







Saving Lives and Property Through Planning

#### Inside...

Wildland-Urban Interface3
What is Defensible Space?4
Making Your Home Fire Resistant5
A Wildland Fire-Ready Home
Ready – Prepare Your Family – Checklist8
Set – As the Fire Approaches – Checklist9
Go – Leave Early – Checklist10
Your Own Wildland Fire Action Plan11
Residential Safety Checklist12

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

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

2 | WILDLAND FIRE ACTION GUIDE

The fire season is a year-round reality, requiring firefighters and residents to be prepared for the threat of wildland fire.

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.

The Twain Harte 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 emergency management officials

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

The IAFC's Wildland Fire Programs offer guidance, insight, and resources that support Twain Harte Fire Department in its outreach, mitigation, and response efforts. Visit www.iafc.org/wildland or www.twainhartecsd.com to learn more about wildland fire-risk reduction and to access our resources.

You are a key leader in 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 advance 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 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.



Buffer Zone





Ready, Set, Go!

Living in the Wildland-Urban Interface and Ember Zone begins with a house that firefighters can defend.

#### **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.

## 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.

#### **Consider This**

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

"Disaster preparedness and maintenance of vegetation around your home and property is each residents responsibility."

- Todd McNeal, THFD Fire Chief

## **Create Defensible Space**

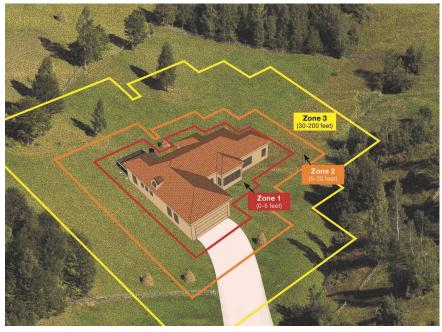
Defensible space is the space between a structure and the wildland area that creates a sufficient buffer to slow or halt the spread of fire to a structure.

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: 0-5ft, Zone 2: 5-30ft, and Zone 3: 30-200ft.

Follow the advice under each zone to help protect your home.



## ZONE 1

# 0-5 feet around your home, or to property line.

- Use hard surfaces, such as concrete or noncombustible rock mulch around home.
- Clean roof and gutters of dead leaves, debris and pine needles.
- Store firewood and other combustible materials 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.
- Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration.

## ZONE 2

# 5-30 feet around your home, or to property line.

- Use non-wood, low-growing herbaceous vegetation.
   Succulent plants and ground covers are good choices.
- Create vegetation groups, or "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 4 inches in height.
- Move trailers/recreational vehicles, storage sheds and other combustible structures out of the zone and into Zone 3. If unable to move, create defensible space around them.

## ZONE 3

# 30-200 feet around your home, or to property line.

- Create and maintain a minimum of 10 feet between the tops of trees.
- Remove ladder fuels to create 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 a fire to climb from the surface fuels into the upper portion of a tree. They can be eliminated by increasing horizontal and vertical separation between vegetation.



## 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 plan 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











#### **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.

#### 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. Combustible fencing can become engulfed, and if attached to the home's sidings can carry the fire right to the home. **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.

## 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.

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.

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

TO NORTHING

Vents: At a minimum, all vent openings should be covered with 1/8-inch corrosion-resistant metal mesh.

Windows: Radiant heat from burning vegetation or a nearby structure can cause the glass in windows to break. This will allow 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.

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.

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

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

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.

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 the garage. Do not store combustibles and flammable liquids near combustion equipment (e.g., hot water heater).

0

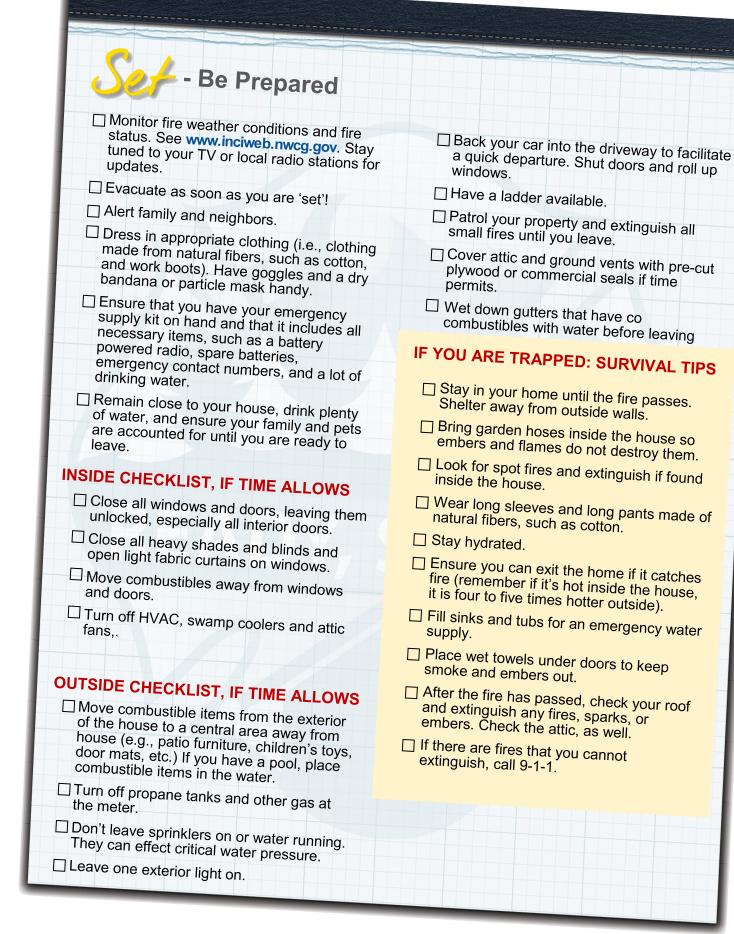
Driveways and Access Roads: Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house. Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic. Ensure that all gate openings 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 fire extinguishers on hand and teach your family how to use Ensure that your family knows where your gas, electric, and water main shut-off controls are, and how to use them. Plan and practice several evacuation routes. Designate an emergency meeting location outside the fire hazard □ Assemble an emergency supply kit as recommended by the American Red Cross. Keep an extra kit in your vehicle. □ Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members. □ Maintain a list of emergency contact numbers in your emergency □ Have a portable radio or scanner so you can stay updated on the fire and emergency weather announcements. □ Have at least 72 hours of food, water and medications



<sup>9</sup> WILDLAND FIRE ACTION GUIDE

# Go! - Act 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

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 temporary refuge area 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.



## 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 nonperishable food for your family (three day supply).
- First aid kit and sanitation supplies.
- Flashlight, battery-powered radio, and extra batteries and whistle
- 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.
- Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.
- Bedding/camping gear and extra clothes

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.



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

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 create the perfect environment for a wildland fire.

IMPORTANT PHONE NUMBERS
Out-of-Area ContactPhone:
Work:
Work: School:
Other:
EVACUATION ROUTES
1
2
3
- DEADY CET COL
WHERE TO GO EAD T, SET, GUS
LOCATION OF EMERGENCY SUPPLY KIT(S)
NOTES
Contact Twain Harte Fire Department for more tips on how to prepare before a wildland fire
or visit our website at: www.twainhartecsd.com

11 | WILDLAND FIRE ACTION GUIDE

# My Personal Wildland Fire Action Plan

## **Residential Safety Checklist**

## Tips to Improve Family and Property Survival During a Wildland

### Get Ready

- Dispose of or relocate combustible material from around your home.
  - Trim trees and bushes, allowing ample space between your home and landscape vegetation.

### Be Prepared

- Arrange your 'Go-Kit' with prescription medication, emergency supplies, important documents, and other essential items.
- Create your own action plan; involve your family and practice exit plans from the home and neighborhood frequently.
- Be sure you're familiar with local emergency notification systems and evacuation systems.

### Act Early

- Get your 'Go-Kit' and leave well before the threat approaches, following a planned, accessible route.
- Stay aware of the situation and follow your plan.
- Cooperate with local authorities during evacuation and re-entry processes.



www.wildlandfirersg.org



# D

Proper Vehicle Use to Prevent Wildfire

MOTORISTS ARE RESPONSIBLE FOR MANY OF THE WILDFIRES SPARKED ALONG OUR ROADWAYS. NEARLY ALL THESE FIRE STARTS COULD BE PREVENTED BY FOLLOWING THESE SAFETY RULES:

#### SECURE CHAINS

NO

DRAGGING

PARTS

PRACTICE SAFE TOWING. DRAGGING CHAINS THROW SPARKS. USE APPROPRIATE Safety Pins and Hitch Ball TO SECURE CHAINS.

#### MAKE SURE YOUR VEHICLE IS PROPERLY MAINTAINED, WITH NOTHING DRAGGING ON THE GROUND.

**CHECK TIRE** PRESSURE



MAINTAIN PROPER TIRE PRESSURE. DRIVING ON EXPOSED WHEEL RIMS WILL THROW SPARKS.



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

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

PROPERLY MAINTAIN BRAKES

ONE LESS

BRAKES WORN TOO THIN MAY CAUSE METAL TO METAL CONTACT, WHICH CAN CAUSE A SPARK.





#PREVENTWILDFIRE #ONELESSSPARK 🛩

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

# Be Prepared and Equipped for EMERGENCY ALERTING

### Sign up for Tuolumne County Emergency Alert System

Go to Tuolumne County's web page at www.tuolumnecounty.ca.gov Click on the button at the top of the screen labeled EMERGENCY ALERTS Enter your contact information with the Everbridge Emergency Notification System

#### **Enable Emergency Alerts on Your Cellular Phone**

Go into phone settings to confirm this feature is enabled

If having trouble confirming feature is enabled go to the location where you purchased your cellular device and ask for assistance

Keep your phone charged at all times and have a auxiliary charging system

### Listen for the THFD Emergency Alert Horn

Have a battery operated AM/FM radio with extra fresh batteries and Listen For.....

# THREE LONG BLASTS AS NOTIFICATION TO

## TURN ON, TUNE IN

## LISTEN FOR FURTHER INSTRUCTIONS

## from the

**Emergency Alert System broadcast on your radio** 

#### www.twainhartecsd.com



V









