MISSOULA COUNTY

WILDFIRE PREPAREDNESS GUIDE





Wildfires Explained

Wildfires can occur anywhere in the U.S., but are most common in the West due to the landscape's natural relationship with fire. Recently, wildfire conditions in the West have become more extreme and destructive as a result of climate change and land development. Western Montana is a fire-prone landscape where it is not a matter of "IF" but "WHEN" a wildfire will occur, especially in Missoula County.

Wildfires can start from natural causes, such as lightning, but 7 out of 10 wildfires in Missoula County are caused by humans. The main causes of human-ignited wildfires are from unattended campfires, debris burning, downed power lines, and vehicles or equipment. Dry weather and drought make vegetation more flammable, and strong winds and/or steep slopes can cause the fire to spread rapidly.

No matter how they start, wildfires are a fact of life in Missoula County, particularly to homes and communities located in areas of moderate to high wildfire hazard.



The purpose of this guide is to provide the proper tools to prepare your home and your family for a wildfire.



UNDERSTANDING WILDFIRE RISK

A community's wildfire risk is the combination of likelihood and intensity (together called "hazard"), and exposure and susceptibility (together called "vulnerability"). Understanding which factors affect your community can help you prioritize risk reduction activities

WILDFIRE



Source: wildfirerisk.org

Learn about wildfire risk to Montana communities by visiting:

- mwra-mtdnrc.hub.arcgis.com
- wildfirerisk.org

QUICKSTAT 💯

Populated areas in Missoula County have, on average, a greater wildfire risk than 96% of other U.S. counties.

Source: wildfirerisk.org

Prepare Before Wildfire Season

Reduce risk and practice wildfire safety at home! Start with learning about your Home Ignition Zone.
 Teach children about fire safety.
 Visit your local fire department or mtfireinfo.org for information on fire restrictions. Help to prevent wildfires by not burning in dangerous fire conditions.
 Follow local outdoor burning laws: Missoula County requires a permit and has seasonal closures. Visit: app.egovmt.com/burnpermit
 Have a family evacuation plan. Sign up for emergency alerts at: smart911.com

QUICKFLIP DI

Prepare a Go Bag to help you evacuate quickly when a wildfire threatens your safety. Flip to the "Evacuation Planning" section in this tab to learn more.



PREPARE FOR WILDFIRE SMOKE

Wildfire smoke is bad for everyone but children, seniors, pregnant people, those with heart or lung disease, and outdoor workers are at greater risk.

Before smoke arrives, prepare your home so you have clean indoor air in at least one room.

- If you have a central air HVAC system, install a MERV 13 or the highest-rated filter your system can handle. When smoke arrives, keep the furnace fan on for continuous cleaning.
- If you do not have HVAC with a MERV 13 filter, use a HEPA portable air cleaner sized for the room.
- To make your own air cleaner, attach a MERV 13 filter to a 20" box fan.
- Check and replace filters ahead of wildfire season.
 Stock up on extra filters.
- Bookmark the Environmental Protection Agency's (EPA) Fire and Smoke Map at: fire.airnow.gov
- Stock up on N95 respirators you can use if you are outside in heavy smoke.
- Learn more and prepare: montanawildfiresmoke.org



HOME IGNITION ZONE

Preparing homes and communities for wildfire begins by reducing risk at the home and working outward. **The Home Ignition Zone (HIZ)** includes your home and the 100 to 200 feet surrounding it. Preparation in this area is critical to the survivability of your structures, property, and community.

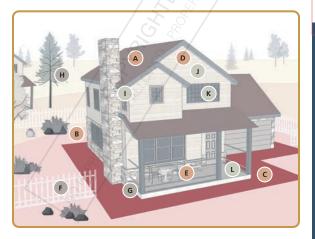
Address the most vulnerable components of your home with building materials and installation techniques that increase resistance to flames, heat, and embers.

QUICKSTAT 🥦

Embers, burning pieces of airborne wood or vegetation, cause 90% of home and business ignitions during wildfire events.

Source: nfpa.org

OWN YOUR ZONE



1ST PRIORITY				
Α	Roof	Install a Class A-rated roof such as asphalt, fiberglass shingles, or metal panels.	\$\$\$	
В	Roof and yard debris	Clear leaves, pine needles, and other flammable material from the roof, gutters, and areas around fences.	DIY	
c	Buffer zone	Clear vegetation and other combustible materials to create a 5-foot buffer zone around the home.	\$\$	
D	Vents	Install flame- and ember-resistant vents. \$		
E	Deck	Remove vegetation, firewood, and other combustible materials from on top and under decks.	DIY	
2ND PRIORITY				
F	Fencing	Replace wood or plastic fences attached to the home with noncombustible metal fencing.	\$\$	
G	Enclose decks	Enclose low decks and areas under bay windows with mesh screening or ventilated noncombustible material.	\$	
Н	Trees	Remove branches that overhang the roof and gutters.	DIY	
3RD PRIORITY				
1	Siding	Replace at least the lower foot of wood or vinyl siding with fiber cement, stucco, brick, or stone siding.	\$\$	
J	Eaves	Enclose open eaves with noncombustible soffit material.	\$\$	
K	Windows	Use dual-paned, tempered glass in windows and doors.	\$\$\$	
Ľ	Deck surface	Replace wooden decking with fire-rated composite material, metal, or lightweight concrete.	sss	

DIY - Do it yourself (sweat and labor) \$ - Inexpensive

\$\$ - Moderately expensive (may need a contractor) \$\$\$ - Investment (professional install)



HOME IGNITION ZONE STEPS

IMMEDIATE ZONE (0-5 FEET AROUND STRUCTURES)

- Landscape using fire-resistant materials, such as rock or gravel.
- If choosing to place plants within this zone, choose fire-resistant plants and incorporate them into your landscaping. For native fire-resistant plants of Montana, visit: msuextension.org
- Clear gutters and roof valleys of vegetative debris.
- Keep tree branches at least 10 feet from the house.
- Install ignition-resistant siding, decks, roofs, windows, etc. For more information on ignition resistant building materials, visit: wildfireprepared.org



Request a FREE Home Wildfire Risk Assessment by visiting: dnrc.mt.gov



SCAN TO SIGN UP



Or visit: dnrc.mt.gov/forestry/resources/ request-a-site-visit

HOME IGNITION ZONE

INTERMEDIATE ZONE (5-30 FEET AROUND STRUCTURES)

- Keep grass mowed and well irrigated.
- Remove fallen leaves, needles, twigs, and branches.
- Clear vegetation within a 10 foot radius of stationary propane tanks.
- Remove ladder fuels (vegetation under trees) so a surface fire cannot reach the tree crowns.
- Prune trees 6 to 10 feet from the ground or 1/3 of the overall tree height.
- Space trees to have a minimum of 18 feet between crowns. The distance should increase with the percentage of the slope.
- Tree placement should be planned to ensure the mature canopy is no closer than 10 feet to the edge of the structure.
- Trees and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation across the landscape.
- Ensure propane tanks and firewood piles are stored at least 30 feet from structures.

EXTENDED ZONE (30-100 FEET AROUND STRUCTURES; EXTENDING TO 200 FEET WITH STEEP SLOPES)

- · Remove heavy accumulations of ground litter/debris.
- · Remove dead plant and tree material.
- Remove small conifers growing between mature trees.
- Remove vegetation growing beneath and between mature trees.
- Trees 30 to 60 feet from the home should have at least 12 feet between canopy tops.
- Trees 60 to 100 feet from the home should have at least 6 feet between canopy tops.
- Tree spacing could be greater due to species of trees, slope angle, and other site conditions.
 Check with a local forester to get advice on what is appropriate for your property.



TAKE ACTION WITHIN YOUR COMMUNITY

Attend or Organize a Wildfire Preparedness Workshop

Learn about evacuation preparation, home ignition zone mitigation, local resources, and more. Contact your local fire department or Missoula County Office of Emergency Management to schedule a workshop.

Become a Neighborhood Ambassador

Motivate your community to take action to reduce its wildfire risk. Receive training on performing wildfire risk assessments for your community.

QUICKCONTACT 2

Contact the Missoula County Wildfire Preparedness Coordinator at: 406-830-4698



Photo Credit: Headwaters Economics

EVACUATION PLANNING

It is important to have an evacuation plan in place before a wildfire occurs. Flip to the "During a Wildfire" tab for the Missoula County evacuation process. A thorough evacuation plan can save your life and should include:

- Several evacuation routes from your home.
- Teaching your children how to evacuate on their own.
- Establishing an emergency meeting place outside of the fire area.
- A central and external contact person.
- A plan for livestock and/or pets.
- Signing up for Smart911.
- A Go Bag!



a Go Bag ready before wildfire season and keep it updated. Have the Go Bag prepared with at least 72 hours' worth of supplies.

REMEMBER THE 5 P'S 1. People 2. Prescriptions 3. Pets

PREPARE YOUR GO BAG



4. Papers 5. Priceless items/

- TOOLS
- ☐ DIGITAL DEVICE
- CASH
- MEDICAL GOODS
- CLOTHES □ FOOD









PRFPARF

KNOW YOUR INSURANCE COVERAGE

Talk to your insurance representative to discuss your coverage as it relates to wildfire losses. If you are evacuated, some homeowner insurance policies may provide discretionary coverage for living expenses. Create a home inventory list and include pictures of your home exterior in your Go Bag.

QUICKTIP C

People with disabilities can learn more about disaster preparedness at: ready.gov

ACCESS

Ensure your home and neighborhood have clearly marked and legible street names and addresses. Driveways should be at least 13 feet wide, with 15 feet of vertical clearance. Use reflective address signs so first responders can easily identify your property in dark/smoky conditions.



Source: Missoula County Sheriff's Office

During a Wildfire

MONITOR LOCAL WEATHER REPORTS

Be aware of current fire danger ratings, red flag warnings, and other fire-related weather alerts. Follow the U.S. National Weather Service Missoula MT for weather alerts

PUBLIC SAFETY POWER SHUTOFF

If extreme weather conditions exist, power companies may shut off power to reduce the risk of new fire starts. For more information, visit: northwesternenergy.com/safety/wildfiresafety or missoulaelectric.com

BE INFORMED ABOUT LOCAL FIRES

Stay informed of wildfires in your area. Current wildfire information can be found at:

- mtfireinfo.org
- inciweb.nwcg.gov
- Follow social media pages for the following:
 - Missoula County OEM
 - Missoula County Sheriff's Office
 - Missoula County Fire Protection Association
 - Lolo National Forest
 - Local Fire Departments

IIMIT SMOKE EXPOSURE

Close windows and doors during times of smoke. Use and regularly maintain a certified high-efficiency particulate air (HEPA) filter to clean indoor air of fine particulate matter. Wear a mask during prolonged outdoor exposure.

MISSOULA COUNTY EVACUATION PROCESS



Missoula County uses a two-stage evacuation process:

Evacuation Warning and Evacuation Order

Evacuation orders can be given without an official evacuation warning! Even small wildfires can cause an evacuation. The Missoula County Sheriff's Office issues evacuations. If ordered to evacuate, do so immediately!

Evacuation Warning: You are warned that current or projected hazards associated with an emergency in this area may require immediate evacuation. This is the time for final preparation, precautionary movement of persons with special needs, mobile property, and pets and livestock.

Evacuation Order: You are ordered to immediately leave the area. Incident conditions present an immediate threat to persons within this area. A slow-moving emergency vehicle with lights and alternating siren tones, loudspeaker announcements, and/or personal contact from a responder all indicate the need to evacuate immediately!

QUICKTIP 💢

You **DO NOT** have to wait for an evacuation order to evacuate. Evacuate early to give responders the best chance to access and protect community resources.

This is the time for final preparation. Arrange for a place to stay and include your pets/livestock when arranging for a shelter.



EVACUATE EARLY

Bring your Go Bag. By leaving early you give your family the best chance of surviving a wildfire. If there is a threat to your home or evacuation route, leave early enough to avoid being caught in fire, smoke, or road congestion.

STAY INFORMED

Sign up for alerts at **smart911.com** or **missoulacounty. us/oem**. Every effort will be made to issue an evacuation warning first. Due to rapidly changing events, an evacuation order may be sent with no prior warning.

DURING

WIIDFIRE

STEPS FOR FINAL PREPARATION

Vehicle

- Place your Go Bag and valuable items inside your car and prepare for quick departure.
- Close garage doors, disconnect the electric garage door opener, and leave it unlocked. Park in your driveway facing out or place your vehicle in the garage facing out, with the keys in the ignition.
- If you do not drive, make other arrangements for transportation in advance.



DURING

WIIDFIRE

IF TIME ALLOWS, INSIDE THE HOME

- Leave a light on in every room and close all interior doors.
- Remove curtains from windows.
- Move flammable furniture to the center of the home, away from windows or sliding glass doors.
- Close the fireplace damper.
- Close or block off doggie doors.
- Turn off all pilot lights.
- Shut off air-conditioning.

IF TIME ALLOWS, OUTSIDE THE HOME

- Leave exterior gates unlocked.
- Place flammable patio furniture in the house or garage.
- Connect garden hoses to outside faucets and place them where firefighters can find them.
- Do not attempt to leave sprinklers or water running; they can affect critical water pressure.
- Place a noncombustible ladder against the house.
- Gather fire tools (e.g., rake, axe, handsaw or chainsaw, bucket, and shovel) and make them easily accessible for fire personnel.
- Move outdoor BBQ and propane appliances more than 30 feet away from structures.
- Turn on outside lights to make the house more visible in heavy smoke.
- Be ready to shut off natural gas, propane, and other fuel at the source.

During an Evacuation Order

EVACUATE IMMEDIATELYI

The time to get organized has passed; do not attempt to protect your home or gather belongings before leaving. Roads can become congested quickly if you delay. When leaving, drive carefully and ensure that your headlights are turned on for visibility.

Follow evacuation instructions from emergency officials and remain updated on conditions via cell phone or radio. **Do not attempt to return home until the Missoula County Sheriff's Office has declared the area safe for re-entry.**

WEAR PROTECTIVE CLOTHING

Wear protective clothing such as sturdy shoes, cotton or woolen clothes, long pants, a long-sleeved shirt, gloves, and a mask/handkerchief to protect your face.

IDENTIFY SHELTER

If you are ordered to evacuate and need accommodations, make arrangements immediately. Do not forget to plan for your pets/livestock. Call **406-258-INFO (4636)** for local shelter information during an evacuation.

DRIVE SAFELY

Drive in a safe and orderly fashion on designated routes only. Smoke, embers, and debris can cause low visibility. Be on the lookout for fast moving emergency vehicles. Consider evacuating in one vehicle to reduce congestion.

EVACUATION ROUTES

Officials will determine the areas to be evacuated and escape routes to use depending upon the fire's location, behavior, winds, terrain, etc.

After a Wildfire

WHEN DO I RETURN HOME?

Only when authorities say it is safe to do so. Stay informed on local emergency response updates from the Missoula County Sheriff's Office.

PRIOR TO RE-ENTRY

Public utilities and services (e.g., electric, water, sewer, and other essential services) must be repaired and in service before re-entry. Authorities will release timely info when it is safe to return.

BE CAUTIOUS

Be very careful when returning home for the first time and look for:

Outside your home

- Unstable burnt trees or power poles.
- Live power lines on the ground.
- Hot or lit embers.
- · Holes filled with hot ash.



Inside your home

- If you smell gas, open the windows, leave the house, and turn the gas supply off at the tank.
 Call your utility provider.
- Turn off the power until your inspection is complete.
- Inspect the roof, attic, rain gutters, porch, etc., for sparks or burning embers. If you find any, wet them right away.
- Make sure the roof and floor are structurally safe.



QUICKTIP 💢

Dress properly for protection against any hazards. Wear a long-sleeved shirt, pants, leather gloves, and boots. Keep a hardhat and dust mask on hand.

AFTER

INSURANCE TIPS AFTER A WILDFIRE

- Know your coverage, including deductible and claim limits.
- Contact your insurance company right away.
- · Complete a "Proof of Loss" form.
- Document damage (i.e., list, photograph, and/or video), if possible. Do not dispose of damaged items until an insurance adjuster is able to review them.
- When making repairs to protect your home and property from further damage, keep records of all repairs.
- Be home when the adjuster inspects your damage.
- If you have questions or need help with a claim following a fire, contact the Montana Commissioner of Securities & Insurance Office at: 406-444-2040 or csimt.gov



FLOODS AFTER A WILDFIRE

A wildfire can cause soil to become hydrophobic, meaning the soil does not absorb water well, which can cause flooding, including flash floods and landslides, to occur after significant rain events.

Be aware of flood hazards no matter where you live, work, or play, but especially if you are in low-lying areas, near water, or downstream of a dam.



DISASTER AND MENTAL HEALTH

Disasters are upsetting experiences for everyone involved. The emotional toll that disaster brings can sometimes be even more devastating than the financial strains of damage and loss of home, business, or personal property.

Everyone who sees or experiences a disaster is affected by it in their own way.

- It is normal to feel anxious about your own safety and that of your family and friends.
- Profound sadness, grief, and anger are normal reactions to an abnormal event.
- Acknowledging your feelings helps you to recover.
- Focusing on your strengths and abilities helps you heal.
- Accepting help from community programs and resources is healthy.



QUICKTIP 💢

Call or text 988 to reach the 988
Suicide & Crisis Lifeline. The Lifeline provides 24/7, free, and confidential support for those in distress or crisis.

MENTAL HEALTH RESOURCES

- samhsa.gov/find-help/disaster-distress-helpline/ disaster-types/wildfires
- ready.gov/coping-disaster

AFTER A WILDFIRE

Missoula County Mitigation Programs

Organizations Offering Technical and Financial
Assistance to Help Homeowners Reduce Wildfire Risk:

Bitterroot RC&D

For private landowners residing in Missoula, Ravalli, and Mineral counties.

bitterrootrcd.org/hazardous-fuels-reduction

Blackfoot Challenge

For private landowners in the Blackfoot watershed.

blackfootchallenge.org/forestry

Clearwater Resources Council

For private landowners in the Seeley Lake area.

crcmt.org/fuels

Missoula and Frenchtown Rural Fire District Mitigation Programs

Each offers fire mitigation programs within their jurisdiction.

Natural Resources Conservation Service (NRCS) – Missoula

Conservation program that helps farmers, ranchers, and forested landowners integrate conservation into working lands. Call the NRCS Missoula Field Office at: **406-829-3395**

Swan Valley Connections

For private landowners in the Swan Valley area.

swanvalleyconnections.org/forest-stewardship

Wildfire Ready Missoula County – United Way of Missoula County

For private landowners to create defensible space and treat their Home Ignition Zone in Missoula County.

missoulaunitedway.org/wildfire-ready-missoula

Additional Resources

For more information on preparing for or dealing with wildfires, visit:

- DNRC Fire Prevention and Preparedness: dnrc.mt.gov/forestry/Wildfire/fire-preventionand-preparedness
- Missoula County Fire Protection Association: mcfpa.org
- Montana Fire Information: mtfireinfo.org
- Missoula County Social Resources: courts.mt.gov/external/selfhelp/resources/ missoula.pdf
- Montana Wildfire Smoke: montanawildfiresmoke.org
- Current Fire Conditions: gacc.nifc.gov/nrcc
- 988 Suicide & Crisis Lifeline: Call or text 988
- Missoula County Office of Emergency Management: missoulacounty.us/OEM
- Public Safety Power Shutoff: northwesternenergy.com/safety/wildfiresafety or missoulaelectric.com
- Smart911 Emergency Alerts: smart911.com
- Ready.gov: ready.gov/wildfires | 800-BE-READY (237-3239)
- National Fire Protection Association (NFPA): nfpa.org
- American Red Cross: redcross.org/prepare/disaster/wildfire
- Insurance Information Institute: iii.org

MY WILDFIRE ACTION PLAN

Important Phone Numbers and Information

Out-of-Area Contact:	
Work:	
School:	
Other:	/~3/
Evacuation Route:	
	- / \$ \$ /
Family Meeting Place:	
Location of Go Bag:	
	2 & /







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Photos used for illustrative purposes only; the people shown are not linked to the topic.

