

MARCH 2025

HOME HAZARD

ASSESSMENT GUIDE

ASSESSING WILDFIRE RISK IN HOME IGNITION ZONES IN THE WUI

HOW TO START?

This guide provides homeowners with tools to assess their home's wildfire risk and prioritize actions to reduce that risk. The assessment worksheet included with this guide is intended to help you understand your vulnerability to wildfire and where hazards on your property exist. Every home is different in terms of wildfire risk and hazards. The goal for this worksheet is not to accomplish a hazard rating of zero, but simply to address certain vulnerabilities that present a risk to your home during wildfire. Where and how you reduce risk should be tailored to the unique features of your property. A great first step is to contact your local fire department to learn about wildfire risk in your area. Your County or neighborhood may also have a Community Wildfire Protection Plan (CWPP) which can provide a risk ranking and offer specific recommendations for reducing risk in your community. One of the most effective first steps you can take is to have your property professionally assessed. Experts from your local fire department, NM Forestry Division, or (if in the Santa Fe area) Greater Santa Fe Fireshed Coalition may offer free assessments to identify and address potential hazards around your home.

COMMUNITY FIRE SAFETY BEGINS WITH YOUR HOUSE.

HOW DO HOMES IGNITE?

Ember showers tend to be the greatest threat to homes from wildfire. Embers can ignite exterior and interior home components from miles away, as well as vegetation and flammable items near the home. Direct flame contact with the house occurs when flammable items touching the house catch on fire, or when embers start a fire on the structure and create direct contact. Radiant heat exposure occurs from heat radiating off a nearby structure or burning tree and can ignite objects inside the home.

RISK REDUCTION VS. RESTORATION

Fire mitigation, or creating defensible space around your home, is a risk reduction strategy that aims to reduce the likelihood of home loss or damage from wildfire. Risk reduction actions are taken close to a structure in "home ignition zones" to protect the home. The further you get from a house, the more you can start to manage for forest restoration and ecological health instead of for risk reduction. Forest restoration involves actions taken to maintain or establish a healthy resilient forest.



HOMES CAN IGNITE FROM EMBERS, RADIANT HEAT OR DIRECT FLAME CONTACT.

SITE HAZARDS

BEFORE YOU BEGIN

Familiarize yourself with the home ignition zones. A home ignition zone is the house itself and everything around it up to 100+ ft, or more if in a high-risk area or on a slope.

ACCESS & VISIBILITY

When assessing your access and visibility, it is important to look at your driveway and the entrance to the community.

- Is it gated?
- Who has access to the open the gate in an emergency?
- Is it wide enough for a first responder vehicle?
- What is the road grade?
- Is your address visible from both directions?

Steep driveways can be a problem for emergency

vehicles. Make sure your address is well marked with reflective numbers and remove any low branches that hang over the driveway. Widening areas of your driveway or creating a turnaround spot may help an emergency vehicle access your home.

VEGETATION & TREES

Vegetation within 100 ft. of the home, or more if on a slope, should be thinned to disrupt fuel continuity in order to keep approaching fire on the ground and out of the tree tops. Prepare your home to withstand a fire even if no one is there to defend it. The closer you are to the house (zones 0 and 1), the more you should think about which trees to remove.

HOME IGNITION ZONES

ZONE 0

0-5 feet. Keep this area free from flammables, like wood piles. Use nonflammable, hard surface materials in this zone, such as rock, gravel, sand, cement, bare earth or stone/concrete pavers. Be mindful to keep flammables off decks and fences.

ZONE 1

5-30 feet. Remove all but scattered vegetation and trees, keep grasses mowed within 30 feet of the home, and space tree crowns approximately 10-20 feet apart. Remove short vegetation from under large trees (ladder fuels), as well as low hanging branches.

ZONE 2

30-100 feet. Clusters of trees should be kept separated (to avoid crown spread). Wood piles and flammables such as fuel tanks and sheds should be kept in this zone or farther out. Remove ladder fuels from underneath the larger trees.

EXTENDED ZONE

100+ feet. This zone should be thinned to a healthy level and managed for ecosystem health.



SITE HAZARDS

Some homeowners choose to hire a contractor who specializes in thinning on private property for home wildfire risk reduction. A contractor can help you decide which trees to remove and which to leave. Your contractor will also make recommendations specific to your property about what to do with the debris and cuttings, known as slash.

What to do with slash:

- Chip (your county or local fire dept. may offer chipping services)
- Firewood
- Lop and Scatter (spread branches and debris evenly over the ground)

Some properties in NM benefit from lop and scatter of slash for erosion control and to encourage grass growth. However, lop and scatter should be done beyond the 30 ft. zone and any wood chips should be kept at least 5 feet away from structures.

FUELS

Keep ladder fuels away from your home. Ladder fuels are low limbs, underbrush and vines that will carry fire from the ground to the tree canopy, or to the siding and roof of your home. Ground fuels are

debris, pine needles, dried leaves, mulch, grass, weeds, shrubs or anything that will carry fire across the ground. Clear ground fuels from within 5 ft. of your house and rake away dried needles and leaves. A 5 ft. strip of gravel around your home will reduce the risk of embers igniting your structure.

FLAMMABLE MATERIALS

Flammable materials on your property may include propane tanks, gas grills, detached structures, firewood, construction debris, decks, outdoor furniture, coyote fencing, and brush piles. All detached structures have the same risk as homes and must be mitigated the same way. Propane tanks need to be at least 30 feet from the home with at least 10 feet of cleared area around them. Burying tanks is optimal. Woodpiles are common during the winter months and most folks place them near the home for easy access. This is fine in the winter, but once the snow melts, wood piles need to be moved 30+ feet away from the home.

Taking precautions against a wildfire on your property will create a safer environment for your whole community.



STRUCTURE HAZARDS

WHAT'S UP WITH YOUR ROOF?

One of the most effective ways to reduce structural ignitability is to ensure your roof has a Class A fire rating. However, no matter the roofing material, it's important to also:

- Remove needles, leaves, and other debris from gutters, roof angles, or corners of a flat roof
- Enclose eaves, and screen vents and attic openings
- Cut back tree limbs overhanging the roof
- Remove open skylights or plastic skylights
- Maintain flashing
- Replace vinyl gutters

CHECK YOUR SIDING

Adobe, concrete block and brick siding are fire resistant as long as there are no gaps to allow embers in. Vinyl siding can melt and expose underlying sheathing which is often not fire resistant. Large logs used in log homes can be relatively hard to ignite, as long as the gaps in between logs are sealed with chinking

to prevent embers from entering the structure.

WINDOWS & DOORS

Windows and doors need to be able to resist an ember shower, radiant heat, and flame contact. Double pane windows and tempered glass hold up better than single pane. Windows with metal screens can delay embers entering the interior should a window break.

FIREPROOF FOUNDATION?

Concrete or slab foundations are inherently fire resistant (as long as the vents are screened). Other types of foundations, like those on mobile homes, are more vulnerable to fire. Mobile homes are generally elevated with skirting that surrounds the crawlspace. Often that skirting is vinyl, which will melt, exposing the insulation and floor of the home. Mitigating vinyl skirting involves replacing it with metal and making sure the vents in the skirting are screened and free of debris.

PRIORITY ACTIONS

- Cover vents or openings in roofs with 1/8" metal screening.
- Replace vinyl gutters with metal gutters.
- Chinking is a flexible material used to seal gaps in logs. Chinking can reduce a log's vulnerability to embers.
- Fiber cement board, "hardy board", can look like regular wood siding but it is much more fire resistant.
- Maintain a 5 foot combustible-free zone around the home to protect siding from ignition.
- In the event of an evacuation, CLOSE the windows, remove curtains and move furniture away from the windows.
- Remove wood piles and sweep needle/leaf debris from decks.
- Remove any vegetation or other flammable material from underneath the deck. Screen the space under decks.

STRUCTURE HAZARDS

IT IS OFTEN THE SMALL, EASY THINGS HOMEOWNERS CAN DO THAT MAKE A HUGE DIFFERENCE IN MITIGATING RISK.

BE WARY OF FUEL TRAPS

Fuel traps are areas where leaves and debris can accumulate. Homeowners need to be vigilant in clearing wind-blown, dry debris from foundation corners, cracks and gaps in the foundation and siding, window wells, under steps and decks, and anywhere else where debris can accumulate.

TIP: Clear dry debris, leaves and pine needles from your deck, bottom of fence, roof and foundation corners!

DON'T FORGET FENCES & DECKS

Decks are highly vulnerable areas of a home. Decks are often constructed of wood, attached to the home, and sometimes connected to flammable siding. The space under elevated decks are often used as storage for wood and construction debris. Other flammables such as propane grills and outdoor furniture are often on top of decks, adding to the vulnerability. Ways to mitigate your deck's risk:

- Remove wood piles during fire season to 30 ft. away from any structure.
- Keep needle and leaf debris swept off the deck.
- Prevent any vegetation from growing under the deck.
- Screen from the bottom of the deck to the ground to help keep embers out from under the deck.
- When residents are absent, remove flammable seat cushions, furniture, and propane from the deck.

Wooden fences can provide a direct path for flames to your home. Dry debris collects against them and fences themselves often dry out and crack, providing pockets for embers to collect and ignite. Clear dead vegetation from the bottom of fences and consider switching to an adobe wall or metal fence, at least within 5 feet of your home.



HAZARD REDUCTION

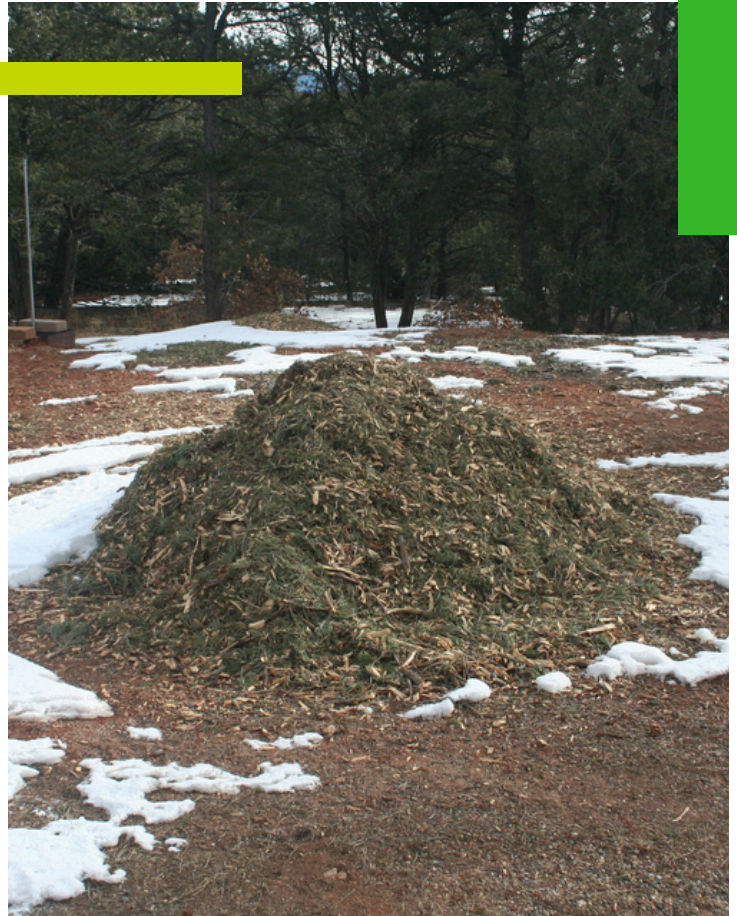
AIM TO BE "FIREWISE"

Communities that have taken measures to become more resistant to wildfire can be recognized by applying to the National Firewise Program. The Firewise Program minimizes the risk of home ignition by:

- landscaping around residential structures
- thinning trees and brush
- choosing fire resistant plants
- selecting ignition resistant building materials
- working together with local fire department to reduce their risk.

A Firewise community develops and implements a mitigation plan in their neighborhood. Aim to be Firewise and lower your hazard rating with these few simple hazard reduction techniques:

- Remove ladder fuels within 30 ft. of the house.
- Mow and water grass near the house.
- Rake leaves and needles.
- Place 5 ft. of gravel or non-flammable material around the house.
- Regularly clean the roof and gutters.
- Use non-flammable deck skirting and screen the deck to the ground.



REDUCE THE HAZARD TO YOUR HOME THROUGH A FEW SIMPLE ACTIONS

**FIREWISE IS A
DESIGNATION,
FIRE ADAPTED
IS A LIFESTYLE**

FIRE ADAPTED VS. FIREWISE

Fire Adapted Communities is a collaborative approach to reducing wildfire risks throughout an entire community. It is an effort that involves wildfire officials, community planners, residents,

business owners, emergency responders, insurance representatives and land managers to participate in wildfire preparedness. Firewise is a key component and provides the framework to help residents reduce the risk of home loss or damage from wildfire.



RESOURCES



Forest Stewards Guild

NATIONAL OFFICE
P.O. Box 6058
Santa Fe, NM 87502

SOUTHWEST OFFICE
1939 Warner Circle, Suite B
Santa Fe, NM 87505

www.forestguild.org

Greater Santa Fe Fireshed Coalition | www.santafefireshed.org

Firewise | www.firewise.org

Ready Set Go! | www.wildlandandfirersg.org

Fire Adapted NM | www.facnm.org

FAC Network | www.fireadaptednetwork.org

NM State Forestry | www.emnrd.state.nm.us/SFD

Forest Stewards Guild | www.forestguild.org

The Forest Stewards Guild practices and promotes ecologically, economically, and socially responsible forestry as a means of sustaining the integrity of forest ecosystems and the human communities dependent on them. The Southwest Region of the Forest Stewards Guild promotes excellence in forest stewardship by working with partners, youth, forest workers, wildland fire professionals, and landowners to promote a sustainable forest-based economy and resilient forests, communities, and watersheds.

This guide, along with the included assessment worksheet, is designed to help you understand wildfire risk and vulnerabilities on your property. Further action may be required to mitigate your property's risk. For site-specific recommendations, consider seeking a professional property assessment. Taking the actions outlined in this guide can help make your home more resilient to wildfire.

