FEMA

Developing a Home for Wildfires

Developers play an important role in determining a home's resistance to wildfires. All phases of the construction process, from planning to implementation, can have a significant impact during any wildfire event. Aspects to be considered include location, building materials, and complying with Firewise standards. For more information, contact your local fire department or firewise.org.

Pre-Construction Design

- ☐ Choose a site away from heavily vegetated areas.
- ☐ Build on the most level portion of the property.
- ☐ Avoid ridgetops, canyons and areas between high points on a ridge. These are extremely hazardous locationsfor houses and fire-fighters because they become natural chimneys, increasing the intensity of the fire.

- ☐ Design decks so that they are not located at the top of a hill directly in the line of a fire moving up slope.

Building Materials & Considerations

- ☐ Use fire-resistive or non-combustible building materials. Whenever possible, use *brick*, *rock*, or *stucco*—they resist fire much better than wood.
- ☐ Your roof has the largest surface area of your structure and is also the most vulnerable, exposed exterior of your house. Use class A or B roofing materials, such as *asphalt shingles*, *slate* or *clay tile*, or *metal*.
- ☐ Use a minimum of Class III flame-spread rated siding material, from the ground to the roof overhang.
- ☐ A building's foundation often comes in contact with wildfire first, enclose them with concrete block, cement walls, or other fire-resistive building materials.
- ☐ Minimize the size and number of windows on the downhill side of the house or the side that would most likely be exposed to wildfire. Consider both size and material for not only windows but sliding glass doors. Multi-paned glass provides more protection from radiant heat than single-paned.
- ☐ To prevent spark and embers from entering your home, cover attic and vent spaces with 1/8-inch wire mesh.
- ☐ Install eave and soffit vents closer to the roof line than the walls.

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Preparing your Home for Wildfire

In order to make your home as defensible as possible against wildfire risk, there are a host of measures that can be taken. This list is not exhaustive, but does provide a number of safety measures to better protect your property during fire season. It is recommended that you create a 30 to 100 foot safety zone around your home. Within this area, you can take steps to reduce potential exposure to flames and radiant heat. Homes built within pine forests should have a *minimum* safety zone of 100 feet. If your home sits on a steep slope, additional safety precautions should be taken. Contact your local fire department or forestry service for additional information.

- ✓ Rake leaves, dead limbs and twigs. Clear all flammable vegetation.
- ✓ Remove leaves and rubbish from under structures.
- ✓ Thin a 15-foot space between tree crowns, and remove limbs within 15 feet of the ground.
- ✓ Remove dead branches that extend over the roof.
- ✓ Prune tree branches and shrubs within 15 feet of a stovepipe or chimney outlet.
- ✓ Ask the power company to clear branches from powerlines.
- ✓ Remove vines from the walls of the home.
- ✓ Mow and water grass regularly, it should be no more than 6 icnhes tall at any given time.
- ✓ Clear a 10-foot area around propane tanks and the barbecue. Place a screen over the grill - use nonflammable material with mesh no coarser than one-quarter inch.
- ✓ Regularly dispose of newspapers and rubbish at an approved site. Follow local burning regulations.
- ✓ Place stove, fireplace and grill ashes in a metal bucket, soak in water for 2 days; then bury the cold ashes in mineral soil.
- ✓ Store gasoline, oily rags and other flammable materials in approved safety cans. Place cans in a safe location away from the base of buildings.
- ✓ Stack firewood at least 100 feet away and uphill from your home. Clear combustible material within 20 feet. Use only wood-burning devices evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).

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Severe Storms

SPOKANE COUNTY

LOCAL HISTORY

All areas of Spokane County are vulnerable to severe storms and extreme winter weather annually. Affects can range from minor disruptions in transportation and utility functions to major structural damage and business closures. The best way to prevent these losses is to prepare *before*, *during*, and *after* severe stroms occur. As a resident of Spokane County, it is important to recognize the risks associated with your area and to start thinking about what you can do in and around your own home and local community. This handout will help you identify a variety of simple steps you can take today as well as offer multiple long-term approaches to reducing the overall risk from severe winter weather and storms.

UNDERSTANDING YOUR RISK

In recent years, Spokane County has experienced severe weather in multiple forms. Windstorms occur frequently with sustained gusts of up to 50 mph. Funnel clouds may produce damaging hail, heavy rain and wind. Drifting often results from blizzards and snowstorms, leaving large amounts of snow in compact areas. Ice and hail storms can damage trees, crops, utility wires, as well as both private and public infrastructure throughout the area.

DATE	**April 1972**	**Nov. 1981**	**Dec. 1995**	**April 1996**	**Nov. 1996**	**Dec. 1996**	**Dec .1996**	**May 1997**
TYPE OF STORM	Tornado	Wind	Rain, Flood, & Wind	Rain, Flood, & Wind	Ice Storm	Winter storm, Ice, Wind, & Gale Warning	Winter storm, Ice, Wind, Gale, Landslide & Avalanche	Tornado and Thunder-storm

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REDUCING YOUR RISK

BEFORE

- Have a 72-hour kit prepared and ready within the home.
- Winterize your home by insulating walls and attics, caulking and weather-stripping doors and windows, and installing storm windows or covering windows with heavy plastic.

- Clear rain gutters, repair roof leaks, and cut away tree branches that may fall on a your house or other structures during a storm.
- Inspect the structural ability of your roof to sustain heavy accumulations of snow, water, or ice--you may need to consult a contractor.
- Know how to operate and shut off water valves (in case pipes burst); maintain heating equipment and chimneys by having them cleaned and inspected annually.

DURING

- Stay indoors during the storm; drive only if absolutely necessary and keep someone informed of your destination and time of travel.
- Keep dry. Change wet clothing frequqently to prevent loss of body heat.
- Know and watch for signs of frostbite, hypothermia, and overexertion.
- If the pipes freeze, remove any insulation or layers of newspapers and wrap pipes in rags. Completely open all faucets and and pour hot water over the pipes, starting where they were most exposed to the cold.
- If you will be going away during cold weather, leave the heat on in your home, set to a temperature of at least 55°F.

AFTER

- Go to a designated public shelter if your home loses power during periods of extreme cold.
  Text: **SHELTER** + your ZIP code to **43362** (FEMA) to find the nearest shelter in your area. Example: *shelter 99202*
- Continue to protect yourself from frostbite and hypothermia by wearing warm, loose-fitting, light-weight clothing in several layers.
- Stay indoors as much as possible, until the weather has subsided enough to be out.

For a more thorough list of Risk Reduction Recommendations, please visit: [www.ready.gov]

Wildfires

LOCAL HISTORY

All areas of Spokane County have a high probability of experiencing wildland fire. The fire season ranges from mid-May through October and is often extended with exceptionally dry weather patters. Affects can range from minor disruptions in transportation and utility functions to major structural damage to both homes and businesses. The best way to prevent these losses is to prepare *before*, *during*, and *after* fire season. As a resident of Spokane County, it is important to recognize the risks associated with your area and to start thinking about what you can do in and around your own home and local community. The following information will help you identify a variety of simple steps you can take today as well as offer multiple long-term approaches to reducing the overall risk from wildfires.

UNDERSTANDING YOUR RISK

DATE	NAME	AREA	ACRES	DEATHS
August 20, 1910	Great Idaho Fire	Over 150,000 acres burned in Spokane, Pend Orielle Counties.	3,000,000	85
1987	Hangman Hills	24 residences lost	1,500	2
October 1991	Firestorm 1991	93 fires destroyed 114 homes and 40 buildings in Ferry, Lincoln, Stevens, Pend Orielle, Spokane, and Whitman Counties.	35,000	1
August 12, 1996	Bowie Road	Spokane County	3,000	
August 14, 1997	Newkirk/Redlake	Spokane & Stevens County	1,750	
Summer 2000	2000 Wildfires	Spokane, Stevens, Ferry, Whitman, Lincoln Counties	300,000	

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REDUCING YOUR RISK

BEFORE

- Design and landscape your home with wildfire safety in mind. Select materials and plants that help contain fire rather than fuel it.
- Plant fire resistant shrubs and trees; Hardwood trees are *less* flammable than evergreen, pine, eucalyptus or fir trees.
- Regularly clean gutters and roof.
- Have your chimney cleaned and inspected at least twice a year, contact your local fire department for exact specifications regarding spark arrester installations.

- Use 1/8-inch mesh screens beneath porches, decks, floor areas and the home itself. Screen opening to floors, roof, and attic so that burning embers cannot accumulate.

DURING

- If advised to evacuate your home, do so immediately. Be sure to take your disaster supply kit, lock your home, and choose a route that travels away from the fire hazard.
- If you haven't received evacuation orders, FEMA recommends you take the following precautions:
  - Gather fire tools such as rake, axe, handsaw/chainsaw, and shovel.
  - Close outside attic, eaves and basement vents, windows, doors and pet doors. Remove flammable drapes and curtains.
  - Shut off any natural gas or fuel supplies at the source.
  - Close all doors inside the house to prevent draft. Open the damper on your fireplace, but close the fireplace screen.

AFTER

- If you have evacuated, do not enter your home until fire officials say it is safe.
- If you remained at home, check the roof immediately after the fire danger has passed. Put out any roof fires, sparks, or embers, check the attic for any hidden burning sparks.
- Follow public health guidelines regarding safe fire ash clean up and use of masks.

For a more thorough list of Risk Reduction Recommendations, please visit: www.ready.gov