

# READY, SET, GO!

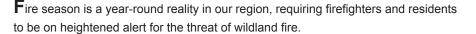
#### YOUR PERSONAL WILDLAND FIRE ACTION GUIDE



Cover photos courtesy Don Silverek

## **READY, SET, GO!** Wildland Fire Action Guide

Saving Lives and Property through Advance Planning



Each year, wildland fires consume hundreds of homes in the Wildland-Urban Interface (WUI) – a high-risk wildfire area containing natural fuels where houses are built. Studies show as many as 80 percent of the homes lost to wildland fires could have been saved if their owners had followed simple fire-safe practices. In addition, wildland fire related deaths occur because people wait too long to leave their homes.

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

Successfully preparing for a wildland fire enables you to take personal responsibility to protect yourself, your family, and your property. In this Action Guide, we provide tips and tools you need to prepare for a wildland fire threat; to have situational awareness when a fire starts and to act early as directed by local officials.

The Ready, Set, Go! (RSG) Program works in collaboration with existing wildland fire public education efforts. RSG is brought to you in partnership with Fire Safe Sonoma, and amplifies the common goal we all share for wildland fire preparedness. Visit us at www.firesafesonoma.org to learn more about becoming prepared.

The IAFC's Wildland Fire Programs offer guidance, insight, and resources that support your local fire department in their outreach, mitigation, and response efforts. Visit www.iafc.org/wildland to learn more about wildland fire risk reduction and to access our resources.

You are a key leader to creating change. You and the members of your community can take simple steps to increase your wildland fire preparedness. Your knowledge and actions may empower others to follow your lead, increasing their safety and potentially decreasing property loss and damage. Being prepared for a wildland fire is vital, as responder resources can be spread thin. Taking advanced personal action can result in improved safety for all involved.

Fire is, and always has been, a natural occurrence. Hills, canyons, and forests burned periodically long before homes were built. Wildland fires are fueled by a build-up of dry vegetation and driven by seasonal hot and dry winds, which are extremely dangerous and difficult to control. Many people have built homes in the WUI without fully understanding the impact a fire may have on their lives. Few have adequately prepared their families and homes for a timely evacuation in the event of a wildland fire.

It is not a question of if, but when, the next major wildland fire will occur. Through advanced planning, understanding, and preparation we can all be partners in the wildland fire solution. The tips on the following pages are designed to help create awareness and a safer environment for you, your family and fire personnel.



#### INSIDE

Wildland Fire Urban Interface	3
What is Defensible Space?	4
Making Your Home Fire Resistant	5
A Wildland Fire-Ready Home	6-7
Ready – Prepare Your Family – Checklist	8
Set – As the Fire Approaches – Checklist	9
Go – Leave Early – Checklist	10
Your Personal Wildland Fire Action Guide	11
Safety Checklist	12

This publication was prepared by the International Association of Fire Chiefs' RSG! Program and the U\$DA Forest Service, U.S. Department of the Interior, and the U.S. Fire Administration.

The printing of this publication was made possible by **Fire Safe Sonoma** in a cooperative effort with the Sonoma County Fire Chief's Association and the Pacific Gas and Electric Company. To learn more about Fire Safe Sonoma go to: www.firesafesonoma.org

To learn more about the **Ready, Set, Go!** Program and its partners, visit www.wildlandfireRSG.org.

## Living in the Wildland Urban Interface and the Ember Zone

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

### Homes on the Wildland Boundary are at Risk too

A home within one mile of a natural area is considered a part of an ember zone, where wind-driven embers can be a risk to your property. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual front of the fire. Prepare your home with the tips from the following pages.

### **Defensible Space Works!**

If you live next to a dense vegetation area, the Wildland-Urban Interface (WUI), you should provide firefighters with the defensible space they need to protect your home. Create a buffer zone by removing weeds, brush, and other vegetation. This helps keep the fire away from your home and reduces the risk from flying embers. Fire preparedness education programs provide valuable guidance on property enhancements.





### **Consider This**

Unmanaged vegetation between and around homes increases the risk of wildland fire spreading throughout the community, and endangering lives and property. Pre-fire planning, fuels management, and sufficient fuel breaks allow firefighters the space they need to keep fire from entering the community.

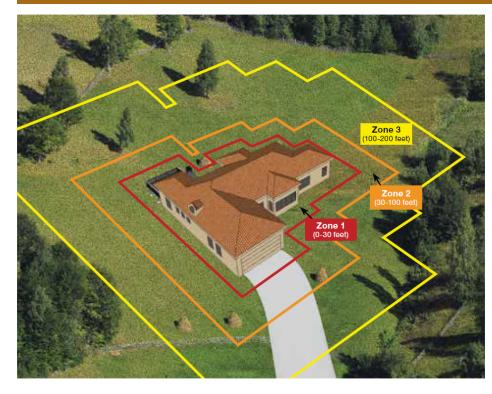


*"Fire preparedness education programs provide valuable guidance on property enhancements."* 

-Nick Harrison, Texas A&M Forest Service

Photos courtesy Santa Rosa Fire Dept.

### **Create Defensible Space**



ZONE 1

## 0-30 feet around your home or to property line

- Use hard surfaces such as concrete or noncombustible rock mulch 0-5 feet around home.
- Use non-wood, low-growing herbaceous vegetation. Succulent plants and ground covers are good choices.
- Store firewood and other combustible materials at least 30 feet away from your home, garage, or attached deck.
- Trim back touching or overhanging branches from the roof to a distance of at least 10 feet.

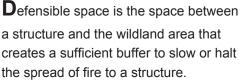
#### **Power Lines**

Create safe space between power lines, and trees and brush that can act as fuel for wildfires. For information about **PG&E's Wildfire Safety Program** visit: https://www.pge.com/en\_US/safety/ emergency-preparedness/naturaldisaster/wildfires/community-wildfiresafety.page

#### ZONE 2

## 30-100 feet around your home or to property line

- Create vegetation groups,
   "islands," to break up continuous fuels around your home.
- Remove ladder fuels to create a separation between low-level vegetation and tree branches to keep fire from climbing trees.
- Remove leaf and needle debris from the yard.
- Keep grass and wildflowers under 8 inches in height.



It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential to help protect a structure during a wildland fire.

You can create defensible space by removing weeds, brush, and other vegetation from around your property. Defensible space is made up of three zones around your home; Zone 1: 0-30ft, Zone 2: 30-100ft, and Zone 3: 100-200ft. Follow the advice under each zone to help protect your home.

#### ZONE 3

100-200 feet around your home or to property line

- Create and maintain a minimum of 10 feet between the tops of trees.
- Remove ladder fuels, creating a separation between low-level vegetation and tree branches to keep fire from climbing up trees.
- Remove dead trees and shrubs.

#### Ladder Fuels

Ladder fuels allow the fire to climb from the surface fuels into the upper portion of the tree.

They can be eliminated by increasing horizontal and vertical separation between vegetation.



To learn more visit www.FireSafeSonoma.org



### Making Your Home Fire Resistant – Harden Your Home

**C**onstruction materials and the quality of the defensible space surrounding the structure are what increases the chance of survival in a wildland fire. Embers from a wildland fire will find the weak spot in your home's fire protection scheme and can easily catch because of small, overlooked, or seemingly inconsequential factors. Below are some measures you can take to safeguard your home.

#### Home Improvements



#### ROOFS

Roofs are the most vulnerable surface where embers land because they become lodged and can start a fire. Roof valleys, open ends of barrel tiles, and rain gutters are all points of entry. Block off all open spaces, and regularly inspect these areas.

#### EAVES

Embers can gather under open eaves and ignite combustible material. Enclose your eaves to prevent ember intrusion, and regularly clear away debris that collects here.

#### 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. Use corrosion resistant metal mesh to screen all vents, and check them regularly to remove any debris that collects in front of the screen.

#### WALLS and FENCING

Combustible siding or other combustible/overlapping materials provide surfaces and crevices for embers to nestle and ignite. Build or remodel with noncombustible or ignition-resistant materials wherever possible, regularly clear away debris from any crevices, and perform annual upkeep.

#### WINDOWS and DOORS

Embers can enter gaps in doors, including garage doors. Install weather proofing around your garage door, and if your garage is attached to your home make sure the interior door is solid and on self-closing hinges.

Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames. Wherever possible, use dual-paned windows with tempered glass, as they are less likely to shatter from radiant heat.

#### **BALCONIES and DECKS**

Construct your balconies or decks with noncombustible materials, and do not store combustible items underneath them. If there is a fire threat, bring any furniture into your home. Embers can collect in or on combustible surfaces, or beneath decks and balconies, igniting the material and entering 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, a sprinkler system can help protect you and your family year-round from any home fire.

### **Tour a Wildland Fire Prepared Home**

Home Site and Yard: Ensure all vegetation within 100 feet around your home or to your property line is well-managed. This area may need to be enlarged in severe fire hazard areas. This may mean considering the impact a common slope or neighbor's yard may have on your property during a wildland fire. Remember the importance of routine maintenance. Keep woodpiles, propane tanks, and combustible materials away from your home and other structures such as detached garages, barns, and sheds. Ensure trees are away from power lines.

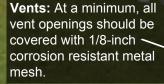
**Roof:** Use a Class A fire-rated roof covering, such as composition shingles, metal, or tile, when roofing or

re-roofing. Block any spaces between roof decking and covering to minimize ember intrusion. Clear pine needles, leaves, and other debris from your roof and gutters. Prune tree branches within 10 feet of your roof.

**Deck/Patio Cover:** Use heavy timber or noncombustible construction material for decks. Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing underneath. Keep your deck clear of combustible items, such as baskets, flower arrangements, and other material. Combustible materials should not be stored under your deck.

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

Address: Make sure your address is clearly visible from the road and constructed of noncombustible materials. Reflective numbering is recommended.



Windows: Radiant heat from burning vegetation or a nearby structure can cause the glass in windows to break. This will allow burning embers to enter and start internal fires. Single-pane and large picture windows are particularly vulnerable to glass breakage. Install dual-paned windows with a minimum of one pane being tempered glass to reduce the chance of breakage during a fire. Limit the size and number of windows in your home that face large areas of vegetation. **Chimney:** Cover chimney and stovepipe outlets with a noncombustible screen of 1/2-inch wire mesh to reduce the size of embers leaving the chimney. Make sure that tree branches are at least 10 feet away from your home.

**Walls:** Wood, vinyl, and other plastic siding and trim products are combustible. Consider building or remodeling with ignition-resistant or noncombustible building materials such as brick, cement, masonry, or stucco.

**Eaves:** Box in eaves with a noncombustible or ignition resistant material.

**Gutters:** Screen or cover rain gutters with a flat noncombustible device. If possible, the device should follow the slope of the roof. Remove debris from gutters at least twice a year, or more if necessary.

> Water: 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, pond, or irrigation ditch, consider a pump.

> > **Fencing:** Use noncombustible fencing within 5 feet of your home. Area at the base of the fence should be kept clear of debris.

**Garage:** Install weather stripping around and under the vehicle access door. This will reduce the intrusion of embers. If the garage is attached to the home, install a solid door with self-closing hinges between living areas and garage. Do not store combustibles and flammable liquids near combustion equipment (e.g. hot water heater).

**Driveways and Access Roads:** Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house. Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic. Ensure that all gate openings are wide enough to accommodate emergency equipment. Trim trees and shrubs overhanging the road back to a minimum of 14 feet to allow emergency vehicles access.

## **READY, SET, GO!**

## Create Your Own Action Guide

**N**ow that you have done everything you can to prepare your home, it is 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 prepare and gain situational awareness in the threat of wildland fire.

## READY – Get Ready







- Create a Family Disaster Plan that includes meeting locations and communication plans and rehearse it regularly. Include the evacuation of large animals such as horses in your plan.
- Have a portable radio or scanner so you can stay updated on the fire and weather emergency announcements.
- Get local alerts when you need them by signing up for **Nixle** at: http://www.nixle.com/ and **SoCo Alert** at: https://sonomacounty.ca.gov/FES/Emergency-Management/SoCoAlert/
- Be prepared for power outages. Visit PG&E at pge.com/wildfiresafety to learn more about PG&E's Community Wildfire Safety Program and for more tips to help you prepare.
- Ò} •` ¦^ Ás@æcÁ [` ¦Áæţ ậî Á} [, •Á, @ \^Á [` ¦Á æe ÉÁ ^|^&d að Éábe à Á æc^ ¦Á, æð Á @ dÉát ~ Á&[ } d [ |• Áæt^ Áæ) å Á @ u, Át Á • ^ Ás@ { È
- Ú|æ), Áæ), å Áj, ¦æ&a&A^ç^¦æ), å áj, ¦æ&a& aæã, } Á ¦[čo+È
- Know how to open your garage door manually.
- Ö^•āt}ææ^ÁæjÁ^{ ^!\*^}&^´áţ ^^cāj\*Áţ &ææaţ}Áţ`orāa^Á c@Áa¹^Á@ez æłåÁæt^æÈ
- Have fire extinguishers on hand and teach your family how to use them.
- Tæiş ææiş Áscé∤ær c4[^!\*^} & Â&[} œæ8c4), `{ à^!• Áş Á ^[`!Á^{ ^!\*^} & Â\*]] |^ Á ãcÈ
- Photos courtesy Santa Rosa Fire Dept. & Don Silverek

## SET – Be Prepared

- Monitor fire and weather conditions at CAL FIRE (http://www.fire.ca.gov/current\_incidents) and NOAA (https://www.noaa.gov/).
- Stay informed by monitoring your TV or local radio stations, **Nixle** (http://www.nixle.com/) and **SoCo Alert** (http://sonomacounty.ca.gov/FES/Emergency-Management/SoCoAlert/).
- Evacuate as soon as you are 'set!'
- Alert family and neighbors.
- Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandanna or particle mask handy.
- Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and a lot of drinking water.
- Remain close to your house, drink plenty of water, and ensure your family and pets are accounted for until you are ready to leave.

#### **INSIDE CHECKLIST, IF TIME ALLOWS**

- Close all windows and doors.
- Remove all shades and curtains from windows.
- Move furniture to the center of the room, away from windows and doors.
  - Turn off pilot lights and air conditioning.



Gas Meter Rupture. Photo courtesy Don Silverek

#### **OUTSIDE CHECKLIST, IF TIME ALLOWS**

- Bring combustible items from the exterior of the house inside (e.g., patio furniture, children's toys, doormats, etc.) If you have a pool, place combustible items in the water.
- Turn off propane tanks and other gas at the meter.
- Don't leave sprinklers on or water running. They can effect critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway to facilitate a quick departure. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Cover attic and ground vents with pre-cut plywood or commercial seals if time permits.

#### IF YOU ARE TRAPPED: SURVIVAL TIPS

- Stay in your home until the fire passes.
- Shelter away from outside walls.
- Bring garden hoses inside house so embers and flames do not destroy them.
- Look for spot fires and extinguish if found inside house.
- Wear long sleeves and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- Fill sinks and tubs for an emergency water supply.
- Place wet towels under doors to keep smoke and embers out.
- After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- Check the attic as well.
- If there are fires that you cannot extinguish, call 911.

## **GO – Act Early**

**B**y 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 GO

Do not wait to be advised to leave if there is a possible threat to your home or evacuation route. Leave early enough to avoid being caught in fire, smoke, or road congestion. If you are advised to leave by local authorities, do not hesitate!

#### WHERE TO GO

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

#### **HOW TO GET THERE**

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

#### WHAT TO TAKE

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



#### Burned Over Car. Photo courtesy Don Silverek

#### **EMERGENCY SUPPLIES LIST**

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 www.redcross.org/ gethelp.

- Three-day supply of water (one gallon per person, per day) and non-perishable food for family (3 day supply).
- Non perishable food for all family members and pets (three-day supply).
- First aid kit and sanitation supplies.
- Flashlight, battery-powered radio, and extra batteries.
- An extra set of car keys, credit cards, cash, or traveler's checks.
- Extra eyeglasses, contact lenses, prescriptions, and medications.
- Important family documents and contact numbers, including insurance documents.
- Map marked with evacuation routes.
- Easily carried valuables and irreplaceable items.
- Personal electronic devices and chargers.
- Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

IAFC's Wildland Fire Programs are funded in cooperation with the USDA Forest Service. In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs). To file a complaint alleging discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington DC 20250-9410 or call toll free voice (866) 632-9992, TDD (800) 877-8339, or voice relay (866)

377-8642. USDA is an equal opportunity provider and employer.

Post it in a location where every member of your family can see it. Rehearse it with your family.

## **My Personal Wildland Fire Action Guide**

During High Fire Danger days in your area, monitor your local media for information and be ready to implement your plan. Hot, dry and windy conditions

Important Phone Numbers:	
Out-of-Area	Phone:
Contact: Work:	
School:	
Other:	
Evacuation Routes:	
Meeting Location:	
Notes:	



For more tips to prepare before a wildfire contact Fire Safe Sonoma at: www.FireSafeSonoma.org

## **READY, SET, GO!**

#### Safety Checklist

Tips To Improve Family and Property Survival During A Wildland Fire

Yes	No	Home		
		<ol> <li>Does your home have a metal, composition, tile or other non- combustible roof with capped ends and covered fascia?</li> </ol>		
		2. Are the rain gutters and roof free of leaves, needles and branches?		
		3. Are all vent openings screened with 1/8 inch mesh metal screen?		
		4. Are approved spark arrestors on chimneys?		
		5. Does the house have non-combustible siding material?		
		6. Are the eaves "boxed in" and the decks enclosed?		
		<ol><li>Are the windows double-paned or tempered glass?</li></ol>		
		8. Are decks, porches and similar areas made of non-combustible material and are they free of easily combustible material?		
		9. Is all firewood at least 30 feet from the house?		
Yes	No	Defensible Space		
		<ol> <li>Has dead vegetation been removed from the defensible space zones around your home? (Consider adding distance due to slope of property.)</li> </ol>		
		2. Is the required separation between shrubs maintained?		
		3. Have ladder fuels been removed?		
		4. Is there a clean and green area extending at least 35 feet from the house?		
		5. Is there a non-combustible area within five feet of the house?		
		6. Is the required separation between trees and crowns maintained?		
Yes	No	Emergency Access		
		1. Is the home address plainly legible and visible from the street?		
		2. Are trees and shrubs overhanging the street trimmed to 151/2 feet?		
		3. If your home has a long driveway, does it have a suitable turnaround area?		
FIRE CHIEFS	<b>F</b>	EMA FIRESAFE		

Ready, Set, Go! www.wildlandfireRSG.org www.FireSafeSonoma.org