



2024
INTERNATIONAL CODE COUNCIL
CONFERENCE
EXPO+HEARINGS

The Community Wildfire Problem

Insight Session 5 - Quick Hits on Emerging Building Safety Topics



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AGENDA

- What is the Wildland Urban Interface (WUI)?
- What is the community wildfire problem?
- How can building and fire code officials, construction professionals, and industry stakeholders help mitigate our increasing community wildfire problem?
- Questions and Answers

What is the Wildland Urban Interface?

The Wildland Urban Interface (WUI) is the zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

- *U.S. Fire Administration*



What is the Wildland Urban Interface?

- Between 1990 and 2020, the U.S. added 4.4 million acres of WUI - an area equivalent in size to the State of Washington.
- During the same period, the number of homes in the WUI increased by 47%.
- Today, 99 million people – 1/3 our population – live in the Wildland Urban Interface.



Statistics and images courtesy of USDA Forest Service Northern Research Station

What is the Wildland Urban Interface?

% Change in Area of the WUI, 1990-2020

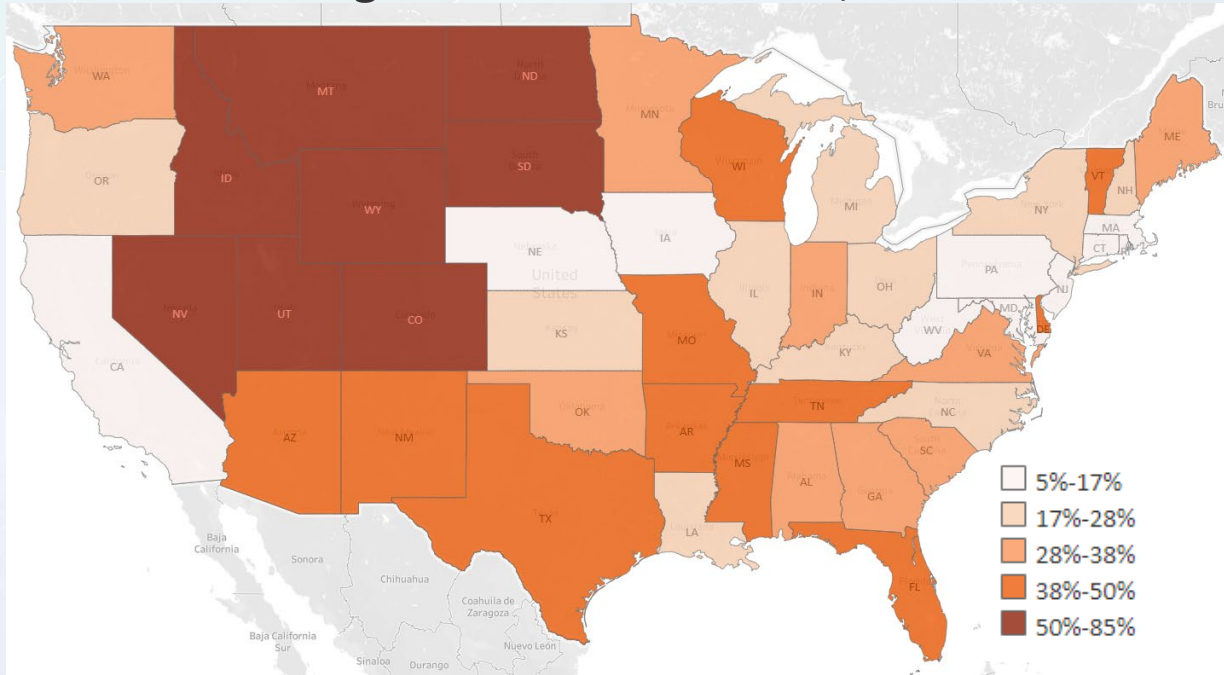


Image courtesy of USDA Forest Service Northern Research Station

What is the Community Wildfire Problem?

- Wildfires now regularly impact hundreds of thousands of acres in a single fire and are increasingly burning near and into communities.
- Between 2000 and 2019, nearly 2,000 communities were threatened by wildfire.
- Between the years of 2005 and 2022, nearly 100,000 structures were destroyed by wildfire.

Wildland Fire Mitigation and Management Commission Report - 2023



Image courtesy of the author

What is the Community Wildfire Problem?

- Some more recent wildfires have resulted in urban conflagrations:
 - 2023 Maui Wildfires - Maui County, Hawaii
 - 102 lives lost; 2,200+ structures destroyed; \$5.5B in damages
 - 2021 Marshall Fire - Boulder County, Colorado
 - 2 lives lost; 1,091 structures destroyed; \$2.0+B in damages
 - 2018 Camp Fire - California
 - 85 lives lost; 18,000 structures destroyed; \$16.5B in damages



Image courtesy of Hart Van Denburg, Colorado Public Radio News

How Do We Mitigate Community Wildfire?

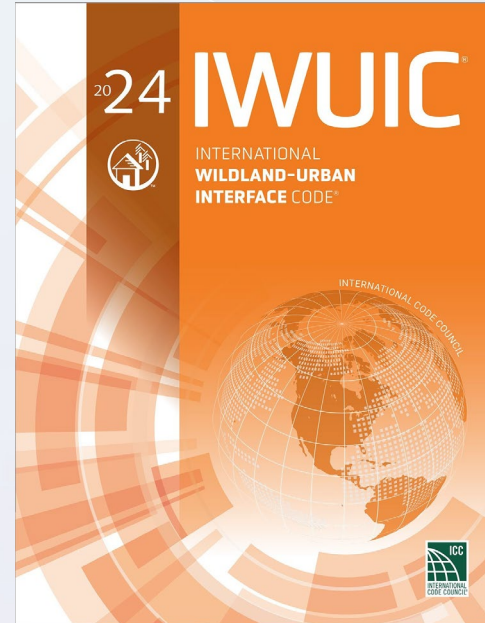


How Do We Mitigate Community Wildfire?

2024 International Wildland-Urban Interface Code

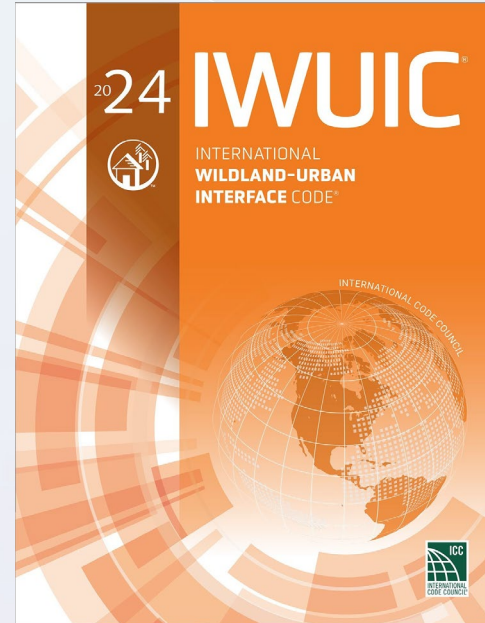
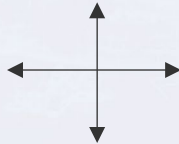
Parcel | Neighborhood | Community

- Ignition-Resistant Construction
- Defensible space
- Emergency Vehicle Access
- Water Supply
- Fire Sprinklers



How Do We Mitigate Community Wildfire?

- IWUIC provisions are flexible based on wildfire risk.
 - IWUIC uses a sliding scale approach to ignition resistance.
- IWUIC allows for alternative methods of compliance by considering shortcomings or overages in fire protection features
 - Ignition-resistant construction
 - Defensible space
 - Water supply



How Do We Mitigate Community Wildfire?

- Use hardscape like gravel, pavers, or concrete. No combustible bark or mulch in the first five feet from your home;
- Check the condition of your roof. When it's time to replace it, use Class A roof coverings which offer the highest resistance to fire;
- Replace combustible fencing, gates, and arbors attached to the home with noncombustible alternatives;
- Regularly clear dead or dry vegetation and create space between trees.



More information: www.iccsafe.org/wui



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