire hose fittings coordinated with your local department.

Be Prepared: Make Your Home Fire Safe

Preparing Your Home: Defensible Space—Zone Zero



ZONE 0 EXTENDS 5-FEET FROM STRUCTURES

(buildings, decks, etc.)

The new ember-resistant “Zone 0” was passed into law in 2020; science has proven it to be the most important of all the defensible space zones.

This zone includes the areas 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.

- Use hardscape like gravel, pavers, concrete and other noncombustible mulch materials. No combustible bark or mulch.

- 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.
- Remove all branches within 10-feet of any chimney or stovepipe outlet.
- Limit combustible items (outdoor furniture, planters, etc.) on top of decks.
- Relocate firewood and lumber to Zone 2.
- Replace combustible fencing, gates, and attach arbors to the home with noncombustible alternatives.
- Consider relocating garbage and recycling containers outside this zone.
- Consider relocating boats, RVs, vehicles and other combustible items outside this zone.

Be Prepared: Make Your Home Fire Safe

Preparing Your Home: Defensible Space—Zone Zero (cont.)

ZONE 1 LEAN, CLEAN & GREEN ZONE

Extends 30 feet out from buildings, decks, and other structures or to your property line, whichever is closer.

- Remove all dead plants, grass and weeds (vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Remove branches that hang over your roof and keep dead branches 10-feet away from your chimney.
- Trim trees regularly to keep branches a minimum of 10-feet from other trees.
- Relocate wood piles to Zone 2.
- Remove or prune flammable plants and shrubs near windows.
- Remove vegetation and items that could catch fire from around and under decks, balconies and stairs.
- Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.

ZONE 2 REDUCE FUEL ZONE

This zone extends 30 to 100-feet from Zone 1, buildings and other structures, decks, etc. or to your property line, whichever is closer.

- Cut or mow annual grass down to a maximum height of 4-inches.
- Create horizontal space between shrubs and trees (*see "Defensible Space" on page 24*).
- Create vertical space between grass, shrubs and trees (*see "Defensible Space" on page 24*).
- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 3-inches.
- All exposed wood piles must have a minimum of 10-feet of clearance, down to bare mineral soil, in all directions.

ALL ZONES 0 TO 100 FEET FROM ZONE 1 AND 2

- “Outbuildings” and Liquid Propane Gas (LPG) storage tanks shall have 10-feet of clearance to bare mineral soil and no flammable vegetation for an additional 10-feet around their exterior.
- Mow before 10 a.m., but never when it’s windy or excessively dry.
- Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.

The County follows State defensible space requirements, particularly in the State Responsibility Areas (SRA). If you live within the city limits, check with your local fire department for any specific requirements related to defensible space or weed abatement.

For more information on the Assembly Bill 38 legislation to see how the need for Defensible Space is affecting real estate, visit: storymaps.arcgis.com/stories/b2fc79e82aec4ecab4250987db7312cb.



Be Prepared: Make Your Home Fire Safe

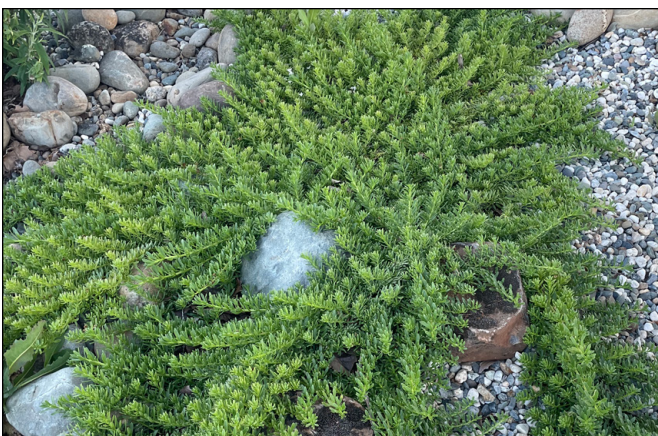
Fire-Smart Landscaping

A fire-smart landscape isn't necessarily the same thing as a well-maintained yard. A fire-smart 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-smart. And you will find that a fire-smart 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, aloe, and jade plant.
- ✓ Select fire-resistant shrubs such as redbud, yerba buena, currant, sumac, and hedging roses.
- ✓ Plant oaks, maples, 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.



Be Prepared: Make Your Home Fire Safe



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.

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.

FOR MORE INFORMATION:

Ready for Wildfire, Fire Smart Landscaping:
readyforwildfire.org/prepare-for-wildfire

UCANR, Fire Resilient Plants:
ucanr.edu/sites/fire/preparedness/landscaping/plant_choice

WFCA, Fire Resilient Plants:
wfca.com/wildfire-articles/fire-resistant-plants

Firewise Landscaping Recommendation:
cnpsmarin.org/category/in-the-garden/fire-smart-landscaping

Firewise Guide to Landscape and Construction: iafc.org/docs/default-source/1fire-prev/bookletguidetofirewiselandscapeandconstruction.pdf

Be Prepared: Make Your Home Fire Safe

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.

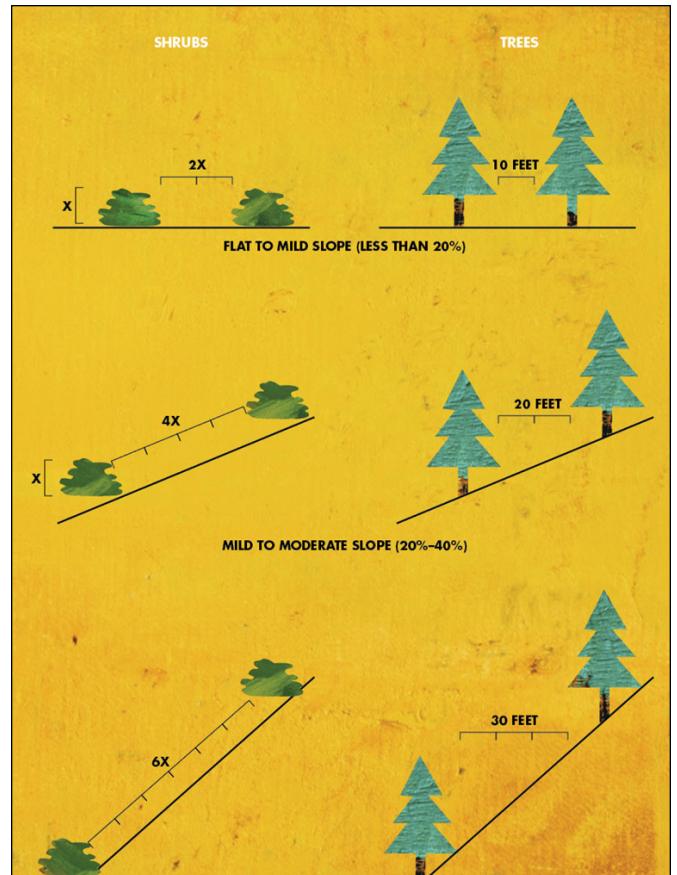


VERTICAL SPACING

- ✓ 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 above to determine spacing distance.



Hazardous Fuel Mitigation

A Do-It-Yourself Primer to Thinning a Young Forest

If you have experience with a chainsaw, you can improve your young forests to reduce their potential fire hazard and their long-term health and resiliency. This is a brief tutorial to get you started.

1. Begin by cutting the smaller surface brush before pruning limbs or felling trees. Always cut or pluck tiny seedlings if you don't want them to fill your understory and require retreatment soon. Begin at the low point in a stand and zigzag your way uphill, so as not to bury your work.
2. Next look at the understory trees. Remove everything dead, as well as suppressed trees that have been out-competed by taller trees. Conifer vigor can be gauged by the distance between whorls of branches; if the distance declines for several years, it's likely to not "release," or respond to being freed by cutting overtopping trees; so it should be removed.
3. Other symptoms of suppression include dead leaders and branches groping for sunlight that became the new leader.
4. Another rule of thumb is if there is not room in the overstory for the tree to grow into, it's a candidate for removal. Visualize the stand in 10, 20, 50, 80 years and beyond. Focus more on what is left behind than what is removed. Consider the likelihood of repeated treatments. With sprouted clumps of hardwoods, if space exists in the upper canopy, you can select the healthiest and most vigorous individuals and remove the rest.
5. Beyond your defensible space, leave a closed overstory with shade to reduce sprouting vigor and guard against windthrow to residual trees. (Within your defensible space separate tree crowns, and reduce sprouts with a weedwhacker with plastic blades.)
6. If time and budget allow, target intermediate trees in the canopy hierarchy. They can be very brushy, growing more horizontally than dominant and co-dominant trees. If there's not space for a tree in the upper canopy now or near future, remove it. This will achieve a large discontinuity in the vertical (ladder) fuels, a key to mitigating crown fires.
7. Carefully prune remaining trees. Leave half the tree's height in live crown if concerned about its growth rate. Proper pruning technique (especially on smaller trees) is one of the most difficult skills to master, and one of the most important. It's essential not to tear the bark of the trunk as each limb falls. One method is to notch the underside of the limb first. Alternatively, you can cut right through the limb a foot or two from the trunk, and then cut off the remaining stub. The desired result is for the cuts to be flush or just beyond the branch collar (the thickening at the base of the limb). Better to leave a short stub than to damage the collar or trunk. If time and budget allow, prune higher with a pole saw. Remember that pole sawing involves aerial hazards.
8. After one round of thinning, the stand will be more open, allowing a better look at the upper canopy battles for dominance. Shake adjoining trunks to see how the crowns interact. If you choose to enter and thin again, criteria such as species diversity, spacing, and wildlife habitat may play a bigger role in your choice of what to take or leave. The more crowded the trees, the better the lumber they will eventually produce, as they will have tighter grain and fewer lower limbs. Likewise, clear lower trunks mean less ladder fuel, which helps protect against crown fires.
9. Quality pruning, working precisely in crowded clumps of sprouts and minimizing operator fatigue calls for a smaller saw

Hazardous Fuel Mitigation

A Do-It-Yourself Primer to Thinning a Young Forest (cont.)

(2.5 to 3 ci engine) with a 16- to 20-inch bar. Safety tips include considering why OSHA mandates that sawyers help protect their legs with chaps. Don't use a chainsaw above shoulder height. Always wear a hard hat (plastic has more resistance to shattering but aluminum is harder to cut through). Cordura hiking shoes do little to protect your toes; steel-toed leather is recommended.

10. Resulting materials need to be chipped, pile burned, or lopped and scattered to avoid increasing fire hazard, each has pros and cons. Chippers depend on good road access, usually require dragging brush uphill, and can be costly to rent or buy.
11. Burning slash is usually the cheapest option, assuming the skills are present to be efficient. Make sure to locate piles in openings and not near smaller trees. Feed piles gradually to avoid damaging residual trees. Too hot a fire can fry the cambium layer at the base of a tree trunk. Ensure that you know local regulations for burn permits, which will be covered later in this handbook.
12. Where fire risk is minimal, you can lop and scatter (never within 200' of buildings). Cut the material so it lies in contact with the ground as much as possible and spread it over the forest floor. CAL FIRE standards are no higher than 30 inches, but the lower the better to minimize the time it will take to decompose. Lop and scatter increases fire hazard in the short term, but the decomposed debris adds carbon and nutrients to the soil. If done correctly, brush will rot and cease to function as kindling within 5 to 10 years.
13. With lop and scatter, it's easiest to treat each branch or sapling as it comes down. Keep the chain snug on the bar and sharp. Rev up the engine and sweep the saw along each side of each major branch or

stem; with the engine RPMs higher than if you were cutting individual branches to minimize "throwing the chain" off the bar. Always be aware of the relationship between the chain and your toes. As much as safety and comfort allow, trim branchlets while the limb or trunk is still attached so the chain doesn't toss the branch around. Next drop the larger piece of wood on top of the brush to weigh down the pile and increase ground contact. Focus on disposing of smaller, flashier fuels less than firewood size. Whatever larger fuels are not gathered for utilization should be arranged in one layer with maximum ground contact for quicker decomposition.

Achieve competence and humility in tree felling before attempting it without a mentor present; never work above your skill level. Learn to anticipate hazards. Remember that complexity is often more of a hazard than tree size, and expect the unexpected. Always make sure that someone is aware of where you are and what you are doing in the event there is an emergency. Wear proper protective clothing at all times.



Hazardous Fuel Mitigation

Prescribed Grazing



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.

Grazing using sheep, goats, or cattle (or combinations) can be an effective tool for managing vegetation. A property owner's animals can be managed for specific fuel reduction goals, or land managers can hire a grazing project.

In addition to being more affordable than other fuel reduction methods, grazing can be especially useful in areas that are difficult to treat with equipment, herbicide, or hand crews. Livestock can work on slopes that equipment can't reach, and can be deployed over large areas or near urban areas where burning or mowing may be impossible. Unlike herbicides or some chipping work, grazing removes the fuels from a landscape instead of rearranging them. Animals can perform a variety of fuel reduction tasks on a grazing unit such as establishing or maintaining a fuel break, removing vegetation around sensitive areas like waterways, and grazing the "ladder fuels" that conduct wildfire into the tree canopy.

With careful planning, grazing animals can help manage invasive weeds at the same time

they are reducing fuels. A contract grazer or Certified Rangeland Manager (CRM) can advise on planning a grazing project to control specific plants such as yellow starthistle or broom. Livestock can also be used in areas with plants that are problematic for humans to work around—for example, goats will enjoy poison oak and blackberry. Timing is critical however, as success of a project will depend on factors like when plants go to seed, whether target plants will be able to regrow that season, or how the palatability of a plant changes as it grows. Targeted grazing (also called prescribed grazing) works best on larger land tracts, usually five acres or more. Smaller landowners can work together to create grazing units that span property lines and provide more of a protective buffer around a community.

When carefully used, grazing can be an impactful piece of a landscape-scale wildfire risk reduction plan. Over time, this approach 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 site conditions (including terrain and vegetation), your goals for the property, availability and type of animals, and their needs including fencing, water, and access. Multi-year contracts can be beneficial both in terms of cost and making sure the vegetation will be maintained over time.

Match.Graze connects grazers with land managers seeking grazing services.

matchgraze.com

Beneficial Uses of Fire

Prescribed Fire/Controlled Burning: Using Fire as a Tool



Prescribed fire, or controlled burning, is an effective and relatively inexpensive tool to restore California’s fire-adapted ecosystems, including Solano’s rolling grasslands and oak woodlands. It can remove unhealthy and dangerously overgrown vegetation, improve the growth and vigor of native plants, enhance wildfire habitat, and reduce hazardous fuels to prevent catastrophic wildfire.

Prescribed fire methods can be simple to complex. 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.

Federal, state, and local regulators, with prescribed burners continue to explore workable solutions to facilitate prescribed fire while protecting the public. Recent legislative changes include changing liability standards as well as a \$20 million claims fund to protect burns under the direction of a California State-Certified Prescribed Fire Burn Boss, or CARX.

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 a “Burn Plan” are met.

Fire engines, crews, and water must be available to monitor and manage the burn. It can’t be too hot or windy, and humidity levels must be within identified limits. How the burn is ignited can significantly affect fire behavior and fire effects on the landscape and vegetation. Some 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. Appropriate burning conditions can be chosen, which can result in less impacts to air quality and public health as compared to wildfire.



Beneficial Uses of Fire

Prescribed Fire/Controlled Burning: Using Fire as a Tool (cont.)

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 can increase firefighter safety by creating safer areas from which bigger blazes can be suppressed.
- ✓ 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.

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. Smoke from prescribed fires is often less toxic than wildfire smoke.
- ✓ Fire is difficult to control. Even with all the planning, preparation, and staffing that is part of a prescribed fire project, fires can escape. However, fewer than 1% of all prescribed fires nationwide escape control.



Beneficial Uses of Fire

Legal Requirements for Burn Piles

Burning yard waste is 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.
- Landscape debris piles must be in small 4x4-foot piles.
- Maximum pile size is 4-feet in diameter.
- Clear all flammable material and vegetation within 10-feet of the outer edge of pile.
- Keep a water supply and shovel close to the burning site.
- A responsible adult is required 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.
- Be 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 (*see "Burn Permits and Smoke Management Plans" on page 37*).

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. 4FT 10FT 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.
- 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.

ONE LESS SPARK
ONE LESS WILDFIRE

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

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

Beneficial Uses of Fire

Prescribed Burn Association

Annual and historic fuel loads are hard to manage in Solano County and many tools are necessary to successfully reduce fuel levels. Prescribed fire is one important tool that has been historically used in the region not just for reducing the impacts of wildfire but also for controlling pests, increasing forage quality, and stewarding native vegetation.

Long-established settler families in our county have been burning for decades and indigenous people of the region for centuries. However, for people who are transplants to the rural life or for people who do not have a family tradition of burning, learning how to 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.

Prescribed Burn Associations (PBAs) are one way to bridge this knowledge gap by delivering hands-on training necessary to employing prescribed fire safely and effectively. PBAs are community-based organizations that connect land owners, land managers, and other interested community members in getting "good fire" on the ground. PBAs take a wide variety of forms, but are always made up of people with a common goal of sharing knowledge, experience, skills, equipment, and resources to conduct prescribed burning that is ecologically minded, effective, and safe.

PBAS COMMONLY SUPPORT THE FOLLOWING ACTIVITIES:

- Determining if/when a burn should be completed
- Planning, permitting, and communication
- Providing resources, information, training, equipment, logistical support, and personnel
- Expanding community support for prescribed burning and building a culture of safe and effective use of prescribed fire

To learn more about PBAs including what they do and how they work please visit the CAL PBA website: calpba.org.

Solano is currently developing its own PBA, to find out more about what is happening with Solano PBA development please visit the Solano RCD website: solanorcd.org/projects-and-programs/wildfire/pba or email fire@solanorcd.org to be added to the Solano PBA email list. If all proceeds as planned, a PBA in Solano will build over the coming years a community of engaged citizens who connect with each other on controlled burning and other land management issues.



Beneficial Uses of Fire

Solano County Ag Pass Program

The Solano County Ag Pass Program facilitates the safety and continuity of commercial livestock and agricultural businesses, including agricultural processors and horse stables, before and during natural disaster events. The program verifies the commercial status of livestock producers, agriculturalists, agricultural processors and horse stable operators and provides disaster preparedness and response training. Once verified and trained, commercial operators are preemptively issued Ag Passes so agricultural properties and businesses within evacuation areas may be accessed during natural disasters for performance of essential livestock care, crop management and processing activities.

Possession of an Ag Pass conditionally permits qualifying commercial livestock producers, agriculturalists, processors and horse stable operators, and/or their managerial employees, to enter evacuation areas to:

- Shelter, transport, evacuate, feed/water and administer livestock veterinary care;
- Perform essential crop management and agricultural activities; and,
- Provide, upon request, support to emergency personnel (such as identifying access roads and water points).

Possession of an Ag Pass does not guarantee access to evacuation areas during emergency events. The incident commander will determine when conditions are suitable to allow access to evacuation areas.

Visit solanocounty.com/depts/agriculture/ag_pass.asp to see full program guidelines including eligibility details, upcoming training dates, and the link to submit an application.



Natural Resources Conservation Service (NRCS) Cost Share Programs

The Natural Resources Conservation Service (NRCS) of the US Department of Agriculture works in partnership with the Solano 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 on privately owned farms, ranches and forests. For more information about EQIP, including program eligibility and how to apply, contact:

Vacaville Service Center
Natural Resources
Conservation Service
(707) 448-0106

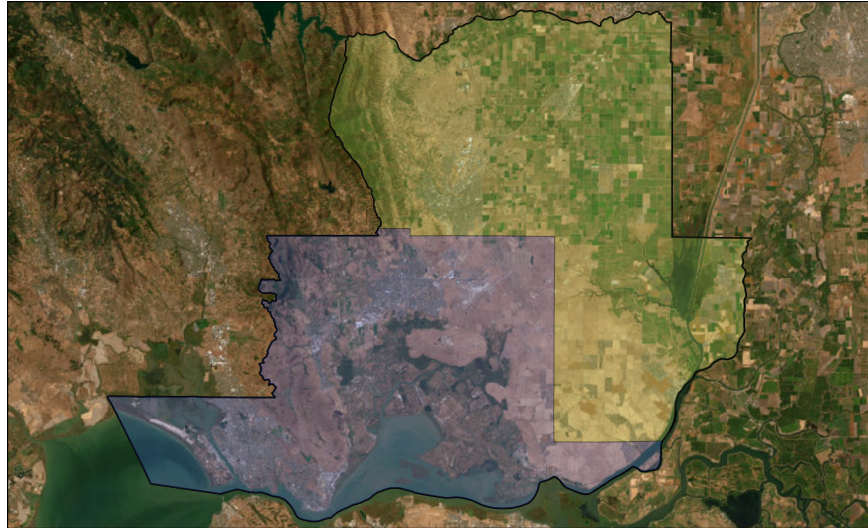
Beneficial Uses of Fire

Bay Area and Yolo-Solano Air Quality Management Districts

Yellow:
Yolo-Solano Air Quality
District boundary
(YSAQMD)

Green:
Bay Area Air Quality
District Boundary Map
(BAAQMD)

County Boundary
in Black



BURN PERMITS AND SMOKE MANAGEMENT PLANS

Bay Area AQMD is the authority for all agricultural burning in the southern portion of Solano County and the Yolo-Solano AQMD is the authority for all agricultural burning in Yolo County and the northeastern portion of Solano County (including Vacaville, Dixon, and Rio Vista).

All burning within the Air Quality Districts on agricultural lands, including materials from agricultural activities, must be authorized by one of the Air Quality Management Districts before ignition. All those authorized to ignite an agricultural burn must first have an agricultural burn permit. Visit the Air Quality District websites (listed below) for complete instructions **BEFORE PLANNING A BURN**.

For More: baaqmd.gov/permits/open-burn or ysaqmd.org/rules-compliance/burning

BURN PERMIT GENERAL INFORMATION

Burning trash is illegal.

While Yolo-Solano AQMD does not authorize individual rural yard burns, it does have overriding regulations governing these burns. **Local rules set by fire districts**, counties or cities may be stricter. Check with your local fire district before burning. Violators of District rules will be cited and penalized.

BURNING IN THE FIRE DISTRICT

Rural yard burning is the open burning of vegetative material (dry weeds, plant prunings, shrubbery, tree trimmings and branches) from around a residential property not located in an incorporated city. Rural yard burning is permitted in only on District approved burn days and only when authorized by a resident's local fire district (which requires a burn permit from your local fire district). If your property is in the State Responsibility Area (SRA), you can verify your address by going to the links listed below:

calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=468717e399fa4238ad86861638765ce1 (SRA)

Beneficial Uses of Fire

Here are the websites for the Local Fire Districts and Suisun RCD:

vfpd.net/24-25-residential-burn-permit (Vacaville Fire Department)

suisunrcd.org/permits (Suisun Marsh Area)

fairfield.ca.gov/government/city-departments/fire/cordelia-fire/burn-permits (Cordelia Fire District)

montezumafiredistrictsolano.ca.gov/forms/#burn-permit (Montezuma Fire District)

For the Suisun Fire Protection District, please visit their Fire Station
445 Jackson Street, Fairfield, California 94533 or call 707-425-3605.

Dixon Fire Department at (707) 678-7060.

Agricultural Burning vs. Rural Yard Burning

Agricultural burning includes any open burning of vegetative agricultural materials generated by agricultural operations on land used for commercial agricultural purposes. Rural yard burning is limited to vegetative yard material from maintenance of residential properties not located in an incorporated city, and where local code allows burning.

RESIDENTIAL BURNING

Smoke and ash generated through the burning of household garbage and non-organic materials can be toxic. Exposure to these pollutants can cause respiratory ailments, stressed immune systems and cancer. Children are especially susceptible to the health impacts of airborne toxins released by the burning of garbage.

YOU MAY NOT BURN:

- Garbage
- Building materials (including lumber or demolished structures of any kind)
- Pallets
- Furniture
- Coal
- Any other non-organic materials, including any plastics or chemicals inside the plastics

There is a statewide ban on the burning of household garbage and non-organic materials.
Violators will be cited.

YOLO-SOLANO SMOKE-RELATED RESOURCES:

The District has a few resources on our website pertaining to health impacts and wildfire smoke. You may use any of these public outreach resources in your Smoke Effects document as this information has been reviewed and pre-approved by District staff:

ysaqmd.org/about-the-district/news-outreach/wildfire-smoke-information

ysaqmd.org/outdoor-physical-activity

ysaqmd.org/about-the-district/news-outreach

Beneficial Uses of Fire

The YSAQMD actively monitors potential smoke impacts from regional wildfires. If you have any questions regarding these resources or need additional air quality related public outreach products, contact—Public Outreach Coordinator Cody Hess: (530) 757-3669 / chess@ysaqmd.org.

Smoke Effects from Open Burning & 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.

AIRNOW IS A GREAT WEBSITE TO SEE THE AQI IN YOUR AREA.
 YOU CAN VIEW IT AT airnow.gov/aqi/aqi-basics.

- ✓ Pay attention to local air quality reports. 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.”
- ✓ 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.
- ✓ Follow recommendations for the Hazardous category. Additional information on reducing exposure to extremely high levels of particle pollution is available.

Air Quality Guide		
AIR QUALITY	VALUES OF INDEX	PROTECT YOUR HEALTH
Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

Beneficial Uses of Fire

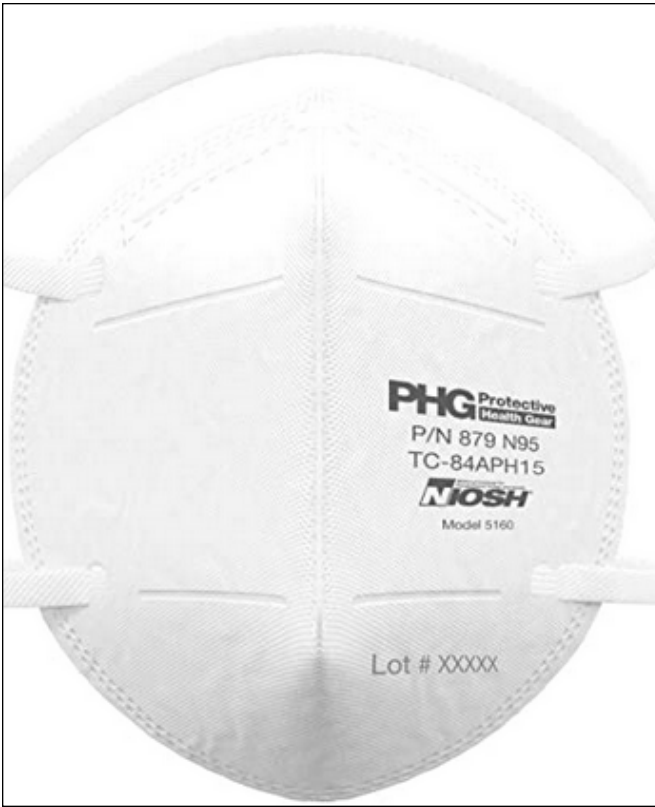
Smoke Effects from Open Burning & Wildfires (cont.)



- ✓ [Airnow.gov](https://www.airnow.gov) - Provides Air Quality Index and whether air quality is getting better or worse: (gispub.epa.gov/airnow/?showgreencontours=false).
- ✓ [Weather.gov](https://www.weather.gov) - National Weather Service provides smoke forecast.
- ✓ For regional Air Quality Index notifications, call 1-866-BURNDAY (1-866-287-6329).
- ✓ 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.
- ✓ 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.
- ✓ 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 bandannas are not designed to protect your lungs from wildfire smoke.

Beneficial Uses of Fire

Smoke Effects from Open Burning & Wildfires (cont.)



N95 mask



Particulate respirator

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.	

Are You Fire-Ready?

The geography, weather patterns, and number of communities within the WUI in California make it particularly vulnerable to devastating wildfire.

To help educate property owners and residents in areas most at risk, Solano County has implemented the Ready, Set, Go Program created by CAL FIRE that breaks down the actions needed to be ready for wildfire.

- **Ready:** Create and Ready: Create and maintain your defensible space and harden your home against flying embers.
- **Set:** Prepare your family and home for evacuations ahead of time by writing an action plan and building an emergency kit
- **Go!** Listen to officials and evacuate immediately to give your family and home the best chance of surviving a wildfire.
- **Visit:** solanocounty.com/getreadysolano for information on preparing your family and home.
- **Visit** the CAL FIRE site for wildfire preparation: readyforwildfire.org.



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



100^{FT}



UP TO 1 MILE

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

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)

Ready, Set, Go!

Notifications & Evacuation

Once your home is ready with defensible space, prepare yourself, your family, and your animals for potential evacuation. You can dramatically increase your safety and the survivability of your property by preparing well in advance of a wildfire.

EMERGENCY NOTIFICATIONS

Being informed makes a big difference in your ability to keep yourself and your family out of harm's way. Register to receive emergency notifications and only use reliable sources for information. Emergency conditions can impact your ability to receive notifications. Consider options that use back-up power sources or do not rely on power, this could include a battery-operated NOAA Weather radio or listening for hi-lo sirens. If it's safe to do so, be a good neighbor and make sure others around you have received the notice to evacuate.

✓ **Hi-Lo Emergency Sirens**—Law enforcement agencies in Solano County are equipped with hi-lo sirens that will only be used in an emergency. Go to [facebook.com/watch/?v=770278626913324](https://www.facebook.com/watch/?v=770278626913324) to listen to how this siren sounds. If you hear a hi-lo siren, you should tune into a reliable source to find out what is happening in your area and if you need to take action. Seek information from Alert Solano, Nixle, reliable social media, radio, or television sources. 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. If you hear the hi-lo, it's time to go.

- ✓ **Alert Solano**—any one that lives or works in Solano County is encouraged to sign up for emergency notifications by going to alertsolano.com. Anyone already registered should login to verify their information at least once per year. You can also receive notifications by downloading the Everbridge app. Notifications will only be sent to residents that are being asked to take protective action for themselves. It is not used to send informational messaging to the community. Emergency Notifications must follow State of California Alert and Warning Guidelines, available at calalerts.org/guidelines.html.
- ✓ **Nixle**—A notification system that can be used for emergency or non-emergency notifications to the community. Messages cannot be targeted to a specific area but rather are sent to an identified zip code(s). It is still critical to sign up for Alert Solano even if you've signed up for Nixle since not all messaging is appropriate to send to an entire zip code. To sign up, text the zip code you would like to follow to 88877.
- ✓ **Know your zone!**—Solano County has been divided into pre-identified zones to aid the community during evacuations. Make sure to write your zone name down and keep it in an easy to view place, like the refrigerator. Go to emergency.solanocounty.com to view the map. Members of the community without internet access can call Solano OES at (707) 784-1600 to ask about their zones. You can also download the Genasys app for your Apple or Android devices.



Ready, Set, Go!

✓ **Social Media**—Social media is a great way to gather information on what is happening in the community before, during, or after an emergency. Residents are encouraged to follow their local first responder agencies on social media. Follow @SolanoOES on Facebook. It's important to note that not all agencies use every platform.

✓ **Door to Door**—Once an evacuation is ordered, law enforcement officers will attempt to go door to door to notify residents of the danger. There are several factors that go into whether an officer will make it to your door, this can include, how fast the fire is moving, terrain, distance between rural residencies, time of day, staffing, etc.



Emergency Notification Language

✓ **Be a Good Neighbor**—You can help get the word out during an emergency! Often times we hear about incidents happening in our community from our friends, family, and neighbors. “Good neighbors” are a key part of the emergency notification system. For a number of reasons, not everyone will receive a notification on their phone, email, or text, and not everyone will receive a knock on their door from a law enforcement officer. If it is safe to do so, make sure those around you received the evacuation message. The community phone tree can often reach people when we can't. Make sure you only share verified information.

Why would you not receive an emergency notification? There are a number of reasons you may not have received an emergency notification. Here are some of the common pitfalls to avoid.

1. Register to receive alerts from Alert Solano.
2. Annually verify your information is still accurate.
3. Everyone in your home or work should sign up for alerts individually to ensure everyone receives this critical information regardless of who is home.
4. You may not be in an area that needs to take action. The message will only be sent to those that need to take a protective action. For community information, check social media and other trusted sources.
5. Your phone is on silent or do not disturb. The message will not override silent mode or do not disturb. Alert Solano telephone calls will come from 707-784-1662 and text messages will come from 88911. Nixle messages will come from 888777. Save these numbers as trusted contacts in your cell phone.

Emergency Notification Language (cont.)

6. You do not have internet service. This could be from service distribution or power outages. Most home phones and smart devices require internet service to function, as does your email. Loss in power may also result in a loss of cellular service if your provider does not have adequate back-up power sources. Have plans in place for power outages and total losses of power, internet, and cellular coverage, especially in rural areas.
7. You may have opted out. If you've ever received an Amber Alert or other emergency messages and clicked the button to turn off future notifications, you could be at risk. Check your settings to ensure you will receive these critical messages when you need them most.

TYPES OF NOTIFICATION

Solano County uses the following terms for emergency notifications, in alignment with the State of California Alert and Warning Guidelines.

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.
Evacuation Orders Lifted	This is the formal announcement lifting evacuations in an area currently under evacuation.
Hard Closure	Closed to all traffic except Fire and Law Enforcement.
Soft Closure	Closed to all traffic except Fire, Law Enforcement, and critical incident resources (i.e. utility, Caltrans, City/County Roads, or those needed to repair or restore infrastructure.)
Resident Only Closure	Soft closure with the additional allowance of residents and local government agencies assisting with response and recovery.



SOLANO COUNTY "***VOLUNTARY ORGANIZATIONS ACTIVE IN DISASTER***" (SOLANO VOAD)

A VOAD is a local group of community organizations that coordinates emergency human services, while working in concert with partner agencies, including the local emergency management agency and social service agencies, during all stages of a disaster.

Solano VOAD is the vehicle in Solano County, California for coordinating private sector, non-profit & community based organizations, the faith community, and government agencies serving human and animal needs following a disaster.

They facilitate partnerships, provide training, and foster effective service delivery to those affected by disasters in Solano County through the collaboration of community agencies throughout the disaster cycle—preparedness, response, and recovery.

The purpose of the Solano VOAD is to be a coalition of agencies and organizations fostering more effective coordination of emergency response and recovery services among its partner organizations and recruiting others to participate in an integrated plan that will ensure an effective and sustainable organization.

For more information: solanovoad.org.

Ready, Set, Go!

Evacuation Readiness



THE SIX "P's"

KEEP THESE SIX "P's" READY IN CASE IMMEDIATE EVACUATION IS REQUIRED

1. People and pets
2. Papers, phone numbers, and important documents
3. Prescriptions, vitamins, and eyeglasses
4. Pictures and irreplaceable memorabilia
5. Personal computer hard drive and disks
6. "Plastic" (credit cards, ATM cards) and cash



EVACUATE EARLY IF:

YOU OR MEMBERS OF YOUR HOUSEHOLD:

- Are older adults and/or are persons with disabilities
- Are persons with access and/or functional needs
- Staying in your home makes you feel unsafe

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!

- Write a Wildfire Action Plan and review annually. (See the form on the back page of this brochure.)
- Build an Emergency Supply Kit (*see "Emergency Supply Kit Checklist" on page 49*) and keep it in your car at all times. Include supplies for your pets.
- If possible, cover up to protect against heat and flying embers, wear long pants, long-sleeved shirt, heavy shoes/boots, cap, bandana or masks for face cover, goggles or glasses, 100% cotton is best.
- If you can locate your pets quickly, take them with you. Ensure they are registered and/or microchipped in case you are not able to find them in time to get out safely.
- Call 911 as early as possible if you are unable to evacuate without assistance.

Ready, Set, Go!

Evacuation Readiness (cont.)

WHEN TO LEAVE

- ✓ Leave early enough to avoid being caught in fire or traffic. Be aware of emergency vehicles in the area while evacuating.
- ✓ 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 outside the danger area, such as the house of a well-prepared friend or family member, shelter or evacuation center, public library, 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.
- ✓ Authorities may not be able to provide evacuation routes at the time you receive an evacuation order. Familiarize yourself with multiple exit routes within your neighborhood.

WHAT TO TAKE

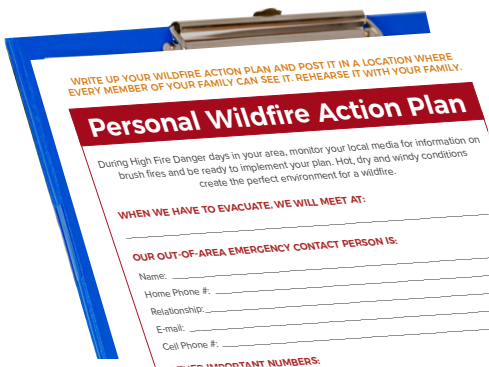
- ✓ Take your Emergency Supply Kit containing your family and pet's necessary items. (See the checklist on the following page.)

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 to go!

Your Wildfire Action Plan Checklist

CREATE A WILDFIRE ACTION PLAN THAT INCLUDES THE FOLLOWING:

- ✓ Designate an emergency meeting location outside the fire or hazard area. This is critical to determine who has safely evacuated from the affected area.
- ✓ Locate several different escape routes from your home and community. Practice these often so everyone in your family is familiar with them in case of emergency.
- ✓ Have an evacuation plan for pets and large animals such as horses and other livestock.
- ✓ Develop a Family Communication Plan that designates an out-of-area friend or relative as a point of contact to act as a single source of communication among family members in case of separation. (It is easier to call or message one person and let them contact others than to try and call everyone when phone, cell, and internet systems can be overloaded or limited during a disaster.)



THE FORM TO CREATE YOUR *PERSONAL WILDFIRE ACTION PLAN* CAN BE FOUND ON THE BACK PAGE OF THIS BOOKLET.

EMERGENCY SUPPLY KIT CHECKLIST

Put together your Emergency Supply Kit long before a wildfire or other disaster occurs and keep it easily accessible so you can take it with you when you have to evacuate. Plan to be away from your home for an extended period of time. Each person should have a readily accessible Emergency Supply Kit. Backpacks work great for storing these items (except food and water) and are quick to grab. Storing food and water in a tub or chest on wheels will make it easier to transport. Keep it light enough to be able to lift it into your car.

For more information on emergency supplies, visit cdph.ca.gov/programs/epo/pages/prepareanemergencysupplykit.aspx.

CHECKLIST

- Three-day supply of non-perishable food and one gallon of water per person, per day
- Remember pet food and water!
- Map marked with at least two evacuation routes
- Prescriptions and/or medications
- Change of clothing (include cold weather and warm weather clothing in your kit)
- Extra eyeglasses or contact lenses
- An extra set of car keys, credit cards or traveler's checks, and cash
- First aid kit
- Flashlight with extra batteries
- Battery-powered radio with extra batteries
- Sanitation supplies
- Cell phone charger and/or battery pack
- Emergency contact numbers
- Copies of important documents (Birth certificates, Passports, Marriage License, Insurance Declaration pages, DMV documents, DD 214, etc.)

ITEMS TO TAKE IF TIME ALLOWS:

- Easily carried valuables
- Family photos and other irreplaceable items
- Personal computer information on hard drives and disks

Always keep a sturdy pair of shoes and a flashlight near your bed and handy in case of a sudden evacuation at night.



GET SET: As the Fire Approaches

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.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.



Ready, Set, Go!

If You Are Trapped

IF YOU ARE TRAPPED

AT HOME:

- Stay calm, keep your family together.
- Call 911 and inform authorities of your location.
- Shelter away from outside walls.
- 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.
- Keep doors and windows closed, but unlocked.

WHILE IN YOUR VEHICLE:

- Stay calm.
- Park your vehicle in an area clear of vegetation.
- Close all vehicle windows and vents.
- Cover yourself with wool blanket or jacket.
- Lie on vehicle floor.
- Use your cell phone to advise officials—call 911.

WHILE ON FOOT:

- Stay calm.
- Go to an area clear of vegetation, a ditch or depression on level ground if possible.
- Lie face down, cover up your body.
- Use your cell phone to advise officials—call 911.



After the Fire Has Passed

- If you feel safe doing so, check your roof and extinguish any fires, sparks or embers.
- If you feel safe doing so, check inside the attic for hidden embers.
- Patrol your property and extinguish small fires.
- If there are fires that you cannot extinguish, call 911.

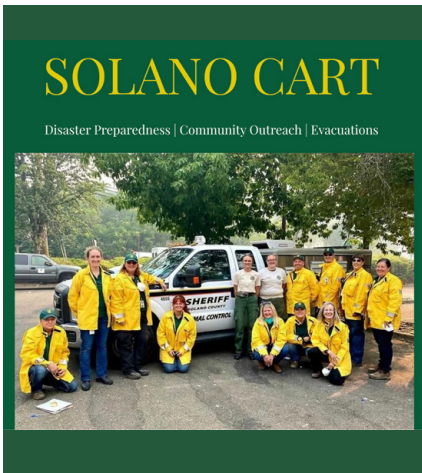
Ready, Set, Go!

Evacuation Planning for Pets & Large Animals

SOLANO COUNTY ANIMAL RESPONSE TEAM (CART)

ARE YOU AND YOUR ANIMALS PREPARED FOR AN EMERGENCY?

CART Mission: *To provide disaster preparedness education and resources to Solano County community members to ensure the best possible outcome for their animals during an emergency.*



Proactively creating a disaster action plan (DAP) is a vital step you can take to ensure the best possible outcome for your animals. Our volunteers are available to partner with animal owners to develop a DAP specific to their needs.

(Contact the DAP Team: dap@solanocart.org)

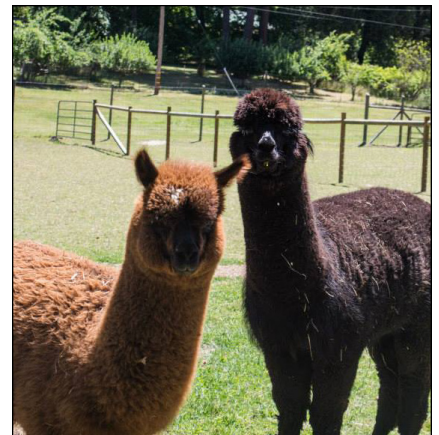
DAPs are kept on file with our organization and we encourage animal owners to regularly update their DAPs and communicate changes to Solano CART to help expedite potential support during an emergency.

Solano Community Animal Response Team

PO Box 2935, Vacaville, CA 95687

(707) 343-8295

solanocart.org / email: info@solanocart.org



Evacuation Planning for Pets & Large Animals (cont.)

- ✓ **Plan ahead—know where you will take or leave your pets.**
- ✓ Arrange in advance for a neighbor to check on, or transport, your pets if you are not home when disaster strikes.
- ✓ Make sure your neighbors have your contact numbers (cell phone, work, home, etc.).
- ✓ Pets may not be allowed inside all emergency shelters; have a pre-arranged alternate location to take your animals.
- ✓ 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.
- ✓ Make sure your pets are microchipped, registered, and always wearing properly fitted collars with personal identification, rabies, and license tags.
- ✓ Store vaccination/medical records, veterinary contact information, proof of ownership, a current photo, and an Emergency Supply Kit.



PET EMERGENCY SUPPLY KIT

- Pet carrier for each pet
- At least a three-day 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 or tied up inside!
- ✓ If securing left inside, use a room with no windows and adequate ventilation, such as a utility room, garage, bathroom, or other area that can be easily cleaned.
- ✓ 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.
- ✓ 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.

Ready, Set, Go!

Evacuation Planning for Pets & Large Animals (cont.)

Plan ahead, know where you would evacuate the animals. 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. Contact Solano CART if you need help with planning.

Have vaccination/medical records, registration papers, and photographs of your animals (proof of ownership) in your Emergency Preparedness Supply 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.

MORE RESOURCES ON EVACUATING PETS AND LARGE ANIMALS:

- ✓ Solano County Animal Response Team:
solanocart.org
- ✓ Wildland Fire Safety For Your Livestock And Pets:
readyforwildfire.org/animal-evacuation
- ✓ Ready—Pet and Animal Emergency Planning:
ready.gov/animals
- ✓ ASPCA—Disaster Preparedness website:
aspca.org/pet-care/general-pet-care/disaster-preparedness

Ready, Set, Go!

Check Your Insurance Before a Wildfire

In advance, know what your insurance company covers in the case of mass disasters. The right amount and type of insurance and well-organized records will be invaluable.

1. Check your policy for disaster-related additional living expenses (disaster ALE). The terms for mass disaster-related additional living expenses can vary from the regular policy. 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 have valuable items or extensive collections, 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. United Policyholders (uphelp.org) offers a home inventory spreadsheet you can use to catalog your belongings.
4. Confirm that your policy covers the cost of replacing your home (Replacement Value), which may be lower than your home's real estate value or purchase price.



Check Your Insurance Before a Wildfire (cont.)



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: insurance.ca.gov/01-consumers.

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.

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 uphelp.org/preparedness.

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

What To Expect After A Wildfire

COMING HOME

Coming home after a wildfire can be difficult. The damage is often unknown until you return days or weeks later. ALWAYS check with officials before attempting to return to your home and follow local procedures about when it is safe to return. Check for the following:

- If you feel safe doing so, check grounds for hot spots, smoldering stumps, and vegetation.
- If you feel safe doing so, check the roof and exterior areas for sparks or embers.
- If you feel safe doing so, check the attic and throughout your house for any hidden burning sparks or embers.
- Be on alert for damaged utilities: if you smell gas or hear a hissing noise, leave the property immediately and call 911.
- If you feel safe doing so, check for fire damage to your home, turn off all appliances and contact PG&E 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, including the Solano Resource Conservation District, on the best way to restore and plant your land with fire-safe landscaping.

WATERSHED IMPACTS AFTER A WILDFIRE

The after-effects of a wildfire on a watershed can cause immediate issues and long-term effects. Rates of erosion and runoff can increase to dangerous levels following wildfires. 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 MAY IMPLEMENT POST-FIRE REPAIR EFFORTS INCLUDING:

- 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.

Landowners with steep slopes, waterways, or heavily damaged areas should contact local experts, including the Solano Resource Conservation District (solanorcd.org) for additional guidance.

LEARN MORE:

[solanocountyrecovers.org/
returning-to-your-property](http://solanocountyrecovers.org/returning-to-your-property)

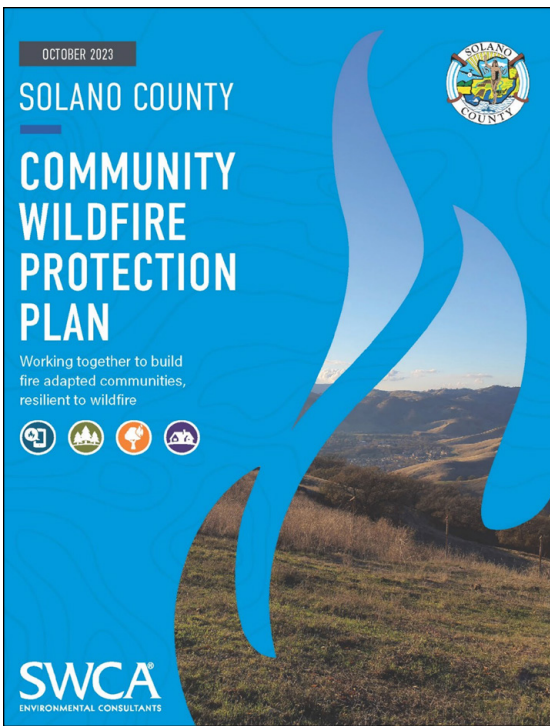
[readyforwildfire.org/
wp-content/uploads/calfire_
returninghomeafterafire_revised.pdf](http://readyforwildfire.org/wp-content/uploads/calfire_returninghomeafterafire_revised.pdf)

[ucanr.edu/sites/fire/
recovery/revegetation](http://ucanr.edu/sites/fire/recovery/revegetation)

[ucanr.edu/sites/fire/recovery/
revegetation/erosion](http://ucanr.edu/sites/fire/recovery/revegetation/erosion)

Communities Working Together

The Solano County Community Wildfire Protection Plan



WHAT IS IN A CWPP?

A Community Wildfire Protection Plan (CWPP) provides the information and tools to reduce catastrophic wildfires, protect the community, and live in better balance with the land. A CWPP is created by collaborative efforts from community members, fire agencies, local government, and other stakeholders.

A CWPP does not end when it is adopted. Adoption begins a continuous cycle of planning, implementation, monitoring, and adaptation. It is recommended that the CWPP be updated every five years.

SOLANO COUNTY'S CWPP

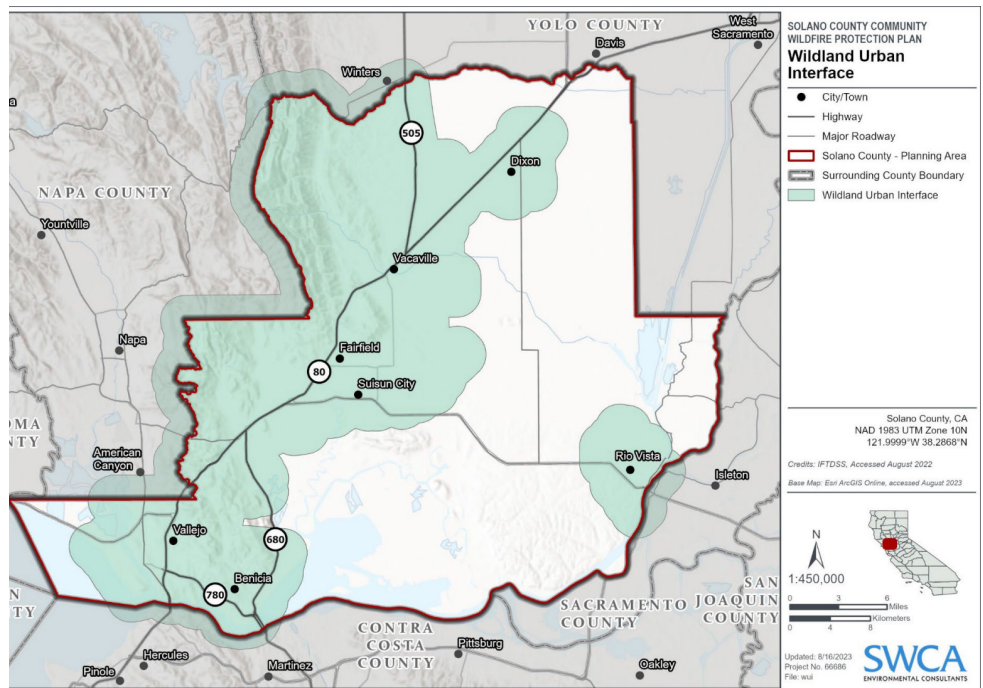
The Solano County Community Wildfire Protection Plan (Plan) serves multiple purposes in addressing the risk of wildfires and protecting human life and property. It aims to provide a comprehensive assessment of wildfire risk and protection needs across the county, bringing together various stakeholders involved in wildfire management and suppression.

Adopted in 2023, you can find the complete Solano County CWPP here:

solanofsc.org/community-wildfire-protection-plan-cwpp

CWPP MUST:

- ✓ Be collaboratively developed with all local stakeholders
- ✓ Identify and prioritize areas for hazardous fuel-reduction and recommend methods of treatment to reduce the risk to the community.
- ✓ Recommend measures to reduce the ignitability of structures throughout the community.



Communities Working Together

Solano County Fire Safe Council



WHAT IS A FIRE SAFE COUNCIL?

Local Fire Safe Councils can take many forms. Most are grassroots organizations founded to unite neighbors in reducing their wildfire risk. They do this through activities such as community workdays, improving communication among neighbors, and other programs to aid residents in preventing and recovering from fires. Fire Safe Councils can be as small and informal, incorporated 501(c)3 nonprofits, large organizations with paid staff, and anything in between.

THE SOLANO FIRE SAFE COUNCIL

The Solano Fire Safe Council is a community organization focused on bringing local interests together for improved wildfire preparedness, protection, and recovery.

OUR PURPOSE

The purpose of the Solano Fire Safe Council includes, but is not limited to:

FIRE-ADAPTED COMMUNITIES:

Helping create and sustain fire-adapted communities;

EDUCATION: Supporting outreach and public;

PLANNING: Promoting community fire-safe planning and coordination including local risk assessments;

CWPP: Contributing to the development, update, and implementation of the Solano County Community Wildfire Protection Plan;

ENGAGEMENT: Supporting fire-related community groups such as local Fire Safe Councils, Prescribed Burn Associations, and Firewise Communities;

COMMUNITY: Empowering Solano County residents to be ready for wildfire;

GRANTS: Seeking available funding for proposed and approved wildfire resiliency projects to make Solano County safer from

wildfires, education on community wildfire resilience, response, and recovery;

STEWARDSHIP: Promoting hazardous vegetation management and beneficial fire practices that support ecological function, climate resiliency, and address historical management issues, including maintaining the area's agricultural and economic viability;

VEGETATION MANAGEMENT: Assessing fire risk and working with fire agencies on hazardous fuels reduction efforts;

RESPONSE: Supporting safe and effective fire response in Solano County; and

RECOVERY: Supporting sustainable post-fire recovery for both communities and landscapes.

Please visit: solanofsc.org.

Communities Working Together

Local Fire Safe Councils

"I saw the 2017 Tubbs Fire jump across Highway 101 and burn down an upper middle class neighborhood, and knew wildfire was going to come to Solano County. There was no local organization that was addressing wildfire risk, so I knew we had to do something."

Rochelle Sherlock, *Green Valley Fire Safe Council Founder*



GLEN COVE FIRE SAFE COUNCIL

The Glen Cove Fire Safe Council is a project of the Glen Cove Community Association, uniting Glen Cove residents for fire safety, preparedness, and education. The GCFSC is committed to raising awareness of fire risk, encouraging our residents in fire mitigation practices, and working with local officials on concerns such as evacuation, disaster planning, and wildfire response. Glen Cove was recognized as a Firewise USA® community beginning in 2024. For more information, visit: glencovefiresafe.org.



GREEN VALLEY FIRE SAFE COUNCIL

The Green Valley Fire Safe Council is a grass-roots collaborative comprised of residents, Cordelia Fire, and CAL FIRE working to enhance wildfire survivability by raising awareness, providing public education, and sharing tools and resources. It serves the Green Valley region of Fairfield and surrounding areas, and actively plans fuel reduction projects to reduce wildfire risk in Solano and neighboring Napa County. Green Valley was recognized as a Firewise USA® community beginning in 2020. For more information, visit: gvfsc.org.



PLEASANTS VALLEY FIRE SAFE COUNCIL

Pleasant Valley Fire Safe Council - Vacaville is a community organization uniting Vacaville residents for fire safety, preparedness, and response. In addition to sharing educational information and providing a forum for residents, PVFSC brings together local fire personnel, land managers, and government in ongoing conversations about fire concerns in the area. As a Firewise USA® community, the Fire Safe Council's goal is to educate ourselves and our neighbors on how to prevent catastrophic fires, to prepare our properties to survive wildfires through home-hardening and vegetation management, and to meet insurers' criteria for continued coverage. For more information, visit: pvfsc-vv.org.



Communities Working Together

Firewise USA®



FirewiseUSA® recognition program is administered by the National Fire Protection Association and provides a collaborative framework to help neighbors in a geographic area get organized, find direction, and take action to increase the ignition resistance of their homes and community and to reduce wildfire risks at the local level. In California, the CAL

FIRE Office of the State Fire Marshal's Community Wildfire Preparedness & Mitigation Division assists local communities in receiving this designation. The Solano RCD is a resource for those interested in becoming Fire Wise as well as existing Fire Wise communities such as Green Valley Fire Safe Council.

Firewise empowers communities ranging from 8 to 2,500 households (dwelling units) with tools and resources, encouraging neighbors to work together to minimize wildfire loss. Actions include creating and maintaining defensible space—already a legal requirement in California—and hardening homes.

In Solano County, there are at least three Firewise Communities, each associated with a local Fire Safe Council: Green Valley, Pleasants Valley, and Glen Cove.

THE FIVE STEPS TO BECOMING FIREWISE

1. Form a volunteer committee of residents and partners. It can be your local Fire Safe Council;
2. Create a community wildfire risk assessment with support from CAL FIRE and the Solano RCD;
3. Create a three-year action plan of priority activities, based on the risk assessment;
4. Conduct an annual “Firewise Day” event;
5. Invest a minimum of 1 volunteer hour per household in local Firewise actions for the year; and apply for recognition through the Firewise® Portal (portal.firewise.org) and renew annually.



WAYS COMMUNITIES BENEFIT FROM FIREWISE:

Framework for Action: Get organized and find direction.

Learning About Wildfire: Learn about community wildfire risks and the simple things that can be done to reduce them.

Peace of Mind: See results quickly and know that the best information is being used to guide action.

Community-Building: Build a strong bond with neighbors while rallying around a common cause for the good of the community.

Citizen Pride: Take pride in earning recognition.

Publicity: Shine the spotlight on community efforts.

Access to Funding and Assistance: Show funders that your community is ready for action.

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

Communities Working Together

Solano Resource Conservation District (RCD)



Solano RCD is a non-regulatory special district to the State of California. Solano Resource Conservation District (RCD) was originally formed in 1956 to provide flood protection in the Ulatis watershed. Today we work closely with the Natural Resources Conservation Service (NRCS) and wide variety of other partners throughout the County on a watershed scale. In 2000 we changed our name to reflect this broader mission.

OUR GOALS

- Restore Solano County watersheds and natural resources to health
- Protect natural resources through vibrant partnerships, strategic restoration, and effective education programs
- Educate children and adults about watershed science and effective stewardship
- Enhance our watersheds and their habitats to better serve all beneficial purposes

We're proud of our ability to work with diverse groups of willing stakeholders to develop ground-up solutions to local resource issues. We partner with private citizens, local, regional, state and federal government agencies, research institutions, non-profits and private sector organizations to design and implement large and small ecosystem restoration programs, habitat enhancement projects, and watershed-based environmental education for kids and adults. We offer County residents conservation planning and watershed coordination services to help people manage their natural resources as individuals and in groups.

OUR TEAM

The RCD is guided by a volunteer Board of Directors appointed by the County Board of Supervisors. District programming is implemented by staff who provide specialized expertise, education and experience to help develop durable solutions to conservation challenges.

We provide direct assistance to Solano County farmers and landowners who work with us voluntarily to protect their soil, water and natural habitats. We also partner with agricultural and natural resource protection organizations and agencies throughout the County and region to implement watershed programs with local and regional benefits.

To discuss how we might work with you or to find out how to volunteer, call our office or drop us a note.

info@solanorcd.org
solanorcd.org

1170 N Lincoln, Ste. 110,
Dixon, CA 95620
(707) 678-1655 x 101

Additional Resources

Additional Fire Safety Resources

TO LEARN MORE ABOUT WILDFIRE AND HOW YOU CAN ENHANCE YOUR PERSONAL FIRE SAFETY, SEE THE FOLLOWING RESOURCES:

SOLANO COUNTY OFFICE OF EMERGENCY SERVICES - FIRE READY:

solanocounty.com/depts/oes/grs/fire_ready/2021_wildfire_preparedness_guide/default.asp

CALIFORNIA FIRE SAFE COUNCIL:

cafiresafecouncil.org

CALIFORNIA FIRE SCIENCE CONSORTIUM:

cafirescience.org

CALIFORNIA NATIVE PLANT SOCIETY—NATIVE PLANTS AND FIRE SAFETY:

cnps.org/conservation/fire

HOMELAND SECURITY—READY FOR WILDFIRES:

ready.gov/wildfires

FIRE ADAPTED COMMUNITIES:

fireadapted.org

FIRE ADAPTED COMMUNITIES LEARNING NETWORK:

fireadaptednetwork.org

FIRE, FUEL, AND SMOKE SCIENCE PROGRAM:

firelab.org

FIRE RESISTANT GARDENING:

ucanr.edu/sites/fire/preparedness/landscaping/plant_choice

UC EXTENSION FIRE RESOURCES AND INFORMATION:

ucanr.edu/sites/wildfire

HOME SURVIVAL IN WILDFIRE-PRONE AREAS: BUILDING MATERIALS AND DESIGN CONSIDERATIONS:

anrcatalog.ucanr.edu/pdf/8393.pdf

INSURANCE INSTITUTE FOR BUSINESS & HOME SAFETY—WILDFIRE:

disastersafety.org/wildfire

JOINT FIRE SCIENCE PROGRAM:

firescience.gov

NATIONAL FIRE PROTECTION ASSOCIATION—SAFETY INFORMATION:

nfpa.org/public-education

CALIFORNIA PRESCRIBED BURN ASSOCIATION:

calpba.org

SMOKEY BEAR'S PREVENTION HOW-TOS:

smokeybear.com/en/prevention-how-tos

PREVENT WILDFIRE CALIFORNIA:

readyforwildfire.org/prevent-wildfire

Acknowledgments Page

Acknowledgments & Thank You's

ACKNOWLEDGMENTS

The Solano County edition of Living With Wildland Fire was developed with input from from the Solano County Office of Emergency Services (OES) and the Solano County Resource Conservation District (RCD) with input from Solano County emergency services providers, as well as many other community partners.

We are grateful to the aforementioned for their hard work, vision, and role in shaping the Solano County edition.

Funding for this project was provided by California Fire Safe Council, as part of their U.S. Forest Service State Fire Assistance (SFA) grant program.

THANK YOU'S

We extend our immense gratitude to all the wildfire resilience advocates, in Solano County and beyond, who aided in bringing this edition to life. We especially thank:

- | | |
|--|--|
| CAL FIRE Sonoma-Lake-Napa | Suisun Fire Protection District |
| Glen Cove Fire Safe Council | University of California Cooperative Extension-Napa-Yolo-Solano Counties & Humboldt and Del Norte Counties |
| Green Valley Fire Safe Council | Tracy Katelman, ForEverGreen Forestry |
| Pleasants Valley Fire Safe Council | Glenn Munn, Assistant Fire Chief, Travis Fire & Emergency Services (ret.) |
| Solano County Fire Chiefs Association | four waters media, inc. |
| Solano County Office of Emergency Services | |
| Solano County Resource Management | |
| Solano Fire Safe Council | |



Local Fire District Information

Help Solano County Firefighters Help You

Firefighters in Solano County are not just responsible for fighting fires, they're often the first responders to medical emergencies and traffic accidents, which can constitute over 50% of their emergency responses. All departments are for the most part what we would call "all-risk".

Volunteers in Solano County are essential to local fire districts and the communities they support. Nearly all fire districts in the area depend heavily on volunteers, with many operating primarily with volunteer personnel and minimal paid staff.

Most local fire districts in Solano County are in urgent need of individuals willing to serve as volunteer firefighters, emergency medical responders, apparatus operators, or to provide logistics and administrative support.

Firefighting resources come at a high cost, and most agencies depend on grants, community donations, and fundraisers to sustain operations. Here's why:

- All expenses are on the rise: equipment, insurance, maintenance and repairs for apparatus and facilities, fuel, medical supplies, training, and more.
- A new fire engine can exceed \$500,000 in cost, while even a used engine can run up to \$150,000.
- Outfitting a single firefighter with Personal Protective Equipment can surpass \$4,000.

SUPPORT YOUR LOCAL FIRE DEPARTMENT AND FIRE DISTRICTS

There are numerous ways you can support your local fire department & districts in Solano County:

- Make a monthly, yearly, or one-time donation.
- Volunteer as a firefighter or in other capacities.
- Donate your time and skills for fundraising, administration, or maintenance tasks.

Talk to your neighbors to ensure that you have a plan of action and also help them by maintaining your defensible space.



Use the following Fire Protection Agencies Directory to locate a local fire department and fire districts near you and discover how you can assist. **Call today!**

VOLUNTEERING

VOLUNTEERING FOR YOUR LOCAL FIRE DISTRICT CAN OFFER NUMEROUS BENEFITS

- Learn new skills.
- Carry on a family tradition.
- Experience camaraderie as part of a team.
- Gain valuable experience.
- Prepare for a career as a firefighter.
- Enhance your community identity and pride.

Think you have what it takes?

Reach out to the nearest local Solano County Fire Department or Fire District. No prior experience necessary!

Selection criteria vary in different departments and districts; many require volunteers to:

- Be at least 18 years old.
- Possess a valid driver's license.
- Maintain good physical health.
- Complete basic fire and emergency medical service training (usually within the first year).
- Fulfill ongoing training requirements.
- Respond to a certain percentage of calls.

Fire departments also seek support volunteers for non-firefighting duties such as fire prevention, logistics, administration, public education and fundraising.

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.

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.

WHEN WE HAVE TO EVACUATE, WE WILL MEET AT:

OUR OUT-OF-AREA EMERGENCY CONTACT PERSON IS:

Name: _____

Home Phone #: _____

Relationship: _____

E-mail: _____

Cell Phone #: _____

OTHER IMPORTANT NUMBERS:

Emergency 911: _____

Local Police: _____

Local Fire Department: _____

Other: _____

Other: _____

Other: _____

OUR TWO EVACUATION ROUTES ARE (DESCRIBE BELOW):

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

If you have an emergency, call 911