## Addressing Wildfire in the Built Environment



An introduction to NFPA's Firewise USA® Program

Megan Fitzgerald-McGowan | Summer 2025



## **About the National Fire Protection Association**

Global, self-funded non-profit devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards.

- Support for development, adoption, and enforcement of codes and standards
- Research and data analysis
- Technical training and certification
- Public education
- Outreach and advocacy

#### **FAST FACTS**

- Founded in 1896
- More than 40,000 members
- 6,000 volunteers
- 275+ technical code development committees
- 300 codes and standards
- 300 employees



## NFPA and Wildfire

- Structures and residents are at risk to fire anywhere.
- NFPA's vision focuses on life safety and property-loss elimination.
- Engaged in WUI risk reduction since U.S. wildfire season of 1985.

#### Fire Protection and Prevention for Summer Homes in Forested Areas

Prepared by the Forest Committee of the National Fire Protection Association Adopted 1935

Price: Ten Cents

National Fire Protection Association International
60 Batterymarch Street
Boston, Mass., U.S.A.





# NFPA Wildfire Safety Work

Policy: Outthink Wildfire

Codes and
Standards:
Consolidation of
wildfire documents

Public Education: Wildfire Community Preparedness Day

Training and
Certification:
Wildfire Mitigation
Specialist

Community Engagement: Firewise USA®

#### NFPA.ORG

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#### The Firewise Vision

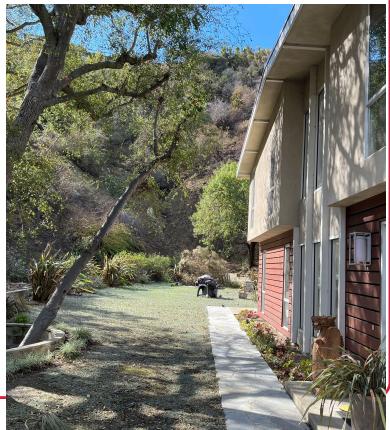
Wildland fires can occur in areas of residential development without the occurrence of disastrous loss.

In fact, a house and its surrounding community can be compatible with the area's ecosystem



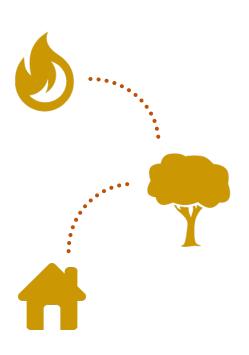
## Palisades Fire – home survival





## What does the science say?

- Research by Dr. Jack Cohen (USFS, retired)
  - Fire does not engulf everything in its path
  - Fire only advances to locations that meet requirements of combustion
  - Altering the type, size, quantity, and spacing of vegetation and other fuels will reduce likelihood of combustion
- Research by the Insurance Institute for Business and Home Safety (embers)
  - <u>https://ibhs.org/risk-research/wildfire/</u>







# Science based recommendations for individual homes

Home Ignition Zone – home and 0-100 feet from the base of a building or furthest attachment (e.g., deck)

- Choosing fire-resistant building materials and construction techniques
- Limiting the amount of flammable vegetation
- Periodic exterior maintenance





#### Strengths

- Spacing between plants
- Rock mulch close to the house and further out
- Paved walkway and driveway to break up vegetation



- Vegetation to the side is continuous, no spacing
- Vegetation is not maintained mowing, trimming, cleaning up debris
- Impact to home behind? Within the HIZ of at least 2 homes







Creating an ignition-resistant community



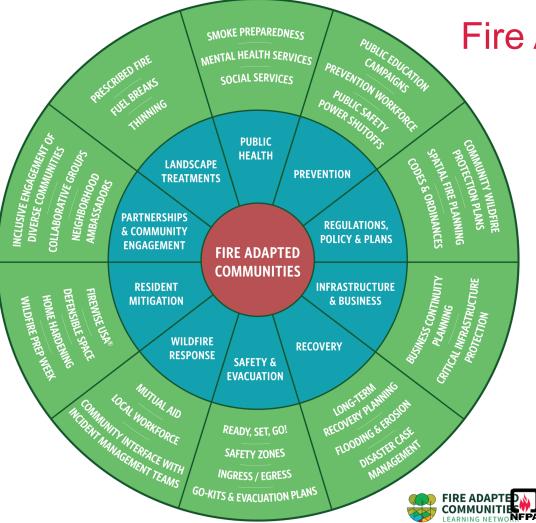
A recognition program that provides a framework to help residents get organized, find direction, and take action to increase the ignition resistance of their homes and community.











Fire Adapted Communities

- Firewise USA is a tool for wildfire adaptation
- Community (selfdefined) level
- Every community's needs are different







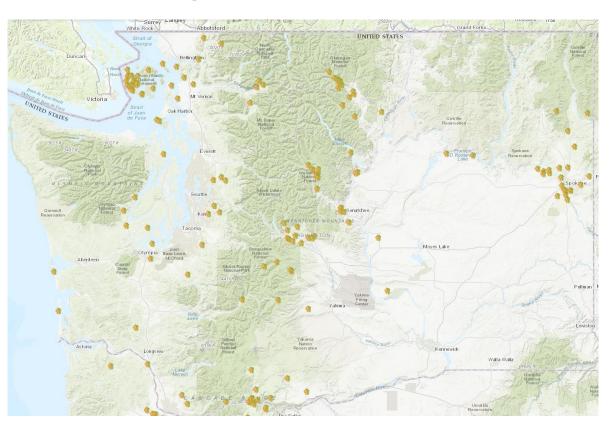
## 2,900+ Sites in 36 States



#### **Fast Facts**

- Established in 2002
- 12 original pilot sites, 9 are still active
- Available in all US states and territories
- Administered by NFPA with support from USDA Forest Service and State Forestry agencies
- Addresses risk of home destruction from wildfire
- Engages property owners in safety action

## **Washington Participation**



- 144 Firewise USA sites in good standing
- River Bluff Ranch in Spokane among 2002 original sites





# FIREWISE USA®

#### **RESIDENTS REDUCING WILDFIRE RISKS**

Why do communities participate in Firewise USA?

- Wildland fires can occur in areas of residential development without the occurrence of disastrous loss.
- A house and its surrounding community can be compatible with the area's ecosystem
- Encourages neighbors to work together to decrease risk for residents and first responders



www.Firewise.org



#### Community/Grass Roots

Individuals/communities

Local practitioners

Local state or federal office

Fire Department

Fire Safe Councils

Other SMEs

**State Liaison** 

Washington State Department of Natural Resources

National program





## **Steps to Achieving National Recognition**

Visit www.firewise.org and click on Get Started

#### **GET ORGANIZED**

Form a board/committee comprised of residents and other wildfire stakeholders.

Obtain a wildfire risk assessment.

Determine the size and boundary: minimum 8 and maximum 2,500 dwelling units.

#### **MAKE A PLAN**

Create a 3-year action plan that identifies community education and risk reduction actions.

#### DO THE WORK

Host a minimum of one wildfire risk reduction educational outreach event.

Meet the minimum wildfire risk reduction investment.

#### **TELL US ABOUT IT**

Create a Firewise USA® Portal account and submit an application to your state Firewise USA liaison.

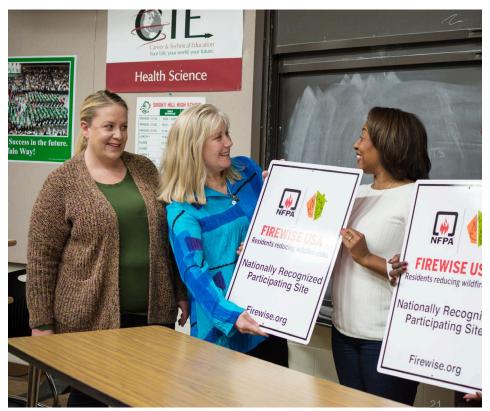
## 2025 Firewise USA Application Canoa Ridge HOA





## Firewise USA® recognition

- Community can request up to 2 signs
- Name of community appears on national website
- Public map is updated 3x annually



## **Steps to Maintaining National Recognition**

To remain "In Good Standing," Firewise sites must submit an annual renewal application. Due in mid-November, can be worked on throughout the year.

#### **BE ORGANIZED**

Committee oversees outreach and mitigation efforts

Verify risk assessment is current, update if prompted by the portal (every 5 years, due date shown on dashboard)

Update community details if expanding or shrinking boundary, submit a new map

#### **REVIEW PLAN**

Verify action plan is still current, update if prompted by the portal (every 3 years, due date shown on community dashboard)

#### DO THE WORK

Host a minimum of one wildfire risk reduction educational outreach event.

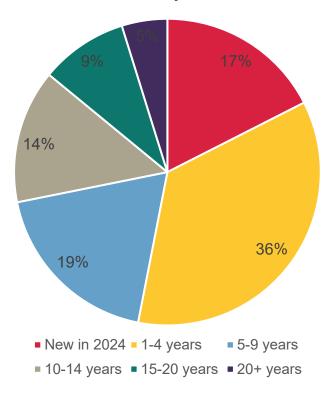
Meet the minimum wildfire risk reduction investment.

#### **TELL US ABOUT IT**

Login to the
Firewise Portal to
complete your
renewal application
and make
community updates

### Firewise USA Retention Over the Years

Participation Data as of January 2025



- 14 percent of communities have been engaged for 15 or more years
- 33 percent have been engaged between 5 and 14 years
- 2023 to 2024 had a 99% retention rate

#### 2024 Firewise USA Site Total Hours of Mitigation by Type

- 474 new communities
- \$293 million invested in risk reduction work by 2,706 sites
- 3.5 million hours worked 75% on/around homes
- 7 million cubic yards of vegetation removed
- 3,986 community work events documented

- 75% of the reported hours represent work within the Home Ignition Zone
- People devoted a total of 3,512,077 hours to wildfire risk reduction – average of 1,296 hours per site

- Dwelling Unit
- 0-100 Feet Landscaping
- Common Areas
- Other



## Sites of Excellence Report

#### The goals:

- 100% participation of homes within the designated pilot boundary (self-identified up to 100 co-located homes).
- Complete identified mitigation tasks within 30 feet of every home, based on recommendations from individual assessments

#### What leads to success:

- Neighbor to neighbor communication
- Build community cohesion
- Coordination with local and state governments
- Remain committed despite setbacks





Residents Reducing Wildfire Risks: Findings from the NFPA® Firewise® Sites of Excellence Pilot, 2019–2020

> Rebecca Miller, PhD Postdoctoral Scholar, West on Fire Project University of Southern California May 2022

# WHAT ABOUT IHBS WILDFIRE PREPARED PROGRAMS?

## Firewise USA and Wildfire Prepared Home

## Strength in numbers

- Both program are working to decrease loss from conflagrations
- Same science foundation, however, IBHS requires homes to meet all requirements before designation
- The more homes meeting that higher standard in a Firewise USA site, the more we bend down the risk



## NFPA & IBHS MOU

- Alignment of messaging
- Development of co-branded resources promoting home improvements and the community-based space
- IBHS community-based designation built off Wildfire Prepared Home and Firewise USA
  - More rigorous
  - Opportunity for Firewise sites who are ready for next level
  - Objective, measurable way to look at mitigation across parcels

## Insurance and Incentives

- Reminder: As a whole, NFPA is not sponsored or funded by the insurance industry. We have specific efforts where we work together
- Firewise USA was not developed for insurance purposes
  - Included in CDI Safer From Wildfires regulation
  - To meet demand for address verification working with data companies that service the industry
  - Data updated twice a year, exploring capacity to deliver more frequently

## Why work with neighborhoods?

"Traditional wildfire [risk] models assume you're exposed to a wildland flame front. But in the WUI, the threat is often your neighbor's house catching fire. That's why:

- Individual mitigation is critical,
- But community-wide action is essential."

Nate Wittasek, P.E. - Vice President, Simon, Gumpertz & Heger

## **Handy Links**

- www.nfpa.org/wildfire all of NFPA's wildfire resources
- www.firewise.org overall Firewise website
- www.portal.Firewise.org Application portal for recognition
- On www.nfpa.org or www.firewise.org use "SEARCH" for
  - State Liaison to find list of state contacts
  - Firewise USA sites to find list of recognized communities



# **Thank You!**

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