

Saving Lives and Property through Advance Planning



he fire season is now a year-round reality in many areas, requiring firefighters and residents to be on heightened alert for the threat of wildland fire.

Each year, wildland fires consume hundreds of homes in the Wildland-Urban Interface (WUI). Studies show that as many as 80 percent of the homes lost to wildland fires could have been saved if their owners had only followed a few simple fire-safe practices. In addition, wildland fire related deaths occur because people wait too long to leave their home.

Your fire department takes every precaution to help protect you and your property from wildland fire. However, the reality is that in a major wildland fire event, there will simply not be enough fire resources or firefighters to defend every home.

Successfully preparing for a wildland fire enables you to take personal responsibility for protecting yourself, your family and your property. In this Action Guide, we hope to provide the tips and tools you need to prepare for a wildland fire threat; have situational awareness when a fire starts; and to leave early.

The Ready, Set, Go! Program works in complimentary and collaborative fashion with the Firewise® Communities Program and other existing wildland fire public education efforts. Utilizing firefighters, it amplifies their messages to individuals to better achieve the common goal of wildland fire preparedness.

Fire is, and always has been, a natural occurrence in the wildland. Our hills, canyons and forests burned periodically long before we built homes there. Wildland fire, fueled by a build-up of dry vegetation and driven by seasonal hot dry winds, are extremely dangerous and difficult to control. Many residents have built homes and landscaped without fully understanding the impact a fire can have on them and few have adequately prepared their families for a quick evacuation.

Its not a question of if but when the next major wildland fire will occur. Through advance planning, understanding and preparation, we can all be partners in the wildland fire solution. We hope you find the tips in the following pages helpful in creating heightened awareness and a more firesafe environment for you, your family and firefighters.

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This publication was prepared by the RSG Program with the assistance of the Ventura County Fire Department and the Orange Country Fire Authority, in cooperation with the International Association of Fire Chiefs; The U.S. Forest Service; U.S. Department of the Interior Bureau of Land Management; and the U.S. Fire Administration. Special thanks to the Insurance Institute for Business and Home Safety; the National Association of State Foresters; University of Nevada Cooperative Extension "Living with Fire" Program; CAL FIRE; FireSafe Council, the National Fire Protection Association and the Firewise Communities Program; and many other organizations for their contributions to message and content. To learn more about the Ready, Set, Go! Program and its partners, visit, www.upperpinefpd.org.

Living in the Wildland Urban Interface and the Ember Zone

Ready, Set, Go! begins with a house that firefighters can defend

Defensible Space Works!

If you live next to a natural area, the Wildland Urban Interface, you should provide firefighters with the defensible space they need to protect your home. The buffer zone you create by removing weeds, brush and other vegetation helps keep the fire away from your home and reduces the risk from flying embers. Firewise Communities and other wildland fire preparedness education programs provide valuable guidance on property enhancements.









Ember Zone

A home within one mile of a natural area is in the Ember Zone. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildland fire.



What is Defensible Space?



Defensible space is the required space between a structures and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildland fire conditions. For more information about defensible space zones and preparedness techniques within each, visit the Firewise Communities website, www.firewise.org.

ZONE ONE

Zone One extends 30 feet out from buildings, structures, decks, etc.

- · Remove all dead or dying vegetation.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from structures and other trees.
- · Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- · Relocate woodpiles or other combustible materials into Zone Two.
- · Remove combustible material and vegetation from around and under decks.
- · Remove or prune vegetation near windows.
- Remove "ladder fuels" (low-level vegetation that allows the fire to spread from the
 ground to the tree canopy). Create a separation between low-level vegetation and
 tree branches. This can be done by reducing the height of low-level vegetation and/or
 trimming low tree branches.

ZONE TWO

Zone Two extends 30 to 100 feet out from buildings, structures and decks. You can minimize the chance of fire jumping from plant to plant by removing dead material and removing and/or thinning vegetation. The minimum spacing between vegetation is three times the dimension of the plant.

- · Remove "ladder fuels."
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from other trees.

Your Home

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

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

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

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

Ensure that trees are far away from power lines.

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

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

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

Cut any tree branches within ten feet of your roof.

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

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

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

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

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

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

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

Build or remodel with fire-resistant building materials, such as brick, cement, masonry or stucco.

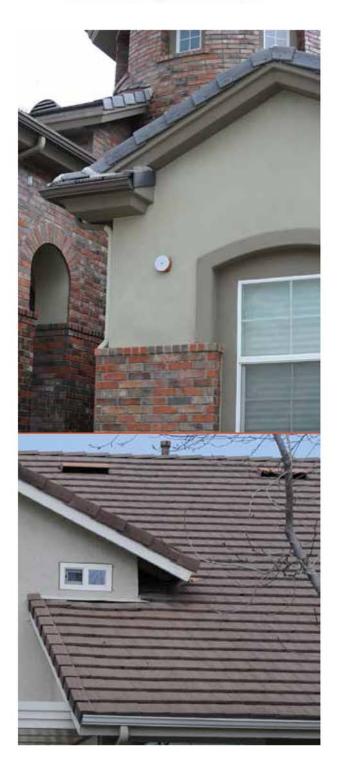
Be sure to extend materials from foundation to roof.

Inside: Keep working fire extinguishers on hand.

Garage: Have a fire extinguisher and tools such as a shovel, **Driveways and Access Roads:** Driveways should rake, bucket and hoe available for fire emergencies. be designed to allow fire and emergency vehicles and equipment to reach your house. Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and Access roads should have a minimum 10-foot clearance under door to prevent ember intrusion. on either side of the traveled section of the roadway and should allow for two-way traffic. Store all combustibles and flammable liquids away from ignition sources. Ensure that all gates open inward and are wide enough to accommodate emergency equipment. Trim trees and shrubs overhanging the road to a minimum of 13 1/2 feet to allow emergency vehicles to pass. Non-Combustible Fencing: Make sure to use noncombustible fencing to protect your home during a wildland fire. Non-Combustible Boxed In Eaves: Box in eaves with non-combustible materials to prevent accumulation of embers. Raingutters: Screen or enclose rain gutters to prevent accumulation of plant debris. Water Supply: Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property. If you have a pool or well, consider a pump. Deck/Patio Cover: Use heavy timber or non-flammable construction material for decks. Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing Chimney: Cover your chimney and stovepipe outlets with a non-flammable screen of 1/4-inch wire mesh or smaller to Keep your deck clear of combustible items, such as prevent embers from escaping and igniting a fire. baskets, dried flower arrangements and other debris. Make sure that your chimney is at least 10 feet away from any The decking surface must be ignition resistant if it's tree branches. within 10 feet of the home.

What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding it are what gives a home the best chance to survive a wildland fire. Embers from a wildland fire will find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildland fire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildland fire.



ROOFS

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

EAVES

Embers can gather under open eaves and ignite exposed wood or other combustible material.

VENTS

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents.

WALLS

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

WINDOWS and DOORS

Embers can enter gaps in doors, including garage doors. Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames.

BALCONIES and DECKS

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home even further, consider protecting your home with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

Now that you've done everything you can to protect your house, its time to prepare your family. Your **Wildland Fire Action Guide** must be prepared with all members of your household well in advance of a fire. Use these checklists to help you gain a situational awareness of the threat and to prepare your Wildland Fire Action Guide. For more information on property and home preparedness before a fire threat, review the preparedness checklist on the Firewise Communities website, www.firewise.org.

Ready – Preparing for the Fire Threat



- O Create a Family Disaster Plan that includes meeting locations and communication plans and rehearse it regularly. Include in your plan the evacuation of large animals such as horses.
- Have fire extinguishers on hand and train your family how to use them.
- Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- Plan several different evacuation routes.
- O Designate an emergency meeting location outside the fire hazard area.
- Assemble an emergency supply kit as recommended by the American Red Cross.
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- O Keep an extra emergency supply kit in your car in case you can't get to your home because of fire.
- O Have a portable radio or scanner so you can stay updated on the fire.





Set – Situational Awareness when a Fire Starts

OUTSIDE CHECKLIST O Evacuate as soon as you are set! O Gather up flammable items from the exterior of the O Alert family and neighbors. house and bring them inside (e.g., patio furniture, O Dress in appropriate clothing (i.e., clothing made from children's toys, door mats, etc.) or place them in natural fibers, such as cotton, and work boots). Have your pool. goggles and a dry bandana or particle mask handy. O Turn off propane tanks. Ensure that you have your emergency supply kit on O Don't leave sprinklers on or water running - they can hand that includes all necessary items, such as a waste critical water pressure. battery powered radio, spare batteries, emergency O Leave exterior lights on. contact numbers, and ample drinking water. O Back your car into the driveway. Shut doors and roll O Stay tuned to your TV or local radio stations for updates, or check the fire department Web site. up windows. O Have a ladder available. Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are O Patrol your property and extinguish all small fires until ready to leave. you leave. O Seal attic and ground vents with pre-cut plywood or INSIDE CHECKLIST commercial seals if time permits. O Shut all windows and doors, leaving them unlocked. O Remove flammable window shades and curtains and IF YOU ARE TRAPPED: SURVIVAL TIPS close metal shutters. O Shelter away from outside walls. O Remove lightweight curtains. O Bring garden hoses inside house so embers don't destroy them. O Move flammable furniture to the center of the room, away from windows and doors. O Patrol inside your home for spot fires and extinguish them. Shut off gas at the meter. Turn off pilot lights. O Wear long sleeves and long pants made of natural O Leave your lights on so firefighters can see your fibers such as cotton. house under smoky conditions. O Stay hydrated. O Shut off the air conditioning. O 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). O Fill sinks and tubs for an emergency water supply. O Place wet towels under doors to keep smoke and embers out. O After the fire has passed, check your roof and extinguish any fires, sparks or embers. O Check inside the attic for hidden embers.

call 9-1-1.

O Patrol your property and extinguish small fires.

O If there are fires that you can not extinguish with a small amount of water or in a short period of time,

GO - Leave Early

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

WHEN TO LEAVE

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

WHERE TO GO

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

HOW TO GET THERE

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

WHAT TO TAKE

Take your emergency supply kit containing your family and pet's necessary items.



EMERGENCY SUPPLIES

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildland fire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies, visit the American Red Cross Web site at www.redcross.org.

0	Three-day supply of water (one gallon per person per day).
0	Non-perishable food for all family members and pets (three-day supply).
0	First aid kit.
0	Flashlight, battery-powered radio, and extra batteries
0	An extra set of car keys, credit cards, cash or traveler's checks.
0	Sanitation supplies.
0	Extra eyeglasses or contact lenses.
0	Important family documents and contact numbers.
0	Map marked with evacuation routes.
0	Prescriptions or special medications.
0	Family photos and other irreplaceable items.
0	Easily carried valuables.
0	Personal computers (information on hard drives

and disks).

O Chargers for cell phones, laptops, etc.

in case of a sudden evacuation at night.

Note: Keep a pair of old shoes and a flashlight handy

My Personal Wildland Fire Action Guide

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

Important Phone Numbers:						
Out-of-State Contact:	Phone:					
Work:						
School:						
Other:						
Evacuation Routes:						
Where to Go:						
Location of Emergency Supply Kit:						
Notes:						
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Be Sure to take...

Make a list of items you want to be sure to take with you.

Check them off as you collect them.

ITEM	LOCATION	NOTES
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Residential Safety Checklist Tips To Improve Family and Property Survival During A Wildland Fire

	Home	Yes	No
1.	Does your home have a metal, composition, or tile (or other non-combustible) roof with capped ends and covered fascia?	0	0
2.	Are the rain gutters and roof free of leaves, needles and branches?	0	0
3.	Are all vent openings screened with 1/8 inch (or smaller) mesh metal screen?	0	0
4.	Are approved spark arrestors on chimneys?	0	0
5.	Does the house have non-combustible siding material?	0	0
6.	Are the eaves "boxed in" and the decks enclosed?	0	0
7.	Are the windows made of at least double-paned or tempered glass?	0	O
8.	Are the decks, porches and other similar areas made of non-combustible material and free of easily combustible material (e.g. plastic furniture)?	0	0
9.	Is all firewood at least 30 feet from the house?	0	0
	Defensible Space	Yes	No
1.	Is dead vegetation cleared to the recommended defensible space area? (Consider adding distance due to slope of property.)	0	0
2.	Is there separation between shrubs?	0	0
3.	Are ladder fuels removed?	0	O
4.	Is there a clean and green area extending at least 30 feet from the house?	0	0
5.	Is there a non-combustible area within five feet of the house?	0	0
6.	Is there separation between trees and crowns?	0	0
-	Emergency Access	Yes	No
1.	Is the home address visible from the street?	0	0
2.	Is the home address made of fire-resistant materials?	0	0
3.	Are street signs present at every intersection leading to the house?	0	0
4.	Are street signs made of fire-resistant materials?	0	0
5.	Is flammable vegetation within 10 feet of the driveway cleared and are overhanging obstructions removed?	0	0
6.	If a long driveway is present, does it have a suitable turnaround area?	0	0

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