READY SET GO

The Personal Wildland Fire Action Guide

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READY, SET, GO!

Wildland Fire Action Guide

The 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 throughout the year.

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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 late to leave their home.

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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.

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Successfully preparing for a wildland fire enables you to take personal responsibility for protecting yourself, your family and your property.

In this Action Guide Program, 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.

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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.

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Its not a question of if but when the next major wildland fire will occur. That's why the most important person in protecting your life and property is not the firefighter, but you.

Through advance planning, understanding and preparation, we can all be partners in the wildland fire solution.

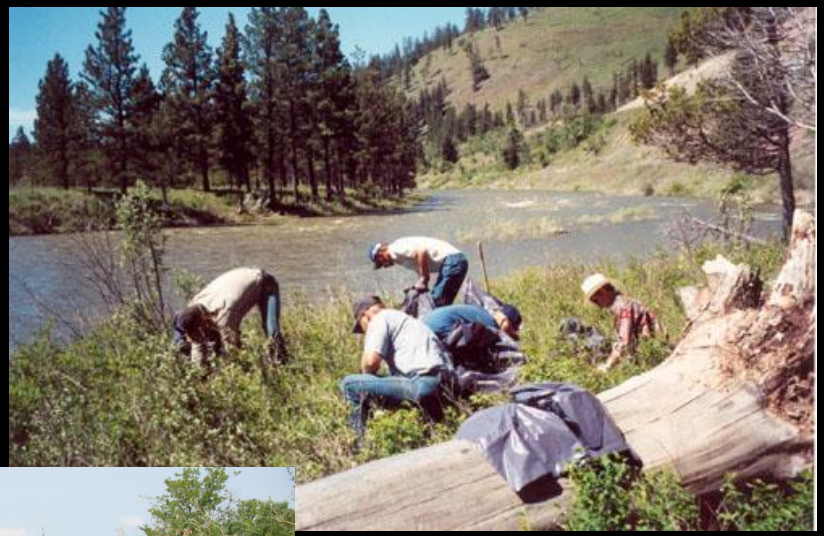
Living in the Wildland Urban Interface and the Ember Zone

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

If you live next to a natural area, the Wildland Urban Interface, you must provide firefighters with the defensible space they need to protect your home.

DEFENSIBLE WORK SPACE

The buffer zone you create by removing weeds, brush and other vegetation helps to keep the fire away from your home and reduces the risks from flying embers.



DEFENSIBLE WORK SPACE

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 a Defensible Space?

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

What is a Defensible Space?

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.

What is a Defensible Space?

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

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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.

What is a Hardened Home?

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 in the next few slides, each will increase your home's, and possibly your family's, safety and survival during a wildland fire.

What is a Hardened Home?

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.

Rain Gutters

Install screen or enclosed rain gutters to prevent accumulation of plant debris.

Your roof is the most vulnerable part of your home because it can easily catch fire from windblown 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.

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.

Vents

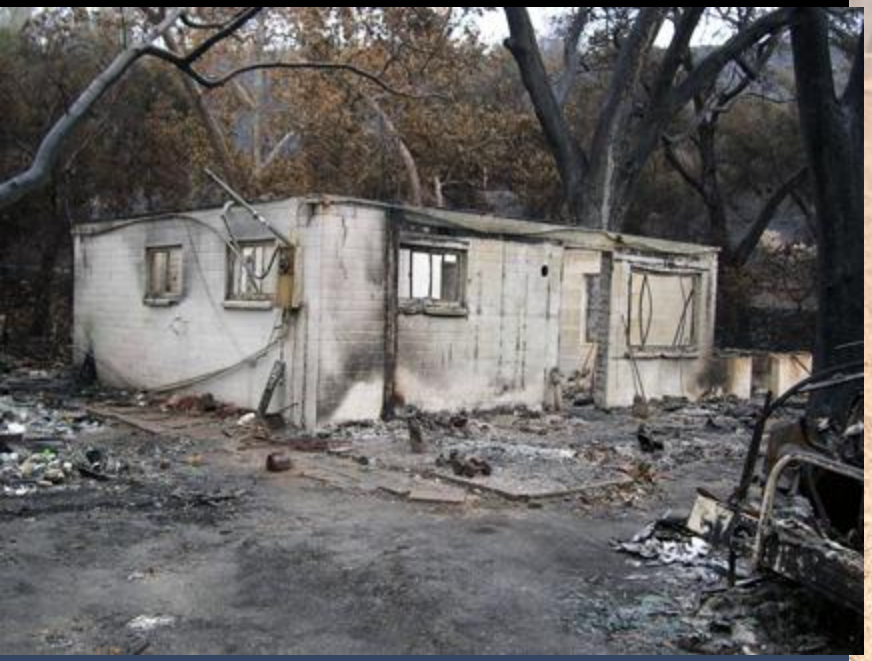
Vents on homes are particularly vulnerable to flying embers.

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).

WALLS

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



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.

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.

WINDOWS and DOORS

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.

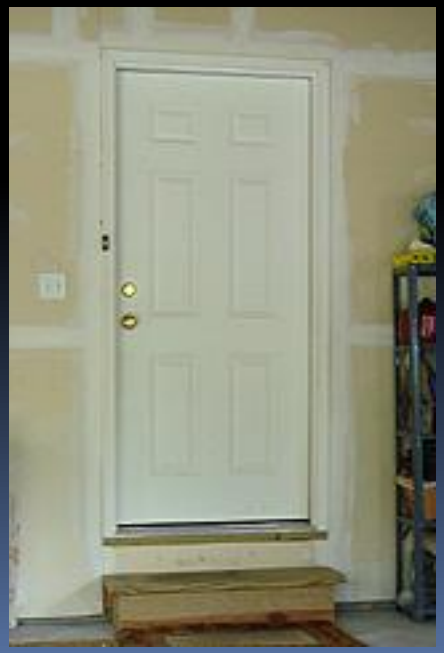
Install dual-paned windows with the exterior pane of tempered glass to reduce the chance of breakage in a fire.

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

Garage and Wildland Fire Preparing

Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Install a solid door with self-closing hinges between living areas and the garage.



Garage and Wildland Fire Preparing

Install weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

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.

Decks

Use heavy timber or nonflammable 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, dried flower arrangements and other debris.

The decking surface must be ignition resistant if it's within 10 feet of the home.

Residential Fire Sprinklers

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

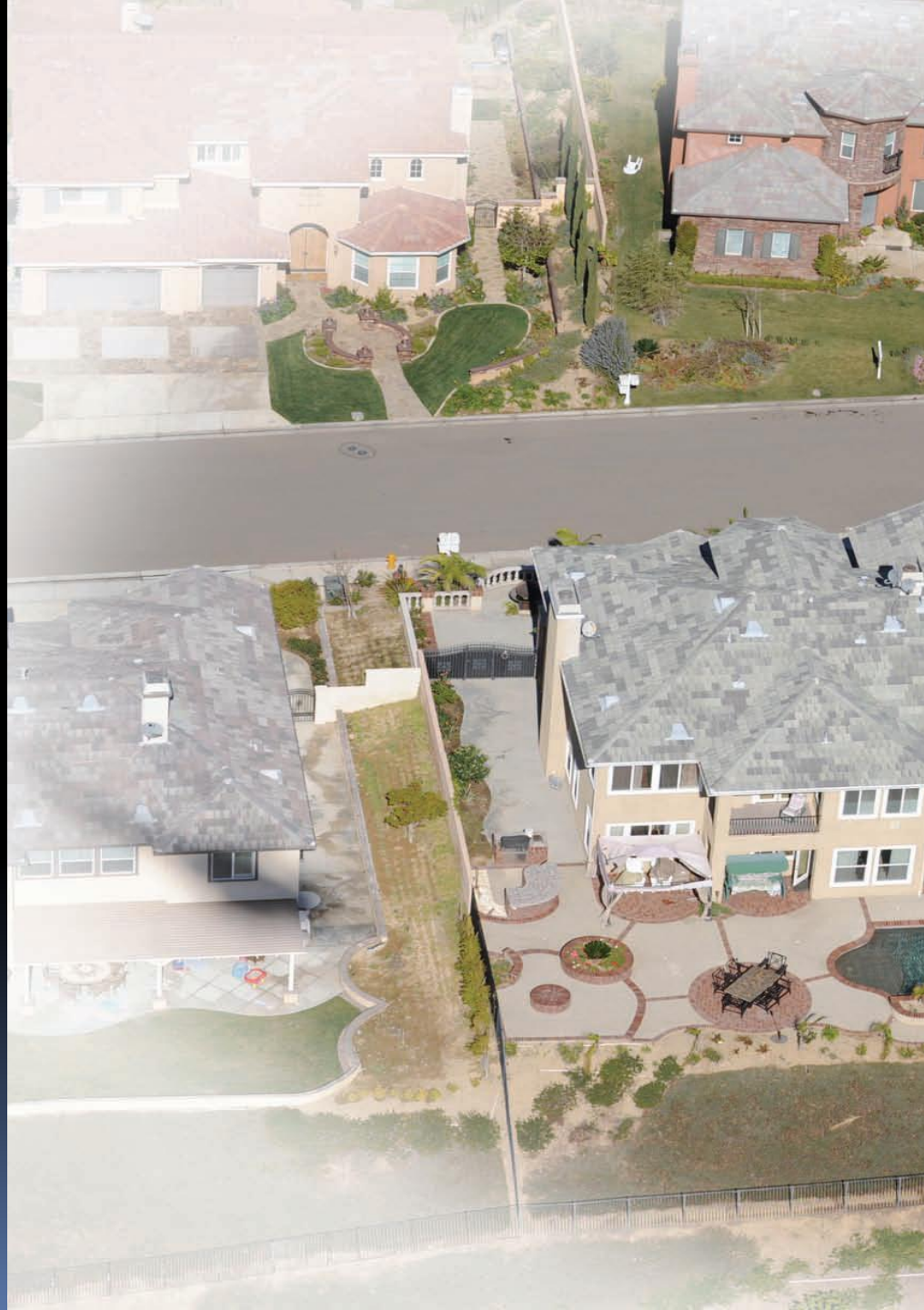
Inside:
Keep working fire extinguishers on hand.

Install smoke alarms on each level of your home and near bedrooms. Test them monthly and change the batteries twice a year

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.



Home Site and Yard:

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

Home Site and Yard:

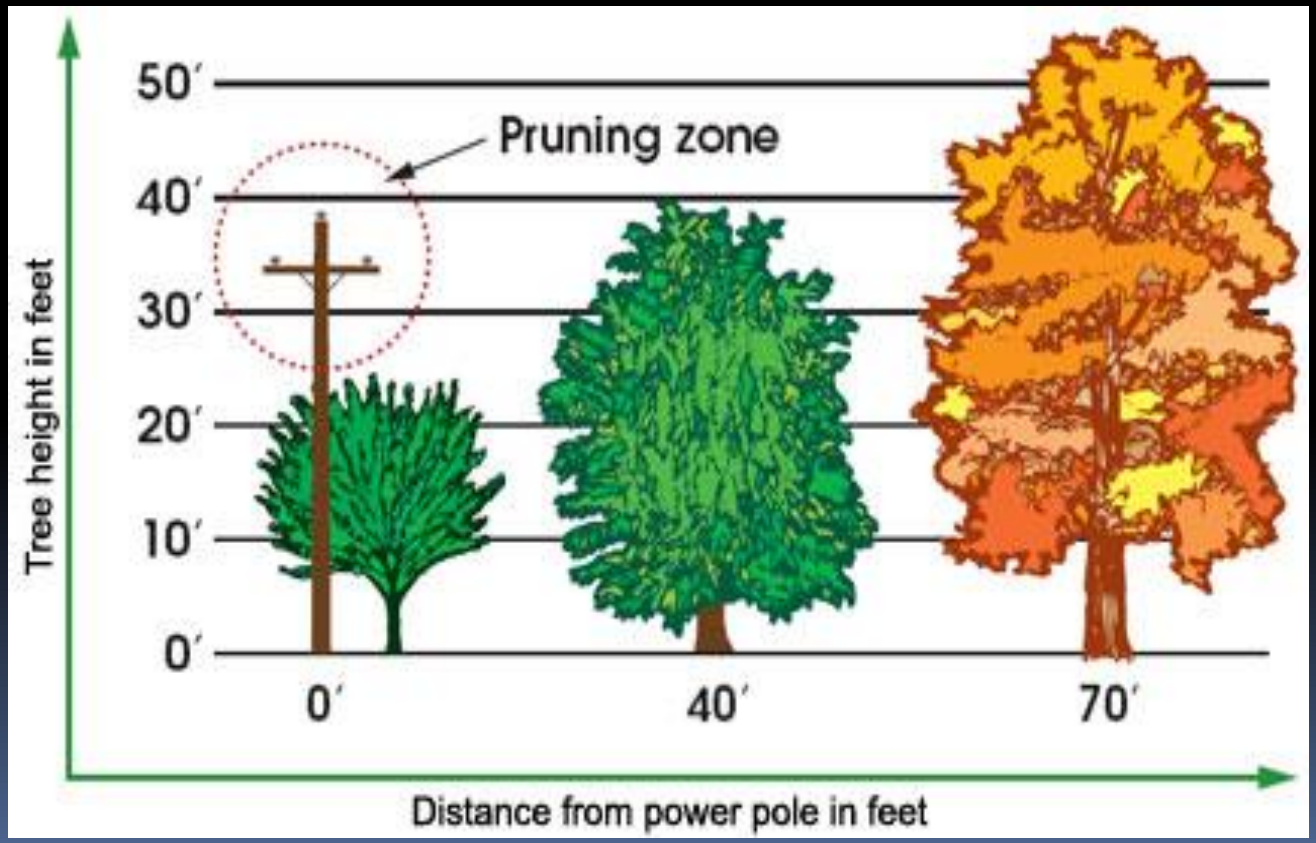
Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Home Site and Yard:

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

Home Site and Yard:

Ensure that trees are far away from power lines.



Home Site and Yard:

Make sure your address is clearly visible from the street for both day and night

Driveway's 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.

Property Gates

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.

Chimney's

Cover your chimney and stovepipe outlets with a non-flammable screen of 1/4-inch wire mesh or smaller to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

The Evacuation Process

What to do when it's time to "GO"

Pre-Evacuation Plan/ Smoke

When a wildfire breaks out, it is not uncommon for smoke to travel many miles. Communities far from the actual fire may be affected by the smoke.

Pre-Evacuation Plan/ Smoke

Most smoke is composed of carbon dioxide, water vapor, carbon monoxide, particulate matter (the stuff that is burning) hydrocarbons, other organic chemicals and other compounds. All of these things can be inhaled into the lungs.

Particulate matter is the principle pollutant of concern from wild fire smoke usually experienced by the general public.

Carbon monoxide levels are highest during the smoldering stages of a fire.

Pre-Evacuation Plan/ Smoke

The Navajo County Public Health Services and Navajo County Emergency Management, partner with Navajo County Emergency Services and other State Agencies, such as the Fire Districts and Law Enforcement Agencies, along with the Arizona Department of Environmental Quality and volunteer organizations such as American Red Cross. They will meet to discuss the current smoke situation and the schedule of the Public Service Announcements.

Pre-Evacuation Plan/ Smoke

The Navajo County Public Health Services and Navajo County Emergency Management and other appropriate agencies such as Arizona Department of Environmental Quality will also consider temporary canceling of outdoor activities and or closures of school or businesses.

Pre-Evacuation Plan

Further dangers from the smoke and the threat of the wild fire overtaking a community will be assessed by:
The Navajo County Emergency Management Team, Arizona Department of Environmental Quality, The responding fire district, And The Sheriff's Office

Evacuation Plan

When evacuating a community is necessary, the Sheriff will instruct his Deputies to notify the community of the danger and have them politely ask the residents to vacate the community. A public service announcement will also follow his decision.

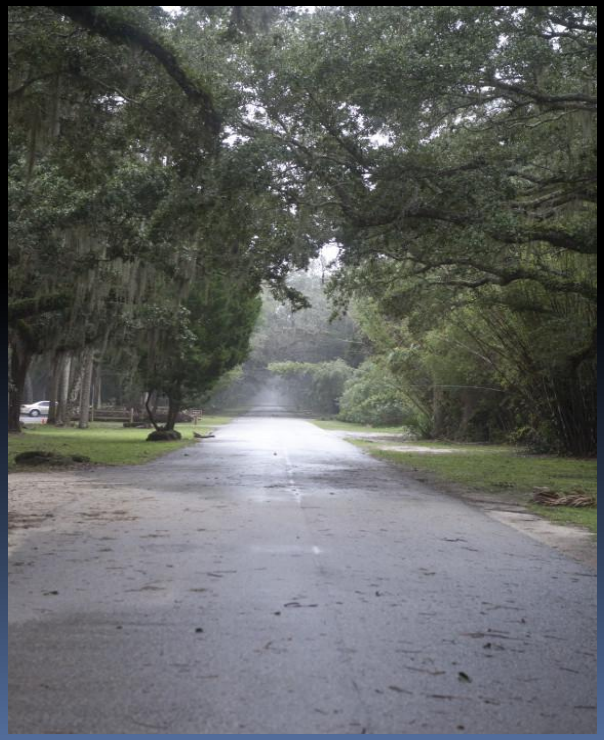
Public Works Road Crews will also be enacted to close roadways and to set up detours.

Evacuation Plan

Some people will choose to stay at their house.
Others will choose to leave.

Evacuation Plan

The earlier you leave your community in an evacuation, the better chance you have to escape the wild fires destructive path.



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Evacuation Plan/ Refusal to Leave

If you decide to stay. You will be issued a “TAG” to complete.
This is what it will say:

“Should you choose to refuse the current evacuation order you should know:

You must remain on your property
You may not have access to first responders
You may not have access to law enforcement
911 calls may not be taken from your residence

If you are found by Law Enforcement off your personal property, You will be subject to arrest for trespassing and/or be removed from the evacuation area.”

Children under the age of 18 years may be evacuated by law enforcement even if the parents choose to remain.

Evacuation Plan/ Agree to Leave

Before leaving your residence

Turn off gas or propane at the source (tank or meter)

Remove BBQ propane tanks (take with you or store in a secure place away from your house)

Close all windows, interior doors, and remove curtains from window area.

Preplan for power outages, this may include taking food from the freezer/refrigerator and securing any other items that depend on continuous power.

We will need to know:

Name of person or persons evacuated from residence
Important hazards or special instructions about your property
Did you leave any pets behind?
Person or persons allowed on property?
Contact info for evacuees

Evacuation Plan/ Security

Law Enforcement Agencies throughout Navajo County will ensure the safety and security of the properties which have been vacated to the best of their ability.

Evacuation/ Reoccupy

Once there is no more threat to a community, a public service announcement will be broadcasted for the reoccupying of communities and people will be allowed to return to their homes.

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Wildland Fire Action Guide

Wallow Fire June 2011/ Apache County AZ