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WILDFIRE

Outline

- **Module #1 - Understand the Problem**
- **Module #2 - Identify the Zones**
- **Module #3 - Evaluate the Home**
- **Module #4 – Available Resources**

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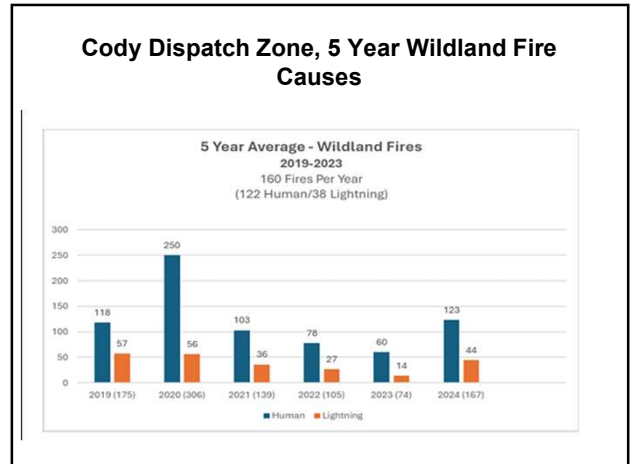
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The Problem...

" Wildland fire kills our firefighters and citizens, threatens our communities, destroys our natural resources, and costs too much."

International Association of Fire Chiefs

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What is the Wildland-Urban Interface?

The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

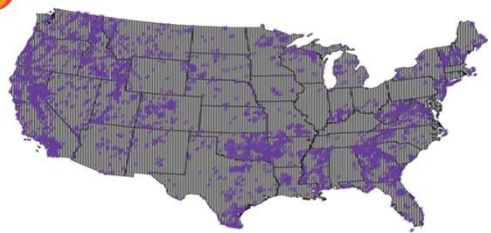


National Wildfire Coordinating Group

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What Communities are at Risk?

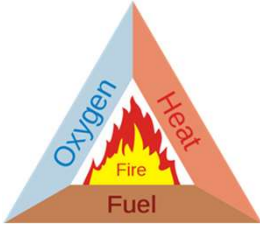


The wildland/urban fire risk exists NOT because of geographical location but as a set of conditions that can exist in many communities

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The Fire Triangle



What component of the triangle can homeowners have the greatest impact?


We need to think of homes as fuel and this as a home ignitability problem.

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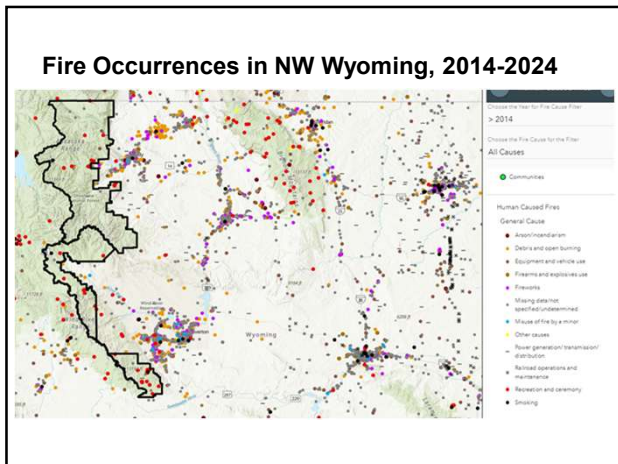
Exposures

THREE REASONS HOUSES BURN DURING A WILDFIRE




Embers are a major factor in home ignition. When considering vulnerability we need to evaluate and address three potential exposures.


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Firefighting Resources are Limited




- Wildfires have grown in size in the last decade
- In 2020 over 58,250 wildfires burned 10.3 million acres nationwide, setting the record in terms of acreage burned.
- There are not enough firefighting resources to protect every home during severe wildfires
- Mitigation on and around our homes can make a significant difference.

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Home Ignition Zones



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WILDFIRE **Immediate Zone**
(Non-Combustible Zone)

0-5 ft. around the perimeter

The diagram shows a house with a 5-foot radius zone around it. The 3D model labels various parts: Chimney, Roof, Flammable Items, Gutter, Eaves, Windows, Exterior Siding, Soffit, and Deck. A 'QUIZ' button is visible at the bottom.

Area should be non-combustible
Roofs & gutters cleared of debris

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WILDFIRE **Building Construction**

- Non Flammable exteriors – roof and sides
- Dual pane windows
- Ember resistant attic vents
- Eaves
- Noncombustible decks and attachments

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WILDFIRE **Ember Vulnerability**

Where is this home vulnerable to ember attack?

The illustration shows a house with yellow arrows pointing to vulnerable areas: roof, chimney, eaves, windows, and deck.

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WILDFIRE **Intermediate Zone**

5 ft.–30 ft. around the perimeter

The 'BEFORE' photo shows a house surrounded by dense trees and brush. The 'AFTER' photo shows the same house with a wide, cleared path around it, representing the intermediate zone.

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WILDFIRE **Landscape Ideas**

The collage shows various landscape options: drought-tolerant plants, a stone path, and a well-maintained lawn area.

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WILDFIRE **Extended Zone**

30 ft. - 100 ft. (and beyond)

The photo shows a person operating a brush chipper to clear a large area of brush and trees, creating an extended zone around a house.

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WILDFIRE **Emergency Access**


- Street Signs
- House Addresses
- Road Widths
- Road Grade
- Road Surface
- Turn Around
- Turn Outs
- Dead Ends
- One Way Roads



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WILDFIRE **Course Outline**

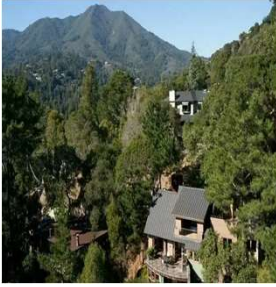
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WILDFIRE **Module #3 - Evaluate the Home**


- Overview of surroundings, structure construction, roof condition, top to bottom and extend out from the foundation
- Defensible space vegetation plan
- Identify hazard reduction options: key vulnerabilities with mitigation strategies



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WILDFIRE **Overview of Surroundings**

- Topography influences wildfire risk
- Direction the structure faces/setbacks
- Dense timber
- Adjacent structures



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WILDFIRE **Roof Type and Condition**



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WILDFIRE **Roof Edges**

- Gutter debris/Corners
- Plug openings
- Remove roof debris



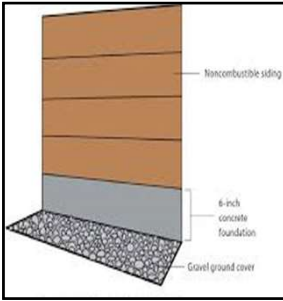
In this case, a bird stop piece is missing. If you have bird stops, inspect them regularly to make sure they are all still in place and functional.

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Siding

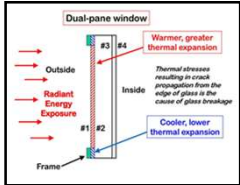

- 0-5 foot of defensible space
- Examine siding for locations where embers could accumulate or lodge.



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Windows

Thermal stress resulting in crack propagation from the edge of glass is the cause of glass breakage.

Warmer, greater thermal expansion

Cooler, lower thermal expansion

Broken dual-pane

Tempered "bug"

The outer pane of this dual-pane window broke during a 2007 wildfire. Having the dual-pane window was one reason why this home survived.

Tempered glass in a window will have a marking etched on one of the corners, similar to that shown here.

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Foundations and Exterior Walls

- Remove combustible materials
- Use closure devices on vents
- Screen wall openings









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Decks and Fences






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Detached Structures

- Create defensible space
- Consider a noncombustible material for a trellis
- Carefully maintain vegetation
- Play sets should be relocated at least 30 ft. from your home





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The screenshot shows the Firewise website's 'Courses and Training' page. The header includes navigation links like 'Home', 'About Firewise', 'Contact', 'Events', and 'FireMedia'. The main content area is titled 'Courses and Training' and features a sub-header 'Learn how to be both effective and safe when you are fighting fire in the wildland/urban interface'. Below this, there are sections for 'Firefighter safety in the wildland/urban interface' and 'Water training - Online course'. A video player is visible at the bottom of the page with the title 'Using Water Effectively in the Wildland/Urban Interface'. The URL 'www.firewise.org' is displayed at the bottom of the page.

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The infographic is titled 'Water Sources' and features the Wildfire Community logo. It lists several water sources: Hydrants, Dry Hydrant, Cistern/Wells, and Back-up power, hardened facilities, ponds, etc. The 'TYPES OF FIRE HYDRANTS' diagram shows a 'Dry Barrel' and a 'Wet Barrel' with their respective components like 'Operating Valve', 'Main Valve', 'Air Valve', and 'Air Valve Seal'. The 'CISTERN/WELL' diagram shows a 'rain water' cistern and a 'well' with a 'pump' and 'riser pipe'. The 'Dry Hydrant' diagram shows a 'dry hydrant' with a 'pump connector' and 'air venting head' connected to a 'hydrant cap' at the base of a '45 degree elbow' and '90 degree elbow'.

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Presenter credits and contact info

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