# How can I get MY neighborhood certified as a FIREWISE Community?

**Firewise USA®** is a national program, but it all starts with the residents of a community wishing to become Firewise certified.

The National Fire Protection Association (NFPA) organizes the program, and certifies communities that meet the criteria. Your local fire department can provide support and information as neighbors go through the process. The certification, and work to earn it, is done by the residents.

**Here are the basics to becoming a Firewise Certified Community:**

☐ **Organize a committee** from among your neighbors.

☐ **Determine the size of your planned Firewise Community** (minimum of 8 individual family dwellings and a maximum of 2,500)

☐ Obtain a written **wildfire risk assessment** from your state forestry agency or fire department. The assessment should be a community-wide view that identifies areas of successful wildfire risk reduction and areas where improvements could be made. Emphasis should be on the general conditions of homes and related home ignition zones. The assessment is a living document and needs to be updated at a minimum of every 5 years.

☐ **Contact your Firewise State Liaison** – for San Mateo County it is currently: Chase Beckman Chase.Beckman@fire.ca.gov to learn about the requirements, and how to get started.

☐ **Meet with your Committee of neighbors**, invite other stakeholders (property management in the area, local fire department, faith-based groups in the area, state forestry agency, local elected officials) to begin forming your **Action Plan**. This plan will be a list of priorities and a proposed time-line of risk reduction actions to be taken within your community.

☐ Work with your Firewise Team, and your state liaison, to **complete your application**!

FIREWISE USA®
RESIDENTS REDUCING WILDFIRE RISKS

The national Firewise USA® recognition program 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. Any community that meets a set of voluntary criteria on an annual basis and retains an "In Good Standing Status" may identify itself as being a Firewise® Site.

The Firewise USA® program is administered by NFPA® and is co-sponsored by the USDA Forest Service and the National Association of State Foresters. While the NFPA® administers this program, individuals and communities participate on a voluntary basis. The NFPA® disclaims liability for any personal injury, property, or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly resulting from participation in the Firewise USA® program. The NFPA® also makes no guaranty or warranty as to the accuracy or completeness of program guidance.

As administrators of this national program, the NFPA® may use the information provided by communities in a variety of ways, including research, to obtain risk reduction success stories, and to provide value-added benefits to participants through its work with private sector entities. Please see our Privacy Policy for additional information.

See more information on NFPA® codes, standards, and other documents.

Website: **nfpa.org** click on tab that says "Firewise USA®"

# Low Cost Retrofit List

## 10 Low Cost Ways to Harden Your Home

1. When it is time to replace your roof, replace it with fire-resistant Class A roof material.
2. Block any spaces between your roof covering and sheathing (bird stops).
3. Install non-combustible corrosion resistant metal gutter covers on gutters to prevent the accumulation of leaves and debris in the gutter.
4. Cover your chimney and stovepipe outlets with noncombustible corrosion corrosion-resistant metal mesh screen (spark arrestor), with 3/8-inch to 1/2-inch openings.**
5. Cover all vent openings with 1/16-inch to 1/8-inch noncombustible corrosion resistant metal mesh screens.**
6. Caulk and plug gaps greater than 1/16-inch around exposed rafters and blocking to prevent ember intrusion.
7. Inspect exterior siding for dry rot, gaps, cracks and warping. Caulk or plug gaps greater than 1/16-inch in siding and replace any damaged boards, including those with dry rot.
8. Install weather stripping to gaps greater than 1/16-inch in garage doors to prevent ember intrusion. The stripping must be compliant with UL Standard 10C.
9. When it's time to replace your windows, replace them with multi-paned windows with at least one pane of tempered glass.
10. When it's time to replace your siding or deck, use compliant noncombustible, ignition-resistant, or other materials approved by the Office of the State Fire Marshal (OSFM).

## 5 No Cost Ways to Create Defensible Space and Enhance the Effects of a Hardened Home

1. Regularly clean your roof, gutters, decks, and the base of walls regularly to avoid the accumulation of fallen leaves, needles and other flammable materials (see Defensible Space for more details).
2. Ensure all combustible materials are removed from underneath, on top of, or within five feet of a deck.
3. Remove vegetation or other combustible materials that are within five feet of windows and glass doors.
4. Replace wood mulch products within five feet of all structures with noncombustible products such as dirt, stone, or gravel.
5. Remove all dead or dying grass, plants, shrubs, trees, branches, leaves, weeds, and pine needles within 30 feet of all structures or to the property line.

*This list was developed as a best practices guide and to assist homeowners to ensure their home is more ignition-resistant from wildfires. Low cost can be subjective. Some of these items are based on upgrading to more stringent materials when that feature is up for replacement due to normal maintenance or lifespan, i.e. roofs.

** Do not use fiberglass or plastic mesh as they can melt or burn.

Updated 1/31/2020

FIRE SAFE
SAN MATEO
COUNTY

# LIVING WITH FIRE

## IN SAN MATEO COUNTY

SURVIVING WILDFIRE:  A GUIDE TO LIVING IN A FIRE PRONE COMMUNITY

# INDEX

ADDITIONAL DETAILS ON THE WEB
Look for QR codes in this publication to find additional details and more information on the internet.
www.firesafesanmateo.org

# CONNECTING PEOPLE, IDEAS, AND SOLUTIONS TO REDUCE THE THREAT OF WILDFIRE IN SAN MATEO COUNTY.

Destructive wildfires affect virtually every part of the U.S., threatening communities, disrupting residents through evacuations and home losses causing billions of dollars of damage to homes, businesses and natural resources.

In the past 10 years, annual home losses from wildfire have tripled. In 2015, more than 2,600 primary structures were lost due to wildfire and as the result of home-to-home ignitions. While firefighters work diligently to protect our property, the truth is, they can't save every home, and their efforts and safety are increasingly compromised by today's severe wildfires.

The good news is, unlike floods, hurricanes or earthquakes, there are simple and often inexpensive ways to make homes safer from wildfire. With a good understanding of wildfire hazards and mitigation strategies, community residents can effectively lower the wildfire risk and losses to their homes, neighborhoods and natural resources.

FIRE SAFE San Mateo County recognizes that the change needed to reverse this loss trend begins with a rock-solid understanding of the basics of how wildfires ignite structures combined with scientifically proven mitigation techniques.

This guidebook provides effective strategies to protect your family, your home and our community from the inevitable wildfire.

Photo Courtesy of Michael Gagarin Photography

# FIRE SAFE SAN MATEO COUNTY

FIRE SAFE San Mateo County was the first fire safe council in California and preceded the 1991 Oakland Hills fire which acted as a catalyst for bringing wildland/urban interface (WUI) concerns into the national consciousness.

# FIRE SAFE SAN MATEO COUNTY

In 1987, San Mateo County Fire Chiefs formed a committee to address the potential for serious loss of life and property in the county's many wildland/urban interface (WUI) neighborhoods threatened by wildfire.

FIRE SAFE San Mateo County has the distinction of being the first Fire Safe Council formed in California, more than three years before the California Fire Safe Council was founded. Today there are more than 90 Fire Safe Councils established throughout California and the western United States.

From concept, FIRE SAFE San Mateo County evolved to include a diverse membership supported by the San Mateo County Fire Chiefs Association.

Our goal is to mitigate San Mateo County's wildfire threat by reducing hazardous vegetation, creating defensible space around homes and structures and educating the public about defensible space, wildfire hazards, fire behavior and fuel reduction under the guidance of local agencies and through the formation of public/private partnerships.

Our members include San Mateo County Fire Departments, land management agencies like Midpeninsula Regional Open Space District, San Mateo County Parks and Highlands Recreation District, private landowners like Stanford University/ Jasper Ridge Biological Preserve, various cities and towns, homeowners' associations, and private entities with an interest in preventing wildfires and reducing their impact on our communities.

All members of the public and interested agencies and organizatios are welcome to attend our monthly meetings and participate in our projects. Our programs are funded by a variety of federal, state and private grants, and community volunteers.

# WILDFIRES TODAY

## According to the National Interagency Fire Center (NIFC), 2015 saw more than 68,000 wildfires burn over 10.1 million acres.

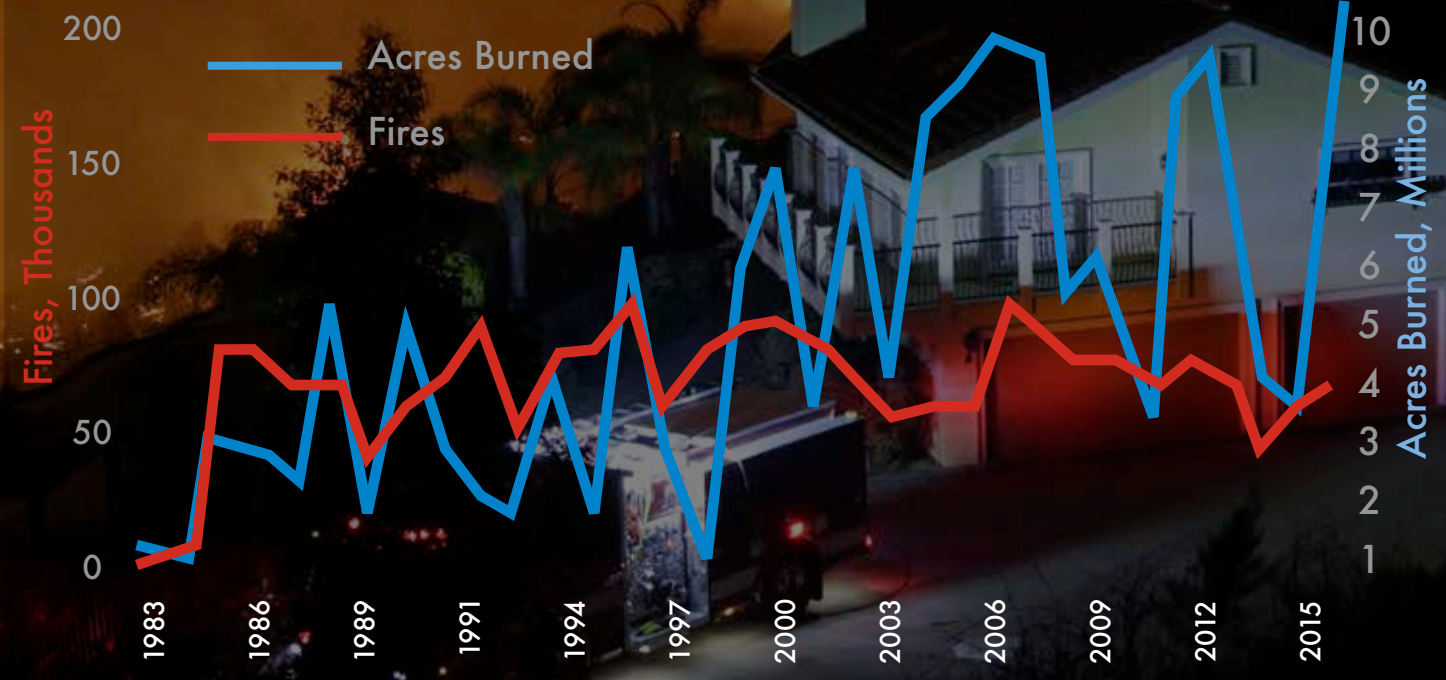
In 2015, more than 2,600 homes and structures were lost due to wildfire.

From 2003 to 2015, more than 22,000 homes were lost to wildfires in the US. California leads the nation in both homes lost and dollars lost to wildfire.

The 1991 "Tunnel Fire" in the Oakland and Berkeley hills rained ash and smoke on San Mateo County as it burned 3,354 homes and caused $1.5 billion in damage, the highest dollar loss ever recorded in a wildfire. 25 people died.

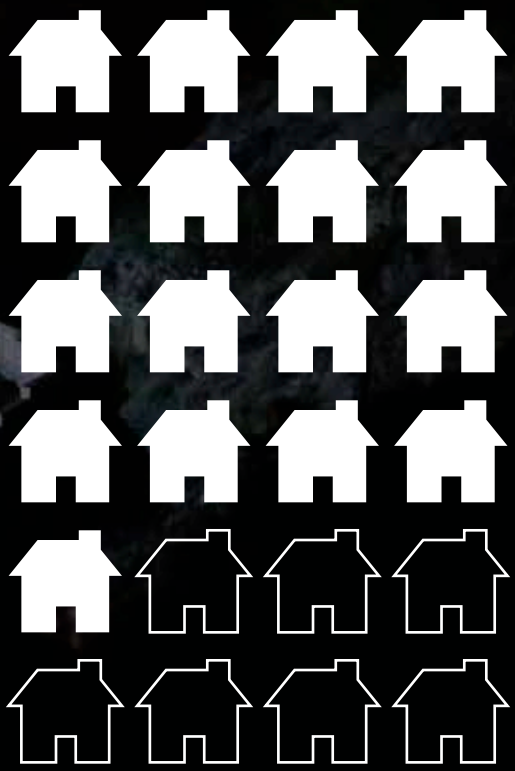
According to the National Interagency Fire Center, 68,151 wildfires burned 10,125,149 acres in 2015 (an area bigger than New Jersey, Connecticut and Delaware combined). This makes 2015 the highest year for acres burned since national wildfire statistics have been kept. 2006 with 9.9 million, and 2007 with 9.3 million acres, hold the number two and three spots.

### Total Number of Wildfires and Acres Burned (1983-2015)



# 75%

The number of wildfires threatening homes has increased 75% in the past ten years, and is expected to continue to increase with climate change and a growing population.



## 45M

45,000,000+ homes are built in wildland/urban interface areas in the United States.

## 72k

72,000 communities in the United States have been identified at risk of wildfire.

## 2k

2,000 homes on average are lost to wildfire each year in the United States.

# DEFENSIBLE SPACE

## Wildland/Urban Interface

# A FIGHTING CHANCE

Creating and maintaining defensible space is the essential way to increase your home's chance of survival during a wildfire. Defensible space helps slow an approaching fire and allows firefighters to operate more safely.

## It's the Law!

# 100 FEET

California Government Code 51182, and Public Resources Code Sections 4290 and 4291, require that any person who owns, leases, controls, operates or maintains a building or structure in, upon, or adjoining any land covered with flammable vegetation shall at all times maintain 100 feet of defensible space.

# Home Ignition ZONE CONCEPT

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

## ZONE 1

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

1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
4. Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
5. Relocate exposed woodpiles outside of Zone 1 unless they are completely covered.
6. Remove or prune all combustible plants and shrubs near windows.
7. Remove vegetation and items that could catch fire around and under decks and awnings.
8. Create separation between trees, shrubs, patio furniture, swing sets, etc.
9. Irrigate plants closest to the home and choose only fire-resistant species.
10. Maintain regularly during fire season, focusing on the areas closest to the structure.

## ZONE 2

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

1. Cut or mow annual grass down to a maximum height of four inches at all times during fire season.
2. Create horizontal spacing between shrubs and trees.
3. Create vertical spacing between grass, shrubs and trees.
4. Remove all fallen leaves, needles, twigs, bark, cones, and small branches. Up to four inches of leaf litter may be permitted where erosion control is an issue.

## ALL ZONES

In both Zones, 0 to 100 feet from buildings and other structures, always:

1. Mow before 10 a.m., but never when it's windy or excessively dry.
2. Maintain driveways and roadways for fire engine access and clearance.
3. Ensure your address number is clearly visible day and night.
4. Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion especially on steep slopes.

### Defensible space gives firefighters a fighting chance!

# DEFENSIBLE SPACE

## ZONE 2 30 - 100 feet

Extends to at least 100 feet from structures and buildings.

1. Cut or mow annual grass down to a maximum height of four inches.
2. Create horizontal spacing between shrubs and trees.

## ZONE 1 0 - 30 feet

Extends 30' from structures and buildings. Keep it "Lean, clean and green!"

1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
4. Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
5. Relocate exposed woodpiles outside of Zone 1 unless they are completely covered.
6. Remove or prune combustible plants and shrubs near windows.
7. Remove vegetation and items that could catch fire around and under decks and awnings.
8. Create a separation between trees, shrubs, patio items, swing sets, etc.

# THE HOME

Includes the structure and attachments such as fences, decks, and awnings.

1. Use fire-resistant materials such as tile roofs and stucco siding.
2. Keep the roof, gutters, and deck surfaces clean of leaves, needles, and combustible materials at all times during fire season.

# DRIVEWAYS

Ensure adequate clearance for fire apparatus by clearing vegetation overhead to 13 feet, 6 inches and clearing vegetation 5-10 feet from sides of driveways/roadways.

A turnaround for fire apparatus may be required and allows fire engines to quickly assess and access your home during a wildfire.

Address numbers must be visible to firefighters, day and night. The law requires four inches minimum numbers on a contrasting background. Use reflective numbers if possible.

# POWER EQUIPMENT

Hundreds of fires are started each year by power tools. If you live in a wildland area, use extreme caution during fire season. Lawn mowers, string trimmers, chain saws, grinders, welders, and tractors can all start fires if not used properly.

Mowing: Striking rocks can create sparks and start fires in dry grass. Use caution, mow only early in the day (before 10 a.m., when the weather is calm, cool, and moist).

Spark Arresters: In wildland areas, spark arresters are required on all portable, gasoline-powered equipment. This includes tractors, harvesters, chainsaws, weed-trimmers 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.

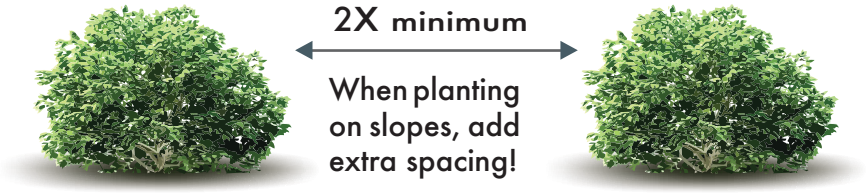
# TREES AND SHRUBS

## Add Space Between Shrubs and Bushes

Choosing the right plants and spacing them properly can slow the spread of fire, reduce flame intensity, catch embers, and improve chances that your home will survive. Adding space between plants and shrubs reduces the likelihood that fire will spread. Space shrubs at least 2X the height of the mature plant. As slope increases, spacing should be increased accordingly.

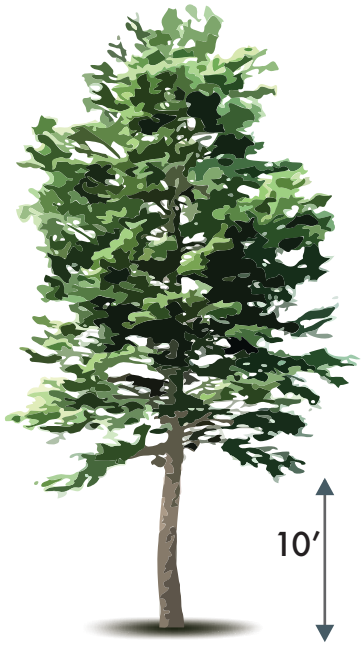
Certain fire prone shrubs and trees, like juniper and cypress, are so flammable that they should always be replaced with fire-resistant plants (see facing page).


Shrubs should be spaced at least twice the height of the plant.



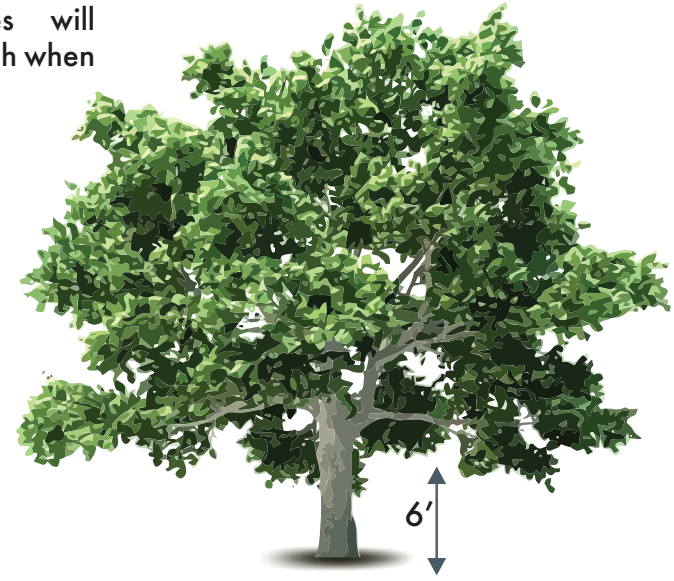

When planting on slopes, add extra spacing!

## Limb and Maintain Trees





Separate trees to ensure that canopies will not touch when mature.




Conifers (pine, fir, cedar, etc)

Deciduous and broadleaf (oak, maple, bay, etc)

**Remove all shrubs and grasses (which act as "ladder" fuels) beneath trees, annually.**

Remove lower limbs of conifers (pine, fir, cedar, etc) so that no leaves or needles are within 10 feet of the ground, or 1/3 the height of the tree if it's less than 30 feet tall. Space trees so that the canopies do not touch, with added space between fire prone species like conifers. Remove limbs within 10 feet of structures.

Trees likes oaks, bays, and ornamentals with broad leaves should be limbed so that no branches are within six feet of the ground, or 1/3 of the height of the tree if it's less than 18 feet tall. A licensed arborist can help select a safe species and maintain your trees in good health for optimum fire resistance.

# Fire-Resistant Plants

Select from this list of fire-resistant plants, or consult a professional for additional species. Plants on this list can be found at most commercial nurseries specializing in native plants. Some plants will do well along the coast, others in the warmer inland areas. A native plant nursery will recommend plants suited to your specific habitat conditions. Remember: *Even fire-resistant plants can be hazardous when not maintained.*

**NATIVE SHRUBS**

| | |
|---|---|
| Coffeeberry (prostrate) | *Rhamnus californica* |
| Spiny redberry | *Rhamnus crocea* |
| Calif. lilac (many spp.) | *Ceanothus spp.* |
| Golden-yarrow | *Eriophyllum confertiflorum* |
| California rose | *Rosa californica* |
| Snowberry | *Symphoricarpos albus* |
| Creeping snowberry | *Symphoricarpos mollis* |
| Silk tassel bush | *Garrya elliptica* |
| Toyon | *Heteromeles arbutifolia* |
| Western redbud | *Cercis occidentalis* |
| Bearberry | *Arctostaphylos uva-ursi* |
| Manzinitas | *Arctostaphylos spp.* |
| Bush poppy | *Dendromecon rigida* |
| Coyote brush | *Baccharis pilularis* |
| Currant (many species) | *Ribes spp.* |
| Holly-leafed cherry | *Prunus ilicifolia* |
| Mountain mahogany | Cercocarpus betuloides |

**NATIVE SHRUBS (RIPARIAN OR IRRIGATED AREAS)**

| | |
|---|---|
| Mock orange | *Philadelphus lewisii* |
| California barberry | *Berberis pinnata* |
| Blue elderberry | *Sambucus mexicana* |
| Thimbleberry | *Rubus parviflorus* |
| Creek dogwood | *Cornus sericea ssp. occidentalis* |
| Flowering currant | *Ribes sanguineum* var. *glutinosum* |
| Bush anemone | *Carpenteria californica* |

**NATIVE PERENNIALS**

| | |
|---|---|
| Yarrow | *Achillea millefolium* |
| California poppy | *Eschscholtzia californica* |
| Chaparral penstemon | *Penstemon heterophyllus* |
| Firecracker penstemon | *Penstemon centranthifolius* |
| California buttercup | *Ranunculus californica* |
| Hummingbird sage | *Salvia spathacea* |
| Western columbine | *Aquilegia formosa* |
| Sticky monkeyflower | *Mimulus aurantiacus* |
| California fuchsia | *Epilobium canum* |
| California goldenrod | *Solidago californica* |
| Creeping sage | *Salvia sonomensis* |
| Coyote mint | *Monardella villosa* |

**NATIVE FERNS**

| | |
|---|---|
| Western sword fern | *Polystichum munitum* |
| Giant chain fern | *Woodwardia fimbriata* |
| Coastal wood fern | *Dryopteris arguta* |
| Bracken | *Pteridium aquilinum* |

**NATIVE GROUNDCOVERS, BUNCHGRASSES**

| | |
|---|---|
| Blue-eyed grass | *Sisyrinchium bellum* |
| Douglas' iris | *Iris douglasiana* |
| Yerba buena | *Satureja douglasii* |
| Strawberry | *Fragaria vesca* |
| Dudleya | *Dudleya cymosa* |
| Pacific stonecrop | *Sedum spathulifolium* |
| Spreading rush | *Juncus patens* |
| Foothill sedge | *Carex tumulicola* |
| Purple needlegrass | *Nassella pulchra* |
| Deer grass | *Muhlenbergia rigens* |
| California fescue | *Festuca californica* |

**NATIVE TREES**

| | |
|---|---|
| Coast live oak | *Quercus agrifolia* |
| Black oak | *Quercus kelloggii* |
| Canyon live oak | *Quercus chrysolepsis* |
| California buckeye | *Aesculus californica* |
| Madrone | *Arbutus menziesii* |
| Catalina ironwood | *Lyonothamnus floribundus* |

**NATIVE TREES (RIPARIAN OR IRRIGATED AREAS)**

| | |
|---|---|
| Coast redwood | *Sequoia sempervirens* |
| Western sycamore | *Platanus racemosa* |
| Valley oak | *Quercus lobata* |
| Willows | *Salix spp.* |
| Big-leaf maple | *Acer macrophyllum* |

These species are only firesafe when properly irrigated and maintained free of dead material. Learn more online at www.firesafesanmateo.org.

## ADDITIONAL CONSIDERATIONS

### SENSITIVE HABITATS

Some areas in San Mateo County require special attention due to their sensitive habitat value. For example, riparian corridors, wetlands, red-legged frog and San Francisco Garter Snake habitats should receive extra dillligence when planting or disturbing native foliage. Contact your local planning department for specific information on fuel mitigation in sensitive habitat areas.

### TREE REMOVAL

Sometimes in our heavily-forested communities' trees may need to be removed in order to achieve defensible space or because they are at risk of falling onto a residence or access road. Please contact your local planning department for information regarding the removal of trees. For tree removals outside the city limits, contact CAL FIRE San Mateo-Santa Cruz Unit Resource Management staff at (831) 335-6740.

# THE FIRE SAFE HOME

## Landscape Design

# FIRESCAPING

"Firescaping" is landscape design that reduces a property's vulnerability to wildfire by choosing plants and design features that offer the best possible fire protection. Fire-resistant plants and "hardscape" features like gravel paths and stone retaining walls block radiant heat and catch wind blown embers before they reach your home.

Appropriate manipulation of the landscape can make a significant contribution towards wildfire survival. Firescaping integrates traditional landscaping features into designs that reduce the threat from wildfire.

In addition to meeting a homeowner's aesthetic desires and functional needs, firescaping includes vegetation modification techniques, planting for fire safety, defensible space principles, thoughtful use of hardscape features, and the use of defensible space "zones."

Three factors determine wildfire intensity: topography, weather and vegetation fuels. Property owners can control the "fuel" component through proper selection, placement and maintenance of vegetation. Careful planning and firescape design will diminish the possibility of ignition, lower fire intensity and reduce the speed at which fire spreads – all factors which will increase a home's survivability during a wildfire.

In firescaping, plant selection is primarily determined by a plant's ability to reduce the wildfire threat. Other considerations may be important, such as appearance, ability to hold the soil in place and wildlife habitat value.

## "When designing a firesafe landscape, remember that less is better."

Minimize use of evergreen shrubs and trees within 30 feet of a structure. Junipers and other conifers and broadleaf evergreens contain oils, resins, and waxes that make these plants burn with great intensity.

Choose "fire smart" plants: these

Placement and maintenance of trees and shrubs is as important as actual plant selection.

are typically plants with a high moisture content, larger leaves, low growing, with stems and leaves that are not resinous, oily or waxy. Deciduous trees are generally more fire-resistant than evergreens because they have a higher moisture content during "in-leaf" stage, and a lower fuel volume when dormant.

Placement and maintenance of trees and shrubs is as important as actual plant selection. When planning tree placement consider their size at maturity. Keep tree limbs at least 10 feet from chimneys, power lines and structures, and separate canopies so no trees touch. Do not plant shrubs beneath trees.

Firescape design uses driveways, lawns, walkways, patios, parking areas, areas with inorganic mulches, and fences constructed of nonflammable materials such as rock, brick, or concrete to reduce fuel loads and create fuel breaks. Fuel breaks are a vital component in firescape design. While bare soil can not burn, it is not promoted as a firescape element due to aesthetic and soil erosion concerns.

When designing a firesafe landscape, remember that less is better. Simplify visual lines and groupings.

A firesafe landscape lets plants and garden elements reveal their innate beauty by leaving space between plants and groups of plants. In firescaping, open spaces are as important as the plants.

# FIRESCAPING

## 1

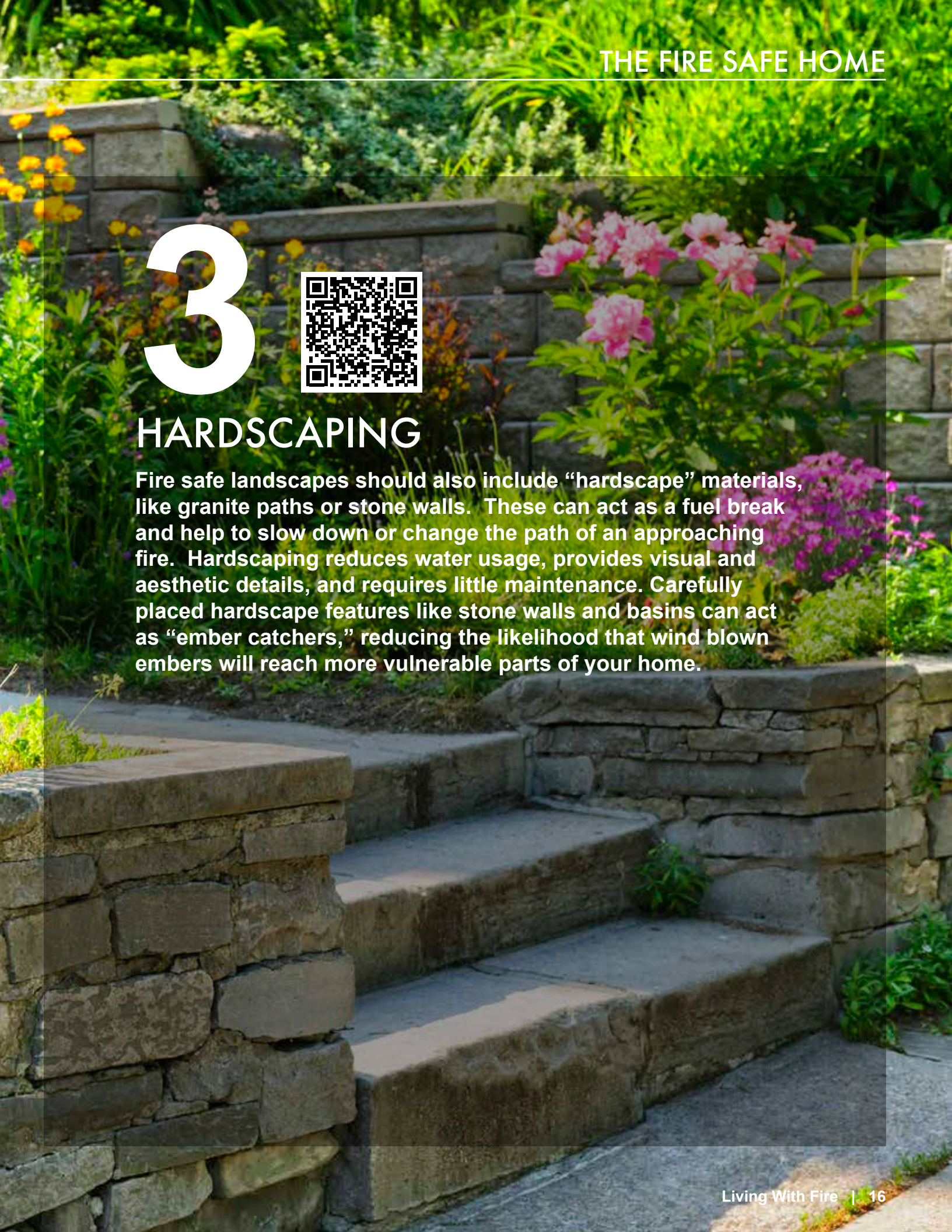
## PLANT SELECTION

**In firescaping, plant selection is primarily determined by a plant's ability to reduce the wildfire threat. Other considerations may be important, such as appearance, ability to hold the soil in place, and wildlife habitat value.**

## 2

## PLANNING & DESIGN

**When designing a landscape for fire safety remember: less is better. Simplify visual lines and groupings. A fire safe landscape lets plants and garden elements reveal their innate beauty by leaving space between plants and groups of plants. In firescaping, the open spaces are more important than the plants.**



# 3

## HARDSCAPING

**Fire safe landscapes should also include “hardscape” materials, like granite paths or stone walls. These can act as a fuel break and help to slow down or change the path of an approaching fire. Hardscaping reduces water usage, provides visual and aesthetic details, and requires little maintenance. Carefully placed hardscape features like stone walls and basins can act as “ember catchers,” reducing the likelihood that wind blown embers will reach more vulnerable parts of your home.**

## Architecture

# DESIGN & MATERIALS

## A firesafe home requires the use of fire-resistant building materials and architectural features, firesafe landscaping, and regular upkeep and maintenance during fire season.

When planning improvements to reduce wildfire vulnerability, consider your home's immediate surroundings. A structure's vulnerability is determined by the exposure external materials and design to flames and embers during a wildfire event.

The higher the expected fire intensity near your home, the greater the need for fire-resistant construction materials and building design. Since embers may travel great distances, ember resistance must be considered even when direct flame contact is unlikely.

Building materials and design features are often just as important as defensible space when a wildfire threatens your home.

In California, the WUI Building Standard, *Chapter 7A of the California Building Code*, affects how new homes are built in wildfire-prone areas. The ideal time to address home ignition risk is when the structure is in the design phase, however, you can still take steps to protect an existing home.

Existing homeowners should utilize the code to help decide what fire-resistant features and materials are required when remodeling. Check with your local fire and building departments to find out about additional local requirements.

Simple design and material decisions can make a big difference when a wildfire approaches. Choosing composition tile for a roof (versus wood shingles); siding materials like stucco and tile; double paned windows; and the use of 1/8-inch wire mesh screens over attic, basement and soffit vents can potentially save your home, family and belongings.

## Fire-Resistant Structures

# BUILDING FEATURES

### ROOFING *(see page 20)*

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

Build your roof or re-roof with materials such as composition, metal, or tile. Block any spaces between roof decking and covering to prevent embers from catching. Roofing material with a Class A rating is fire-resistant and will help keep the flame from spreading.

Examples include:
- Composition shingle
- Metal
- Clay or Cement tile

### GUTTERS *(see page 20)*

Screen or enclose rain gutters to prevent the accumulation of plant debris. Choose metal gutters instead of vinyl. Clean frequently during fire season.

### SIDING

Wood products, such as boards, panels or shingles, are combustible, making poor choices for fire-prone areas.

Consider replacing wood siding with ignition resistant building materials.

Examples include:
- Cement
- Plaster
- Stucco
- Masonry (concrete, stone, brick or block)

** While vinyl siding is relatively difficult to ignite, it can fall away or melt when exposed to radiant heat from wildfires.*

### WINDOWS

Use double-glazed or tempered glass to help reduce the risk of fracture or collapse when exposed to radiant heat. Tempered glass is the most effective, and should be used when exposure to fire is likely.

Consider limiting the size and number of windows that face large areas of vegetation.

### SKYLIGHTS

For skylights, glass is a better choice than plastic or fiberglass.

### SOFFITS & EAVES

Enclose eaves, fascias, soffits and vents. 'Box' eaves, fascias, soffits and vents, or enclose them with metal screens.

Eaves and soffits should be protected with ignition-resistant or non-combustible materials. Soffit vent openings should be covered with 1/8-inch metal screen.

### VENTS

Attic, basement, and soffit vents on homes create openings for flying embers from wildfires. Cover all vent openings with 1/8-inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Protect vents in eaves or cornices with baffles to block embers. (mesh is not enough). Rated, fire-resistant vents are available.

### CHIMNEYS

Cover your chimney and stove-pipe outlets with a non-combustible screen. Use metal screen material with openings between 3/8- and 1/2-inch to prevent embers from escaping and igniting a fire. Ensure that no tree limbs are closer than 10 feet to the roof or chimney.

## Fire-Resistant Structures

# EXTERIOR FEATURES

### ATTACHMENTS

Anything attached to the house, such as room additions, bay windows, decks, porches, and carports, should be considered part of the house. These can act as fuel bridges and ember catchers, and are particularly dangerous if constructed from combustible materials.

Protect all overhangs and "attachments" by removing vegetation and other fuels within five feet. Follow the steps shown in "defensible space" within 30 feet of these features.

### DECKS & BALCONIES

Enclose the undersides of decks, overhangs, and balconies with noncombustible or fire-resistant materials. Use 1/8-inch wire screen to keep embers out.

Decks and elevated balconies should be kept free of combustible materials and debris. Clean decks reglarly during the fire season, typically May to October.

Deck surfaces within 10 feet of the building should be built with ignition-resistant, non-combustible, or other approved materials.

Elevated wooden decks should not be located at the top of a hill. Consider a terrace with a concrete, stone or brick surface.

Never store combustible items such as lumber or firewood on or beneath your deck.

### FENCES

Wood fences should not be attached directly to the house, as they catch wind blown embers and readily ignite. Positioned properly, fences can catch embers before they reach the house. Consider using ignition resistant or non-combustible fence materials. If a wood fence must be attached to the house, separate the fence from the house with a masonry or metal barrier.

### GARAGE

Install weather stripping around and under the garage door to prevent embers from blowing in. Keep combustibles elevated off of the floor on shelving in case an ember gets in.

### ADDRESS NUMBER

Make sure your address is clearly visible from the road. Four-inch numbers on a contrasting background are required.

### PATIOS

Use ignition resistant materials such as tile, stone, or concrete.

### DRIVEWAYS

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. Fire Engine turnarounds may be required on new driveways.

Ensure that gates open inward and are wide enough for emergency vehicles.

Trim trees overhanging roads and driveways to 13 feet, 6 inches to allow emergency vehicle clearance.

### WATER SUPPLY

Keep multiple garden hoses attached that are long enough to reach all areas of your home and other structures on your property.

If you have a pool or well, install a fire pump. Follow fire codes to ensure firefighting water is available (see page 24).

## Architecture

# ROOF AND GUTTERS

The roof is one of the most vulnerable areas of a home, with a large surface likely to catch embers during a wildfire.

Roofs tend to collect dead vegetation, such as pine needles and leaf litter, which will readily ignite from even tiny embers. Even a small handful of leaf litter is too much. Regular cleaning and maintenance of a roof is as important as the materials used to construct it.

The roof is most likely to ignite along the surface and the edge where gutters are connected, usually from embers landing and igniting debris.

"Regular cleaning and maintenance of a roof is just as important as the materials used to construct it."

Homeowners can reduce this threat by keeping leaves, needles and debris cleared rom the roof and using ignition-resistant roofing materials.

Roofing materials are "rated" for fire resistance. Class A is the highest rating, offering the highest resistance to fire, and is required for new roofs.

Recommended roof materials:
- Metal
- Tile (with bird stops)
- Asphalt shingles

## RAIN GUTTERS

During a wildfire, material in gutters is likely to ignite, allowing fire to spread to the eave. Metal angle flashing should be placed between gutters and fascia to provide some protection. Vinyl gutters can melt and detach leaving this area exposed.

Recommended gutter materials:
- Metal (aluminum, copper)
- Metal gutter guards
- Metal flashing

Install metal gutter guards to keep debris from accumulating. Make sure debris does not accumulate between the guard and roof. Clean your gutters regularly during fire season!

# EMBERS

Embers are the most significant cause of home ignition in wildfires. Most homes are ignited by wind-dispersed embers, not from the actual flames of the fire.

## The Ember Problem

Wildfires can shower entire neighborhoods with millions of tiny, burning embers or firebrands, often well in advance of the main fire, and before firefighters have time to respond. Embers can travel up to a mile ahead of a fire, carried by wind and convection.

## Vent Screens

Research conducted by the Insurance Institute for Business and Home Safety shows that simple, inexpensive measures, such as placing 1/8-inch wire mesh screens over attic and basement vents, can prevent ember intrusion, potentially saving your home.

Embers are the most significant cause of home ignition in wildfires. Recent research indicates that two out of every three homes destroyed during the 2007 Witch Creek fire in San Diego County were ignited either directly or indirectly by wind-dispersed, wildfire-generated, burning or glowing embers (Maranghides and Mell, 2009) and not from the actual flames of the fire.

Embers are capable of igniting and burning your home in several ways. In order to have a wildfire-safe home, two equally important factors must be implemented: 1) select building materials and designs that help the home resist the wildfire and the intrusion of embers, and 2) create adequate defensible space and firescaping based on the wise selection, placement, and maintenance of vegetation and hardscape features. Protection from embers should be every homeowner's top priority when creating a fire safe home.

"Flying embers can be carried up to a mile from a fire, sometimes destroying homes in areas assumed to be safe."

## Roofing Materials

A fire-resistant roof is among the most important features a homeowner can install to protect from embers. Class "A" fire-resistant roof structures, such as metal, tile and asphalt shingles, are less likely to ignite from an ember than wood shakes and shingles.

## Rain Gutters

Even homes with a fire-resistant roof can burn if rain gutters are not kept clean. Just one handful of leaves or needles is enough to ignite from an ember and spread fire to the home. Metal rain gutters are safer than vinyl in fire prone areas. Clean regularly!

# HOMEOWNER RESOURCES

## San Mateo County
## Contacts for Wildfire Related Information

**To Report Wildfires or Other Emergencies, Dial 9-1-1**

**FIRE SAFE San Mateo County**
San Mateo County Fire Safe Council
www.firesafesanmateo.org

**Unincorporated, State Responsibility Areas (SRA)**
CAL FIRE San Mateo-Santa Cruz Unit
(650) 573-3846
www.fire.ca.gov

**Belmont**
Belmont Fire Protection District
(650) 595-7492
www.belmont.gov/fire

**Burlingame, Hillsborough, Millbrae**
Central County Fire Department
(650) 558-7600
www.ccfdonline.org

**Half Moon Bay, Miramar, El Granada, Princeton-by-the-Sea, Montara, Moss Beach**
Coastside Fire Protection District
(650) 726-5213
www.coastsidefire.org

**Foster City**
Foster City Fire Department
(650) 286-3350
www.fostercity.org

**La Honda**
La Honda Fire Brigade (Volunteer)
(650) 747-0381
www.lahondafire.org

**Menlo Park, Atherton, East Palo Alto, Bayside Southern Unincorporated San Mateo County**
Menlo Park Fire Protection District
(650) 688-8400
www.menlofire.org

**Brisbane, Daly City, Pacifica**
North County Fire Authority
(650) 991-8138
www.northcountyfire.org

**Redwood City, San Carlos**
Redwood City Fire Department
(650) 780-7400 or (650) 802-4300
www.redwoodcity.org/fire
www.cityofsancarlos.org/depts/fire

**San Bruno**
San Bruno Fire Department
(650) 616-7096
www.sanbruno.ca.gov

**San Mateo (City)**
San Mateo Fire Department
(650) 552-7900
www.ci.sanmateo.ca.us

**San Mateo Highlands**
San Mateo County Fire Department
(650) 345-1612
www.cfsfire.org

**South San Francisco**
South San Francisco Fire Department
(650) 829-3950
www.ssf.net/416/fire

**Woodside, Portola Valley, Emerald Hills, Ladera, Los Trancos, Skyline, Viste Verde**
Woodside Fire Protection District
(650) 851-1594
www.woodsidefire.org

# FIRE CODES

Fire agencies adopt codes and standards that increase a community's ability to survive wildfires. Compliance with the adopted fire code is required by law and helps reduce fire losses while increasing public safety.

## WILDFIRE CODE EXAMPLES

These are examples of codes specifically related to reducing the risk of damage from wildfires. Communities may adopt different, sometimes stricter codes, so it is important to check with your Fire Department and Building Division before planning a remodel or new construction project.

*Any person that owns, leases, controls, operates, or maintains an occupied dwelling (in or near the wildland) shall maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line (Government Code 51182 & PRC 4291)*

*Ignition-resistant building materials and standards give structures an increased ability to resist intrusion of flame or burning embers projected by a vegetation fire. Certain jurisdictions may have requirements regarding installation of roofs, eave and roof vents, exterior wall materials, exterior windows and doors as well as decks. (CRC R327)*

*All new construction must utilize Class A Fire Resistive roofing.*

*Spark arrestors are required on all chimneys and outdoor fireplaces. A spark arrestor shall be constructed with heavy wire mesh with openings not to exceed 1/2 inch to prohibit the release of fire brands and embers. (CCR Title 19, 3.07)*

*Access and Roads, including private driveways, must be maintained for fire apparatus clearance, with a road width of at least 20 feet and vertical clearance of 13 feet, 6 inches. (CFC 503.2.1). Fire apparatus access shall not be obstructed in any manner including vehicle parking or vegetation intrusion. (CFC 503.4)*

*Address numbers must be plainly legible and visible from the street. Numbers must be at least four inches high on contrasting background. Streets and roads must be identified with approved signs. (CFC 505.1 & 505.2)*

*Security Gates: The installation of a security gate shall be approved by the fire department. Gates shall have an approved means of emergency operation. (CFC 503.6)*

*Bridges must be constructed and maintained to carry the load of fire apparatus. Load limits shall be posted at both entrances to the bridge. (CFC 503.2.6)*

*Water Supply and Storage: Minimum water supply for new dwellings (less than 3,600 square feet) shall be capable of supplying a flow of 1,000 gallons of water per minute for duration of two hours. (CFC Appendix B-105.1) In areas without a water service provider, contact the local fire agency for specific storage and hydrant requirements.*

*Fire Hydrants: A fire hydrant shall be accessible at all times and shall have a perimeter clearance of three feet. (CFC 507.5.5)*

Visit your local Fire Department and Building Division for detailed information.

## PG&E Safety Tips

# TREES & POWERLINES

Proper tree and site selection provides trouble-free beauty and pleasure for years to come. Choose the "Right Tree For the Right Place" to help protect your property from fires and electrical hazards.

Trees need space to grow both above and below ground. Carefully consider your surroundings and follow these guidelines when planting near utilities.

Choose a tree and location where the ultimate height and spread of the tree will remain at least 10 feet away from power lines. Roots may be damaged if underground facilities need to be dug up for repairs.

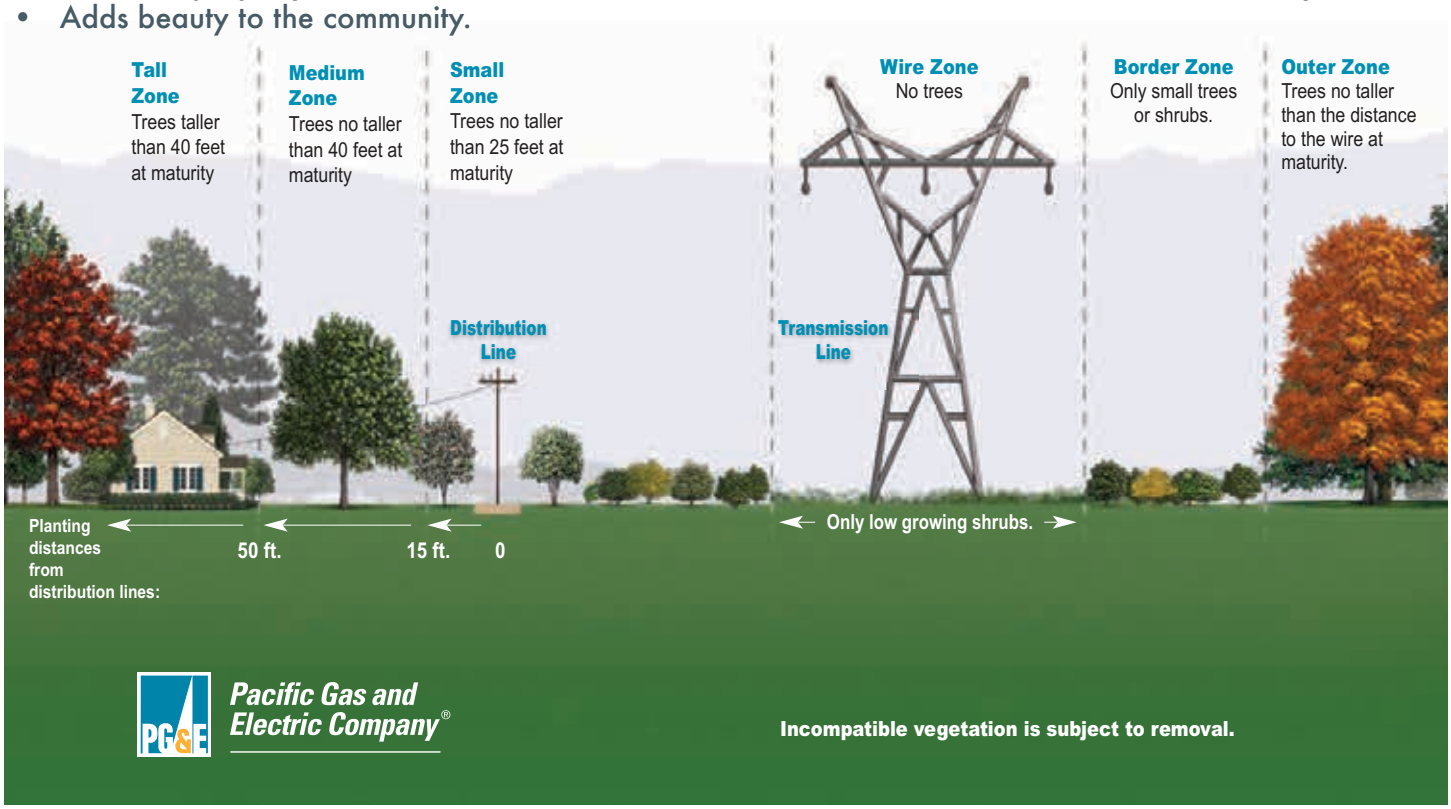
Proper selection of trees under or near power lines:

- Reduces fire hazards.
- Limits the need for frequent pruning.
- Increases property value.
- Adds beauty to the community.

PG&E publishes a guide to planting near powerlines. To order your copy of *A Guide to Small Trees Near Distribution Lines,* call 1-800-743-5000, or email PG&E at RightTreeRightPlace@pge.com.

When ordering, please specify:

- Northern California, Bay Area and Inland, or Central California.
- How many of each.
- Mailing address, as they are not available electronically.
- How or where you learned of the tree guide (mention FIRE SAFE San Mateo County).



# Wildfire Preparedness CHECKLIST

## Follow these simple action steps to prepare and protect your home and family from wildfire:

- ☐ Clean leaves and other debris from gutters, eaves, porches and decks to help prevent embers from igniting your home. Repeat often during fire season.
- ☐ Remove all dead leaves and vegetation from decks and within 10 feet of the house. Repeat often during fire season.
- ☐ Remove any combustibles stored underneath decks or porches.
- ☐ Screen or box in areas below patios and decks with 1/4-inch wire mesh to prevent debris and combustible materials from accumulating.
- ☐ Remove all combustible materials such as firewood, propane tanks, and dry vegetation within 30 feet of your home's foundation and outbuildings, including garages and sheds. If it can catch fire, don't let it touch your house, deck, or porch.
- ☐ Wildfire can spread to treetops via "ladder fuels." Prune trees annually so the lowest branches are at least six to ten feet from the ground or shrubs.
- ☐ Keep your lawn cut and maintained. If it's brown, cut it to less than four inches. Cut grass early in the day, when fire danger is lower. Repeat as needed.
- ☐ Rake and remove debris and lawn cuttings. Dispose of cut material in green cans to reduce fuel on your property.
- ☐ Inspect shingles, roof tiles and flashing. Replace or repair as needed to prevent ember penetration. Consider installing a fire-resistant roof if you don't have one already.
- ☐ Cover exterior vents with 1/8-inch metal wire mesh to prevent embers from entering the home.
- ☐ Ensure that your address number is visible. Four-inch numbers on a contrasting background are required.
- ☐ Learn more about how to keep your family safe and reduce your home's risk of wildfire damage online at www.firesafesanmateo.org.

2016 Edition

# LIVING WITH FIRE IN SAN MATEO COUNTY

Funding for this publication was provided in part by the Cooperative Fire Program of the U.S. Forest Service, Department of Agriculture, Pacific Southwest Region, through the California Fire Safe Council.



Fire Safe San Mateo County
4091 Jefferson Avenue
Redwood City, CA 94062-4014

www.firesafesanmateo.org

www.firesafesanmateo.org

# DISASTER READY GUIDE

LISTOS CALIFORNIA

EN

ENGLISH

**ALSO AVAILABLE IN:**

Español
中文
Filipino
Tiếng Việt
한국어

**LISTOS CALIFORNIA:**
ListosCalifornia.org

**GOVERNOR'S OFFICE OF EMERGENCY SERVICES:**
CalOES.ca.gov

**OFFICE OF THE GOVERNOR OF CALIFORNIA:**
Gov.ca.gov

# SAFETY STEPS FOR ANY DISASTER

**1.** Get alerts to know what to do.


**2.** Make a plan to protect your people.


**3.** Get to safety with things you need.

**4.** Stay safe at home when you can't leave.

**5.** Help friends and neighbors get ready.

# CONNECT & PROTECT

Think about who you want to connect with during an emergency. These may be family, neighbors, friends or caregivers. Who do you want to protect? Who wants to protect you? Write down their names and contact information. Include home, work, school and other numbers. Share copies with everyone on your list.

You should also pick one person, outside the area where you live, who won't be affected by your local disaster. You and your contacts might be able to check in as safe with that faraway relative or friend, and share where you are.

## EMERGENCY CONTACTS

| | |
|---|---|
| CONTACT NAME | CELL PHONE |
| WORK/SCHOOL | HOME PHONE |
| ADDRESS | EMAIL |
| | |
| CONTACT NAME | CELL PHONE |
| WORK/SCHOOL | HOME PHONE |
| ADDRESS | EMAIL |
| | |
| CONTACT NAME | CELL PHONE |
| WORK/SCHOOL | HOME PHONE |
| ADDRESS | EMAIL |
| | |
| **OUT OF TOWN** CONTACT NAME | CELL PHONE |
| WORK/SCHOOL | HOME PHONE |
| ADDRESS | EMAIL |
| | |

Try **texting** if local phone calls can't get through during a disaster.

# EVACUATION ACTION

If you are not safe at home, work or school due to a disaster, you will need to go to a safe place and meet up with people you care about. It's hard to know ahead of time where these safe places might be. These places might change based on the kind of emergency you face.

Be ready to go in the safest direction, to the nearest **safe place,** with little warning.

### 1. Follow the guidance of local authorities.

They will have the latest information and know the best ways to keep you safe. Instructions might come from your fire department, sheriff or police department, or from elected officials, like mayors or supervisors.

Listen to the news and sign up for local alerts at **CalAlerts.Org.**

### 2. Learn different ways to get out of your community fast.

In a disaster, the road to safety may not be your usual route. Disasters may close roads and bus routes you usually take. Get familiar with more ways to escape during an emergency. Practice those trips with the people who would go with you. That way, you will know how to stick together in a real emergency.

### 3. Be ready to go to your safe place.

Have your **Go Bag** of supplies packed. Have your **Connect & Protect plan** in place. Reach out to the people you care about, and who care about you. Decide if it is safe, and possible, to get to the home of family or friends. If not, find a public shelter.

**2-1-1** Dial 211 on your phone to find a public shelter.

# GO BAG: PACK AHEAD


Most disasters are unexpected and happen fast. You might not have time to shop, or even to pack. Pack up important items now, so you and your family will have what you need later.

Pack a Go Bag for when you have to leave home in a hurry. Pack things for each member of your household. Think about what you would take if you had 15 minutes of notice to leave your home. Now, think if you had just two minutes.

## TO PACK NOW

### Documents

Copies of identification and insurance.

Other papers important to you.

Photos of family and pets.

### Cash

Small bills $1s & $5s.

Save up a little at a time.

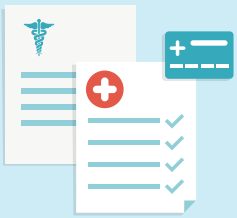
### Map

Mark different routes out of your neighborhood.

### Medications List

List all prescriptions.

Other important medical information.



### This Guide

Your contacts list.

Your supplies checklist.

# GRAB AND GO


## PACK AS YOU LEAVE

- Wallet or purse and keys
- Phone and charger
- Medicine

## GOOD TO GRAB IF YOU ALREADY OWN

- Portable radio
- Flashlight
- First aid supplies
- Portable computer


**Write down here what else you should bring for everyone in your household.** Clothes? Toothbrush? Think about needs of babies, older adults, people with medical conditions or disabilities, and pets.

# STAY BOX: BASICS


In some disasters, you may be safer staying at home. Damage from the disaster might make that uncomfortable. You might not have water to drink, to bathe or to flush the toilet. You might have no electricity to keep your food cold, turn on a light or charge your phone.

Add items to a Stay Box, for when you can't leave home. Prepare for at least 3 days without water or electricity. Save up a little at a time, until you have enough for everyone in your household to get by. Remember any pets. If you already own a flashlight or a portable radio, keep it someplace easy to find.

## TO PACK NOW

### Water

Save up to 3 gallons per person, for drinking and washing.

### Food

Set aside foods that won't spoil and require no cooking.

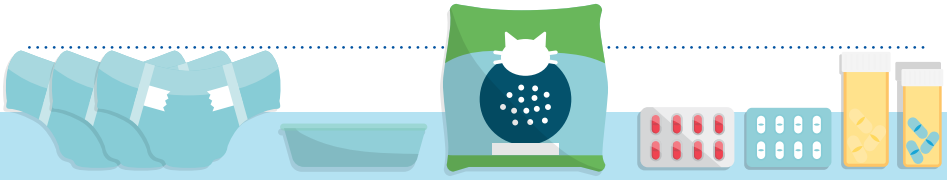
You know best what you and your family like to eat.

### Trash Bags

Set aside extra plastic bags, with ties, to use in a bucket for a toilet.

# IMPORTANT ITEMS


**Write down here any important items you use every day that might run out if you are stuck at home for many days.** Set aside a little extra in your Stay Box, in case you can't get to a store.



# BASIC TIPS FOR ANY DISASTER

## 1. **Carry Identification:** Families may be apart when disaster strikes. People and pets get separated.

- Everyone you care for should carry identification.
- Put written identification in children's school bags.
- Consider a medical alert tag or bracelet.
- Get pets updated tags and microchips.
- Photos of families and pets can help you reunite.

## 2. **Build a Support Network:** Have a backup plan in case of emergency. Think about who you can rely on.

- Talk with your neighbors about their needs, and yours.
- Discuss disaster plans with caregivers.
- Ask schools about plans to reunite parents and children.
- Plan ahead for skilled helpers to assist with evacuations.
- Share keys with trusted friends to rescue your pets.

## 3. **Have Extra Medications and Power Supply:** Many people can't go three days without medications. Some need electricity to power equipment and devices.

- Carry extra medicine when you leave home.
- Photo (or carry) list of doctors and prescriptions.
- Ask pharmacy to renew 30-day prescription at 28 days.
- Save extra doses in your Go Bag.
- Plan to keep medicine cold and charge equipment/devices.

## 4. **Reduce Stress:** Lessen physical and mental stress by planning ahead.

- Dial **211** to find shelters for specific needs.
- Label equipment before evacuation.
- Ask utility to warn of power shutoffs.
- Pack specialty medical and communication supplies.
- Plan to comfort those with Alzheimer's or mental illness.

# TIPS FOR A VARIETY OF CIRCUMSTANCES

Disasters are challenging for everyone. Each of us has different needs in preparing for a disaster. You, or someone you care about, can benefit from planning ahead. Think now about ways to make the experience safe and comfortable for all.

Talk with people you trust – at health clinics, schools, faith communities, health support groups, assisted living facilities, social service agencies, independent living centers. Here are some safety tips that might help.

## GET READY

### Pregnant Women

Ask your doctor how to get care or deliver during a disaster.

Plan ahead to avoid bad air, toxic water and unsafe food.

Tell staff at a shelter that you are pregnant.

### Parents of Infants

If you use formula, set aside plenty of clean water.

Get or make a body sling to walk far with the baby.

Know the safety plan of your child's caregiver.

### Caregivers

Create an emergency plan with your care recipient.

Build a network of support beyond yourself.

Help your care recipient pack needed supplies.

# TIPS FOR A VARIETY OF CIRCUMSTANCES

## GET READY

### People with Pets

Get your pet an ID tag. Ask for a free or discount microchip.

Pack food, water, medicine and proof of immunization.

Dial 211 to ask which public shelters accept animals.

### Older Adults

Carry family/caregiver contact information in your wallet.

Post family and emergency numbers near your phones.

Learn about your retirement community's emergency plans.

### Rural Communities

Share alerts through phone trees and ham radio networks.

Meet with neighbors to discuss collaboration.

Plan ahead for evacuating large animals.

# TIPS FOR A VARIETY OF CIRCUMSTANCES

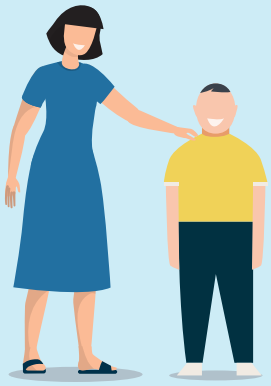
## PLAN AHEAD

### People with Developmental Disabilities

Identify trusted allies to rely on in a disaster.

Make a plan together with this support network.

Practice your plan to help you feel safe.



### People with Speech/ Communication Disabilities

Carry an instruction card on how to communicate with you.

Carry communication devices, phrase cards or picture boards.

Know how to replace your assistive device if damaged/lost.

### People with Mobility and Other Physical Disabilities

Plan ahead with trusted allies for transportation.

Make a plan for damaged ramps/rails.

Evacuate early if you need extra time to get out.

# TIPS FOR A VARIETY OF CIRCUMSTANCES

## PLAN AHEAD

### Transportation Challenged

Arrange carpooling if you must evacuate.

Ask if public transit may be free after a natural disaster.

Learn if ride share services will offer free rides to shelter.

### People with Limited English

Find trusted community sources to talk to about safety options.

Ask bilingual youth to share safety steps with you.

Research which media you follow provide emergency alerts.

### New Californians

Learn emergency system basics, like dialing 211.

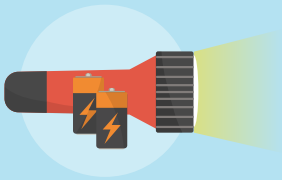
Ask your community how disasters here are different.

Find trusted sources in emergencies beyond the government.

# SAFETY TIPS: WILDFIRE

## BEFORE

Red Flag warning means prepare NOW.



Plan for no electricity. Don't use candles.

Get bandana or mask to protect lungs.

Check that water hose is working.

Clean gutters. Remove brush near home.

## DURING

Don't "wait and see". Leave when told!

Leave smoky areas quickly.

Close all doors and windows. Turn off Air Conditioner.

Open or remove curtains, shades or blinds.

Prepare pets for evacuation.

# SAFETY TIPS: FLOOD

## BEFORE

Keep storm pipes and drains clear.

Move valuable items to higher floors.

Get plastic tarps, sandbags to keep out water.


Keep car gas tank at least half full.

Learn best escape routes to higher ground.

## DURING

Don't "wait and see". Leave when told!

Never walk through moving water.

Never drive into flooded areas.

Watch for mudslides after wildfire.

Watch for tsunami on coast after earthquake.

# SAFETY TIPS: EARTHQUAKE

## BEFORE

Secure tall furniture to walls.

Hang nothing heavy above a bed, sofa or chair.

Get free MyShake app for earthquake warnings.

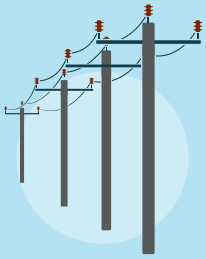
Practice earthquake safety drills.

Learn when to turn off gas, electricity and water.

## DURING

Don't rush outside. Get under a table or desk.

Stay in bed and cover head with a pillow.



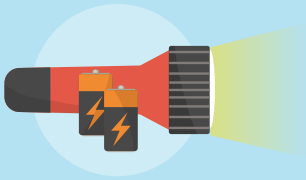
Outside, move away from anything that could fall.

Pull over car and stop away from buildings, trees.

Be ready for aftershocks.

# SAFETY TIPS: POWER SHUTOFF

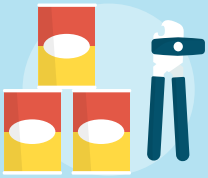
## BEFORE



Prepare flashlights and lanterns – no candles.

Keep phone batteries fully charged.

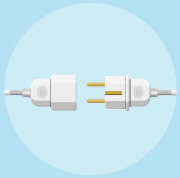

Keep car gas tank at least half full.



Buy food that won't spoil and doesn't need cooking.

Buy ice to keep food or medicines in coolers.

## DURING



Unplug appliances/electronics to prevent damage.

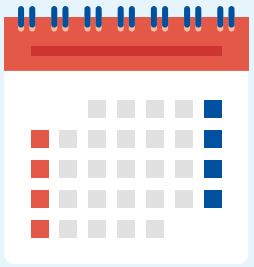
Leave one light plugged in.

Keep your refrigerator and freezer closed.

Use generators, camp stoves and grills outdoors.

Don't use your gas stove for heat.

# STEP-BY-STEP SAFETY CALENDAR



You don't need to follow this calendar exactly. Just take a few steps each week, at your own pace. You will enjoy peace of mind knowing you are ready if a disaster strikes.

## WEEK 1

Pack a **Go Bag** for each person in your household.

Sign up for local emergency alerts at **CalAlerts.org.**


## WEEK 2

Create your **Connect & Protect** plan for family, neighbors, caregivers.

Talk about your plans with people on your list.


## WEEK 3

Learn different evacuation routes and mark them on a map.

Practice your **Evacuation Action** plan.

## WEEK 4

Start packing a **Stay Box** to be safe and comfortable at home.

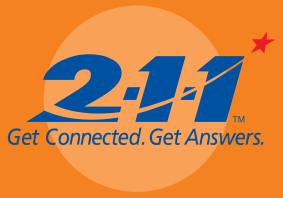
Do a little at a time, until you feel ready.

# EMERGENCY ALERTS

There are many ways to get alerts, news and instructions for approaching or current disasters. Sign up for multiple alerts from reliable sources.

Television


Radio




Dial 211

Landline Phone

Cell Phone

Email

Smartphone

Social Media

Ham Radio

## EMERGENCY RESOURCE WEBSITES

**211CA.org**
Dial 211 for evacuation routes, shelters.

**CalAlerts.org**
Sign up to get your County's alerts.
Get MyShake earthquake warning app.

**CalOES.ca.gov**
State guides, alerts & resources.

**Response.ca.gov**
Real-time wildfire & shelter news.

**Ready.gov**
Resources to prepare for any disaster.

## LISTOS CALIFORNIA

**ListosCalifornia.org**
Learn about the Listos California Emergency Preparedness Campaign.

## CERT

**Ready.gov/CERT**
Community Emergency Response Team (CERT): a 20-hour classroom-based preparedness training.

## LISTOS

**CFAListos.org**
An 8-hour preparedness program for individuals and families.

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