

READY, SET, GO!

Your personal wildfire action plan



Orange City Fire Department
176 South Grand Street | Orange, California 92866

READY, SET, GO!

WILDLAND ACTION PLAN

SAVING LIVES AND PROPERTY THROUGH ADVANCE PLANNING

Wildfires are now a year-round reality in Orange County. This means that both firefighters and residents have to be prepared against the threat from brush fires at all times.

Firefighters train hard and make countless preparations to be ready for a wildfire. Residents need to do the same. Successfully preparing for a wild- fire requires you to take personal responsibility for protecting yourself, your family, and your property.

The Orange City Fire Department takes every precaution to help protect you and your property from a wildfire. However, the reality is, during a major wildfire, there will simply not be enough fire engines or firefighters to defend every home, especially during the first hours of a major wildfire, so you must become part of the solution.

If your home borders a natural area, what firefighters call the Wildland Urban Interface, you are directly at risk from a wildfire. In addition, if you live within one mile of a natural area, you live in the Ember Zone. Homes in the Ember Zone are at risk from wind-driven embers from a wildfire. Recent fires in the State of California have resulted in entire neighborhoods destroyed by fires, started by embers, not the wildfire itself.

This publication will help guide you through the process of making your home resistant to wildfires, help to prepare you and your family to leave early, and evacuate safely. We call this process, “Ready, Set, Go!”

We will identify the Ember Zone and provide suggestions on how to retrofit your home with features that protect it from embers. You will learn the importance of having defensible space around your home and the preparations needed to help you leave early, by evacuating before the fire reaches you.

Fire is, and always has been, a natural part of the beautiful area where we have chosen to live. Wildfires fueled by a build-up of dry vegetation and driven by hot, dry winds, are extremely dangerous and almost impossible to control. Many residents have built their homes and landscaped without fully understanding the impact a fire could have on them. It is not a question of if, but when, the next wildfire will occur. That is why the most important person protecting your life and property is not a firefighter, but you. With advance planning and



preparation, you can dramatically increase your safety and the survivability of your property.

We hope you find this information helpful as you prepare your home and family for a wildfire.

Ready, Set, Go!

LIVING IN THE WILDLAND URBAN INTERFACE AND THE EMBER ZONE

READY, SET, GO! BEGINS WITH A HOUSE THAT FIREFIGHTERS CAN DEFEND

WHAT IS WILDLAND URBAN INTERFACE?

Wildland urban interface (WUI) is roughly defined as the zone where natural areas meet areas of development. The WUI has gained increased importance as more and more homes are built in rural settings neighboring public lands. Since the development and implementation of the National Fire Plan, there has been a marked increase in reduction of hazardous fuels in the WUI on the edge of federal lands.



FUEL MODIFICATION

The City of Orange enjoys a natural "wildland" environment on the eastern end of the city. This environment affords wonderful views, a feeling of getting away to the country, and plenty of opportunities for recreation. However, the City of Orange, as well as California as a whole, has experienced very real and sobering property losses due to wildland fires. Most of us remember the firestorms of 1993. Orange lost eight homes in the Stagecoach Fire. These losses caused the fire service to look long and hard at the safety of structures in the Wildland Urban Interface.

Fire behavior is dictated by three factors: 1) the lay of the land, 2) weather, and 3) fuel. Southern California experiences some of the fiercest wildland fires in the nation largely due to the chaparral native to the region, and due to the infamous Santa Ana winds. Fortunately, we can tame fire behavior by controlling the fuel in and around our structures. "Fuel modification" is a term used to describe the transition area beginning with natural vegetation types and amounts, and ending with irrigated, fire resistant vegetation.

WHAT ARE THE PRIMARY THREATS TO HOMES DURING A WILDFIRE?

Research around home destruction vs. home survival in wildfires point to embers and small flames as the main way that the majority of homes ignite in wildfires. Embers are burning pieces of airborne wood and/or vegetation that can be carried more than a mile through the wind, they can cause spot fires and ignite homes, debris and other objects.

There are methods for homeowners to prepare their homes to withstand ember attacks and minimize the likelihood of flames or surface fire touching the home or any attachments. Experiments, models and post-fire studies have shown homes ignite due to the condition of the home and everything around it, up to 200' from the foundation. This is called the Home Ignition Zone (HIZ).

HOW TO PREPARE YOUR HOME FOR WILD FIRES

WILDFIRE RISK REDUCTION STEPS THAT CAN MAKE YOUR HOME SAFER DURING A WILDFIRE

VEGETATION MANAGEMENT

1. HOME IGNITION ZONES

Limiting the amount of flammable vegetation, choosing fire-resistant building materials and construction techniques, along with periodic exterior maintenance in the three home ignition zones - increases the chances your home will survive a wildfire when exposed to embers and/or a surface fire. The zones include the Immediate Zone: 0 to 5 feet around the house; Intermediate Zone: 5 to 30 feet; and the Extended Zone: 30 to 100 feet.

2. LANDSCAPING AND MAINTENANCE

To reduce ember ignitions and fire spread, trim branches that overhang the home, porch and deck and prune branches of large trees up to (depending on their height) 6 to 10 feet from the ground. Remove plants containing resins, oils and waxes and ensure mulches in the Immediate Zone (0 to 5 feet around the house) are non-combustible options like crushed stone and gravel. Maintain vegetation annually.

FIRE RESISTIVE CONSTRUCTION

3. ROOFING AND VENTS

Class A fire-rated roofing products offer the best protection. Examples include: Composite shingles, metal, concrete and clay tiles. Inspect shingles or roof tiles and replace or repair those that are loose or missing to prevent ember penetration. Box-in eaves, but provide ventilation to prevent condensation and mildew. Roof and attic vents should be screened to prevent ember entry.

4. DECKS AND PORCHES

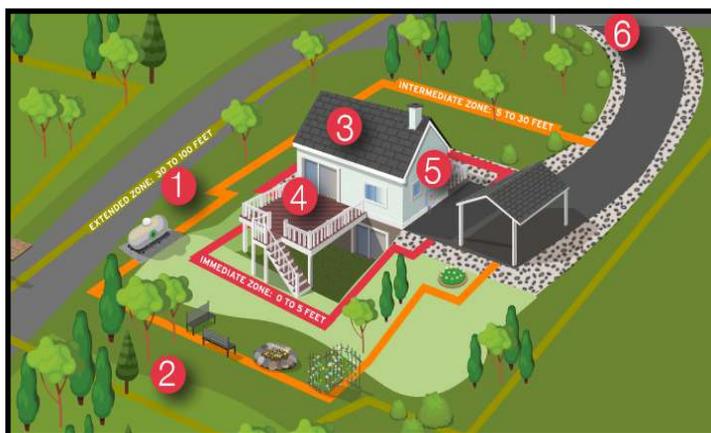
Never store flammable materials underneath decks or porches. Remove dead vegetation and debris from under decks/porches and between deck board joints.

5. SIDING AND WINDOWS

Embers can collect in small nooks and crannies and ignite combustible materials; radiant heat from flames can crack windows. Use fire-resistant siding such as brick, fiber-cement, plaster or stucco and dual-pane tempered glass windows.

6. EMERGENCY RESPONDER ACCESS

Ensure your home and neighborhood has legible and clearly marked street names and numbers. Driveways should be at least 12 feet wide with a vertical clearance of 15 feet, for emergency vehicle access.



WHAT IS DEFENSIBLE SPACE?

Defensible space is the required clearance between a structure and natural vegetation that provides firefighters with the room they need to defend the structure. Under normal conditions, defensible space creates a sufficient buffer to slow the spread of a wildfire. It reduces the amount of direct flame and radiant heat from the fire-front and gives firefighters an advantage in protecting the structure.

ZONE ONE

EXTENDS 30 FEET OUT FROM BUILDINGS, STRUCTURES, DECKS, ETC.

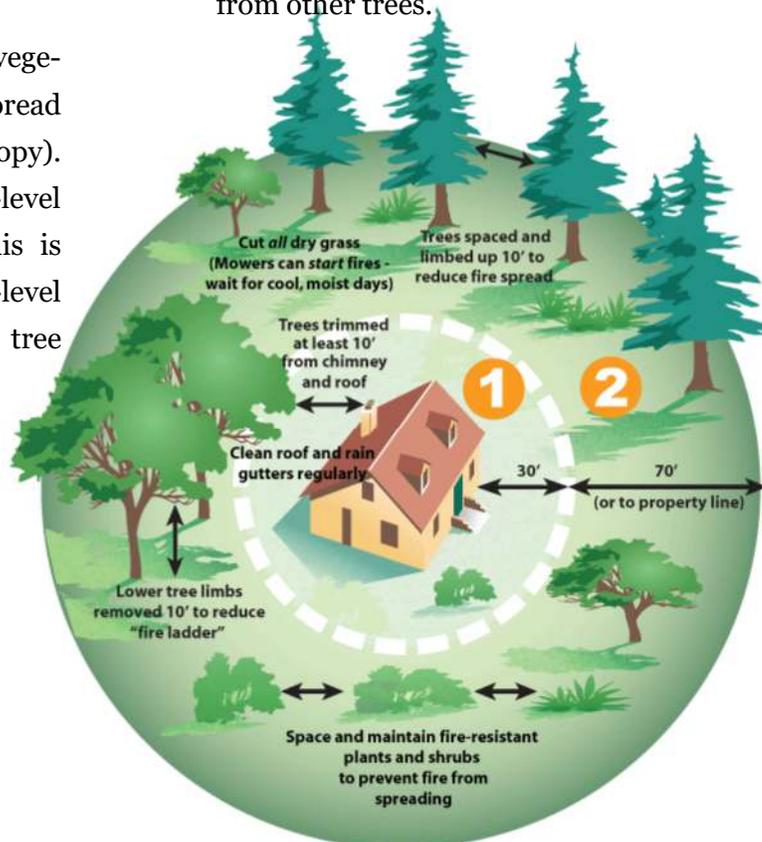
- Remove all dead or dying vegetation.
- Trim tree canopies regularly to keep their branches a minimum of 15 feet from structures and other trees, and 10 feet from chimneys.
- Remove leaf litter (dry leaves/pine needles) from yard, roof, and rain gutters.
- Relocate woodpiles or other combustible materials 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 is done by reducing the height of low-level vegetation and/or trimming low tree branches.

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 diameter 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.



READY,



Now that you have done everything you can to protect your house, it is time to prepare your family. Your Wildfire Action Plan must be prepared with all members of your household well in advance of a fire.

Use these checklists to help you prepare your Wildfire Action Plan. Each family's plan will be different, depending on their situation.

Once you finish your plan, rehearse it regularly with your family, and keep it in a safe and accessible place for quick implementation.

GET READY | PREPARE YOUR FAMILY

- Create a Family Disaster Plan that includes a meeting location, communication plans, and rehearse it regularly. Include in your plan the evacuation of large animals such as horses.
- Register your phone number at www.alertoc.org so you can receive emergency messages.
- 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.
- 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.
- Keep an extra emergency supply kit in your car in case you cannot get to your home because of fire.
- Have a portable radio or scanner so you can stay updated on the fire.



GET SET | AS THE FIRE APPROACHES

- 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 bandana 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 ample drinking water.
- Stays tuned to your TV or local radio station, social media or twitter for updates.
- Remain close to your house, drink plenty of water, and keep an eye on your family and pets until you are ready to leave.
- Do not leave sprinklers on or water running - they can waste critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

INSIDE CHECKLIST

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades, lightweight curtains and close metal shutters.
- Move flammable furniture to the center of the room, away from windows and doors.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning.
- Shelter away from outside walls
- Bring garden hoses inside house so embers do not destroy them
- Patrol inside your home for spot fires and extinguish them.
- Wear long sleeves and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Ensure you can exit the home if it catches fire (remember if it is 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.

OUTSIDE CHECKLIST

- Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, doormats, etc.) or place them in your pool.
- After the fire has passed, check your roof and extinguish any fires, sparks, or embers.

GO! | LEAVE EARLY

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

WHEN TO LEAVE

Leave early enough to avoid being caught in fire, smoke, or road congestion. Do not wait for authorities to tell you to leave. In an intense wildfire, they may not have time to knock on every door. If you are told to leave, leave, 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 and equipment. Choose an escape route away from the fire.

WHAT TO TAKE

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



EMERGENCY SUPPLIES

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildfire 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.

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

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

WILDLAND FIRE SAFETY FOR YOUR LIVESTOCK

You've taken steps to keep your family and home fire safe. Don't forget your pets and livestock. With some advance planning you can increase their chances of surviving a wildland fire.

LIVESTOCK

- Clear defensible space around your barns, pastures and property just as you do your home. PRC 4291 requires clearance around all structures on your property.
- Plan ahead, know where you would evacuate the animals Contact your local fairgrounds, stockyards equestrian centers, friends etc. about their policies and ability to take livestock temporarily in an emergency. Have several evacuation routes in mind. If you don't have your own truck and trailer, make arrangements with local companies or neighbors before disaster strikes. Make sure your neighbor have your contact numbers (Cell phone, work, home, etc.).
- Have vaccination/ medical records, registration papers and photographs of your animals (proof of ownership) and your Disaster Preparedness Kit.
- If you must leave your animals, leave them in a preselected, cleared area. Leave enough hay for 48 to 72 hours. Do not rely on automatic watering systems. Power may be lost.



Livestock Disaster Preparedness Kit

- Hay, feed and water for three days
- Non-nylon leads and halters
- First aid items
- Wire cutters and a sharp knife
- Hoof pick
- Leg wraps
- Shovel
- Water buckets
- Plastic trash barrel with a lid
- Portable radio and extra batteries
- Flashlights

During a wildland fire, local animal rescue organizations work with law enforcement and fire departments to rescue as many animals as they can. In battling a wildfire, firefighters will do what they can but they are not responsible for evacuating your livestock. Firefighters may cut fences or open gates to free trapped animals.

Do not wait until the last minute to start evacuating!

WILDLAND FIRE SAFETY FOR YOUR PETS

PETS

- Plan ahead. Know where you will take or leave your pets. In case you are not home when disaster strikes, arrange in advance for a neighbor to check on or transport your pets. Make sure your neighbors have your contact numbers (cell phone, work, home, etc.). In the event of evacuation pets may not be allowed inside human emergency shelters – have an alternate prearranged location to take your animals.
- Make sure your pets are always wearing properly fitted collars with personal identification, rabies and license tags.
- Each animal should have it's own pet carrier. Birds, rodents and reptiles should be transported in cages. Cover cages with a light sheet or cloth to minimize their fear.
- Store vaccination/medical records, veterinary contact information, proof of ownership, a current photo, and a Disaster Preparedness Kit in one location.

Pet Disaster Preparedness Kit

- Pet carrier for each pet
- Two week supply of food and water
- Non-spill food and water bowls
- Pet first-aid kit
- Medications and dosing instructions
- Car litter box and litter
- Plastic bags for waste disposal
- Paper towels
- Disinfectants
- Leashes/collars/harnesses
- Blankets
- Toys and treats
- Newspaper



Do not wait until the last minute to start evacuating!

MY PERSONAL WILDFIRE ACTION PLAN

Complete your Wildfire 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 on brush fires and be ready to implement your plan. Hot, dry, and windy conditions create the perfect environment for a wildfire.

IMPORTANT PHONE NUMBERS

FAMILY MEMBERS

Name (s):	Phone #1:	Phone #2:

SCHOOL:

WORK:

ANIMAL SHELTER: _____

EVACUATION ROUTES:

MEETING LOCATION:

IN AN EMERGENCY DIAL 911

FIREWISE USA

RESIDENTS REDUCING WILDFIRE RISKS

NFPA's Firewise USA program teaches people how to adapt to living with wildfire and encourages neighbors to work together and take action now to prevent losses.

Get started now! Learn about becoming a recognized Firewise USA® site.

VISIT WWW.FIREWISE.ORG FOR MORE DETAILS.

**Main Line (714) 288-2500 | Fire Prevention (714) 288-2541
IN AN EMERGENCY DIAL 911**