



## Los Angeles County Rebuilding Webinar Series

# Webinar 4 – Resilient Rebuild: Incorporating Fire- Resistance Standards

May 13, 2026

# Our Team



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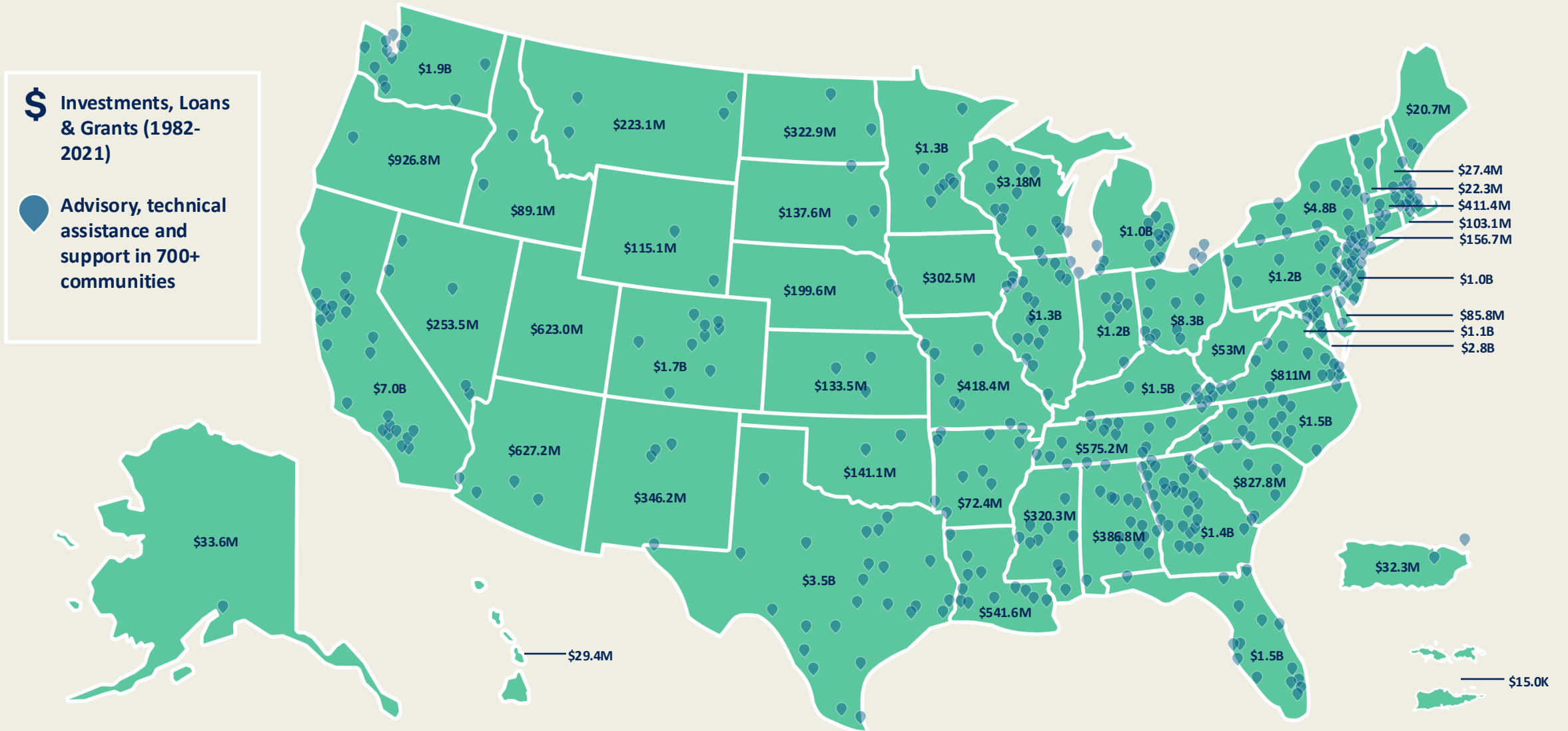


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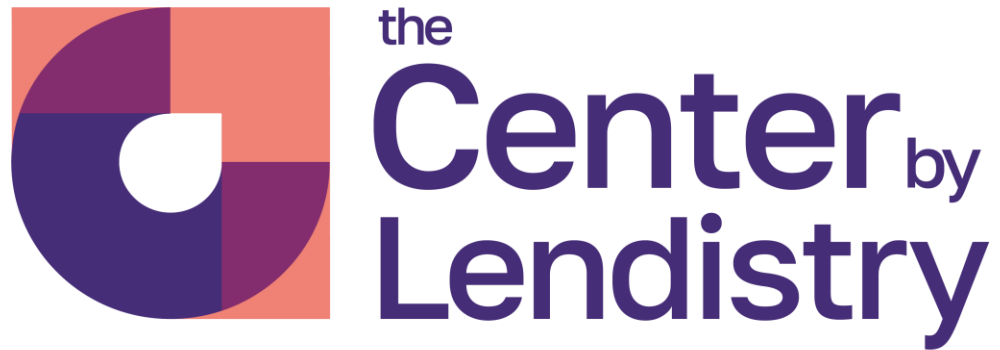


**Sydney Smanpongse**  
FELLOW, SUSTAINABLE CONNECTED  
COMMUNITIES

# We've invested deeply in communities since 1982



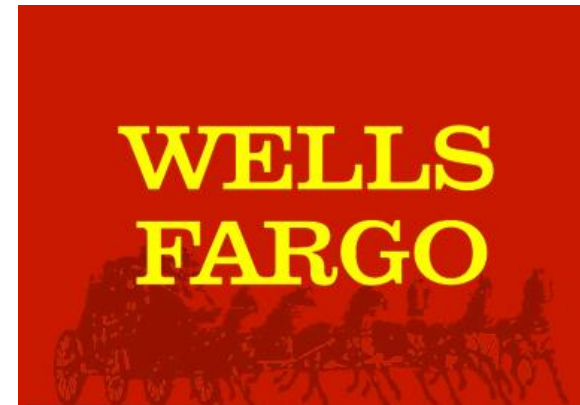
# THANK YOU TO OUR PARTNERS



## Los Angeles County Wildfire Recovery Series

The Road to Recovery - Understanding your Options	2/25/2026	12:00 – 1:30 PM
How to Rebuild: Financing 101	4/1/2026	12:00 - 1:30 PM
How to Rebuild: Manufactured, Factory-Built Home & ADUs	4/22/2026	12:00 - 1:30 PM
Resilient Rebuild: Incorporating Fire-Resistance Standards	5/13/2026	12:00 - 1:30 PM
Returning Home: Supporting Seniors	5/27/2026	12:00 - 1:30 PM
Returning Home: Mobile Home Park Residents and Renters	6/17/2026	12:00 - 1:30 PM

# THANK YOU TO OUR FUNDERS

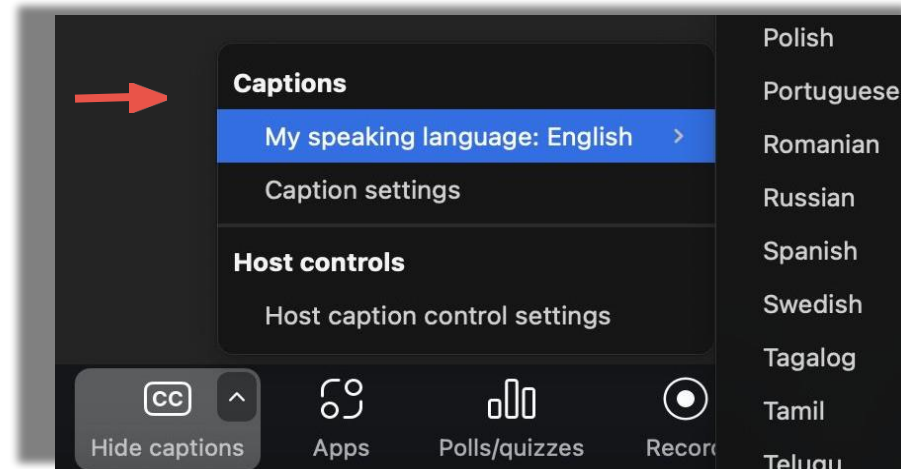


BMO



# Housekeeping

- Use the Q&A to ask your questions
- Translation – Closed captioning available (30+ languages)
- The materials will be uploaded into the LA Rebuild Hub
- No sales or promotional pitches, please



# Disclaimer

*The information in this presentation is for general guidance only and does not constitute legal, financial, or insurance advice. Individual circumstances vary, and wildfire survivors should consult with licensed professionals, including contractors, insurance providers, and legal advisors, before making decisions about rebuilding.*

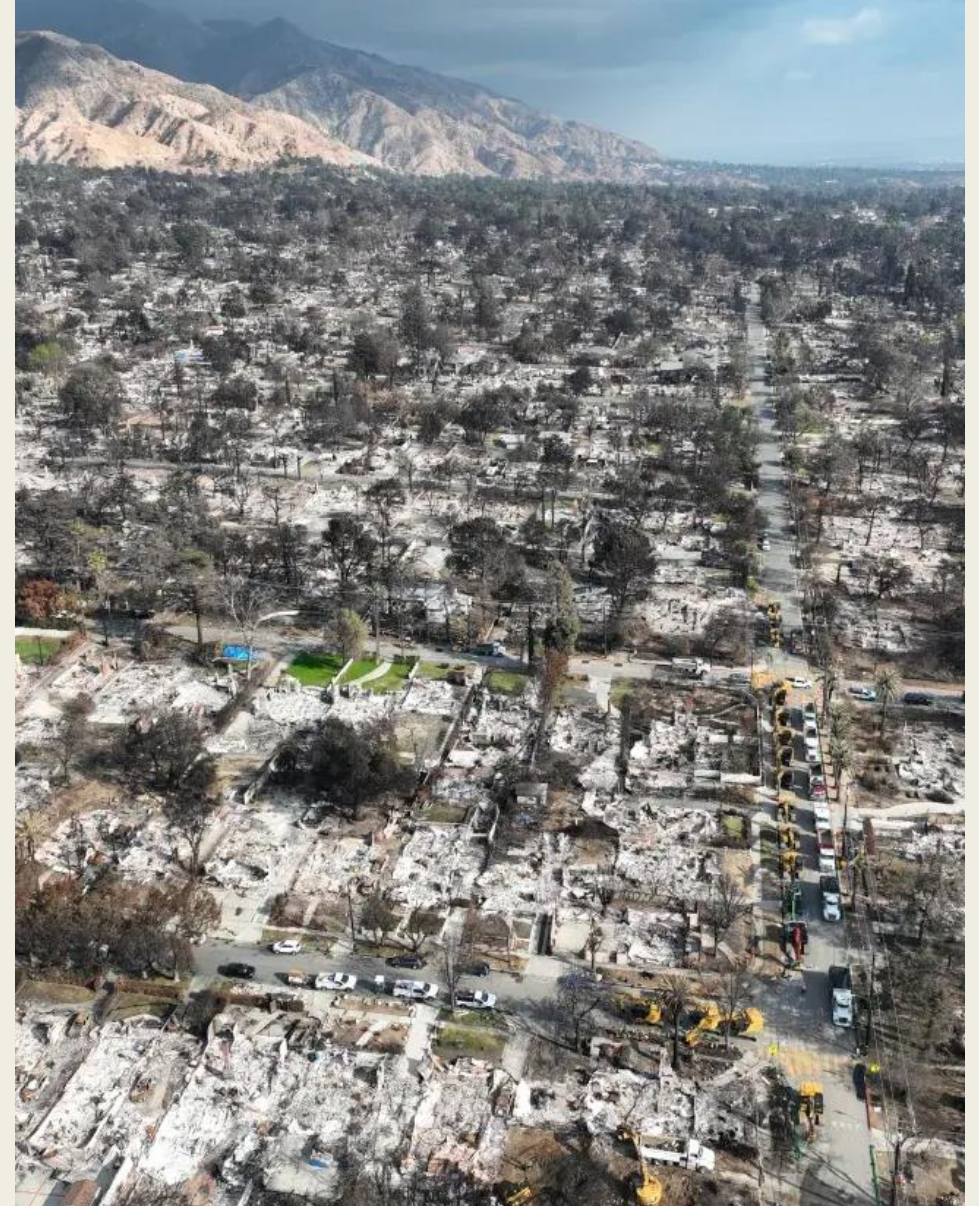
## TODAY'S AGENDA

- Why Fire Resilient Rebuilding Requirements Matter
- California Rebuilding Requirements
- Guest Speakers
  - Global Emergency Relief, Recovery & Reconstruction (GER3)
  - U.S. Green Building Council California
  - Neighborhood Partnership Housing Services, Inc.
- Policy Updates

**WHY**

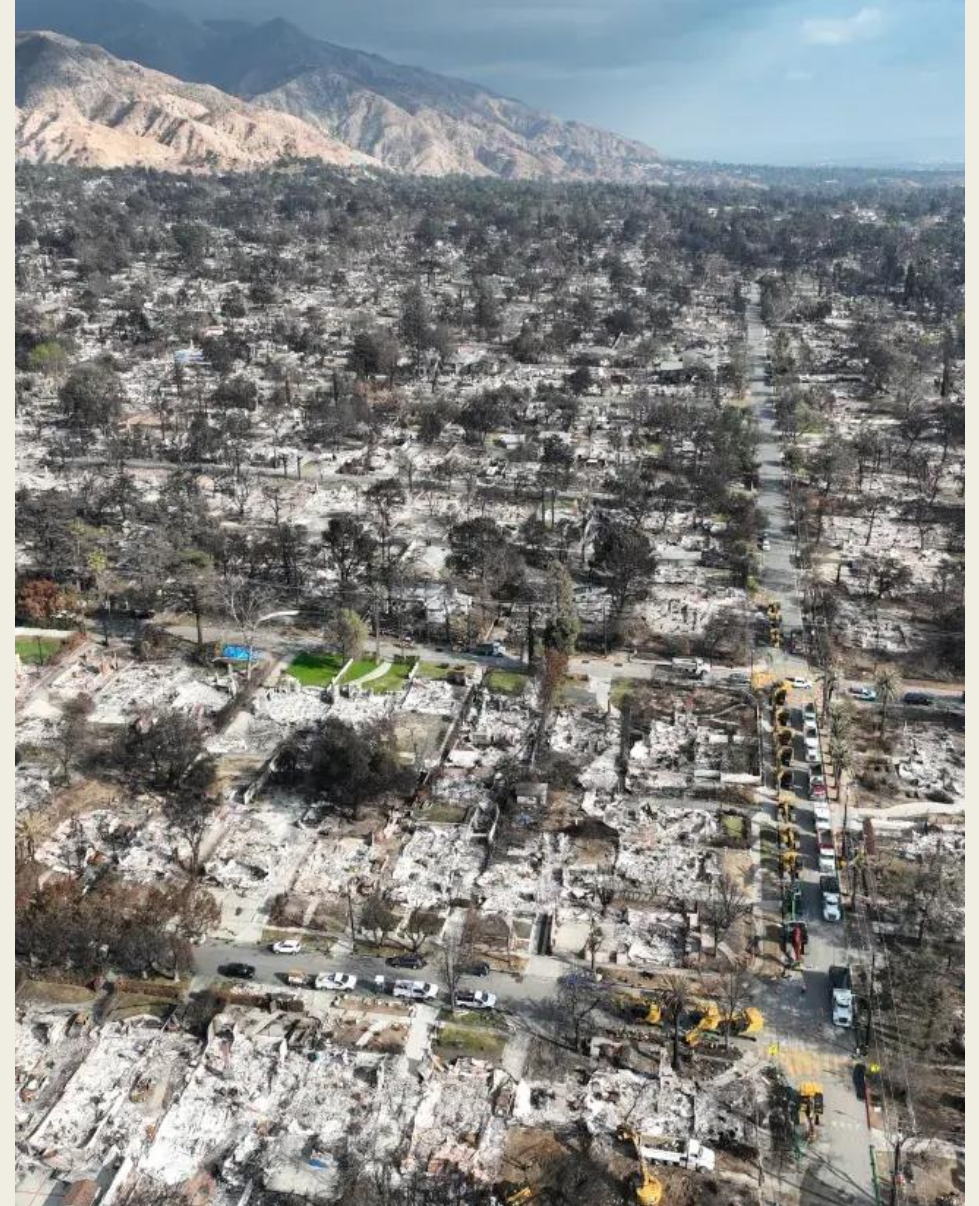
## Why This Matters

- The Eaton and Palisades fires burned more than **37,000 acres** and destroyed over **16,000 structures** across Altadena and Pacific Palisades
- Climate change is fueling longer, more intense wildfire seasons across California
- Wildfires increasingly threaten housing stability, community preservation, and long-term affordability
- Disasters can lead to displacement, rising insurance costs, and prolonged recovery challenges
- Investing in resilience and preparedness can help reduce future risk and support safer rebuilding



## Benefits of Resilient Rebuilding

- Rebuilding resiliently creates an opportunity to:
  - Improve home safety
  - Increase energy efficiency
  - Lower long-term maintenance and utility costs
  - Strengthen neighborhood resilience



# RESILIENT REBUILDING REQUIREMENTS

**Is your property located in a high-fire hazard zone?**

**Yes**

**No**

**Unsure**

# High-Fire Hazard Zones

- High fire hazard zones are areas where wildfires are more likely to start and spread quickly based on a combination of environmental conditions.
- **Key Factors That Increase Fire Risk:**
  - Vegetation (Fuel)
    - Dry grass, brush, and dense vegetation
    - More fuel = faster and more intense fires
  - Weather
    - Hot, dry conditions
    - Strong winds (like Santa Ana winds) that spread embers quickly
  - Topography (Land Shape)
    - Steep slopes and canyons
    - Fires move faster uphill and through narrow areas
  - History of Fire Activity
    - Areas with past wildfires are more likely to burn again



[Fire Hazard Severity Zones | OSFM](#)

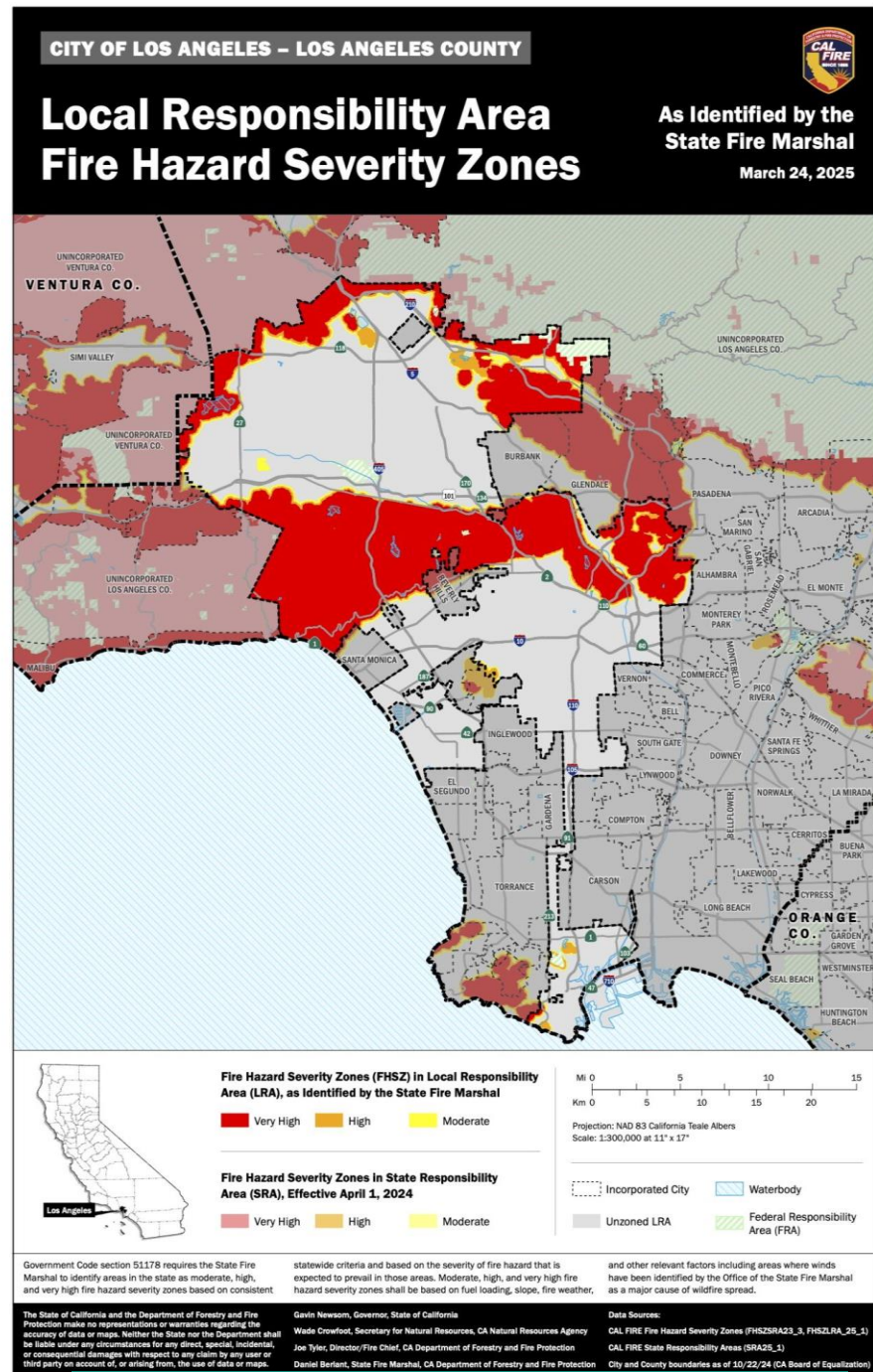
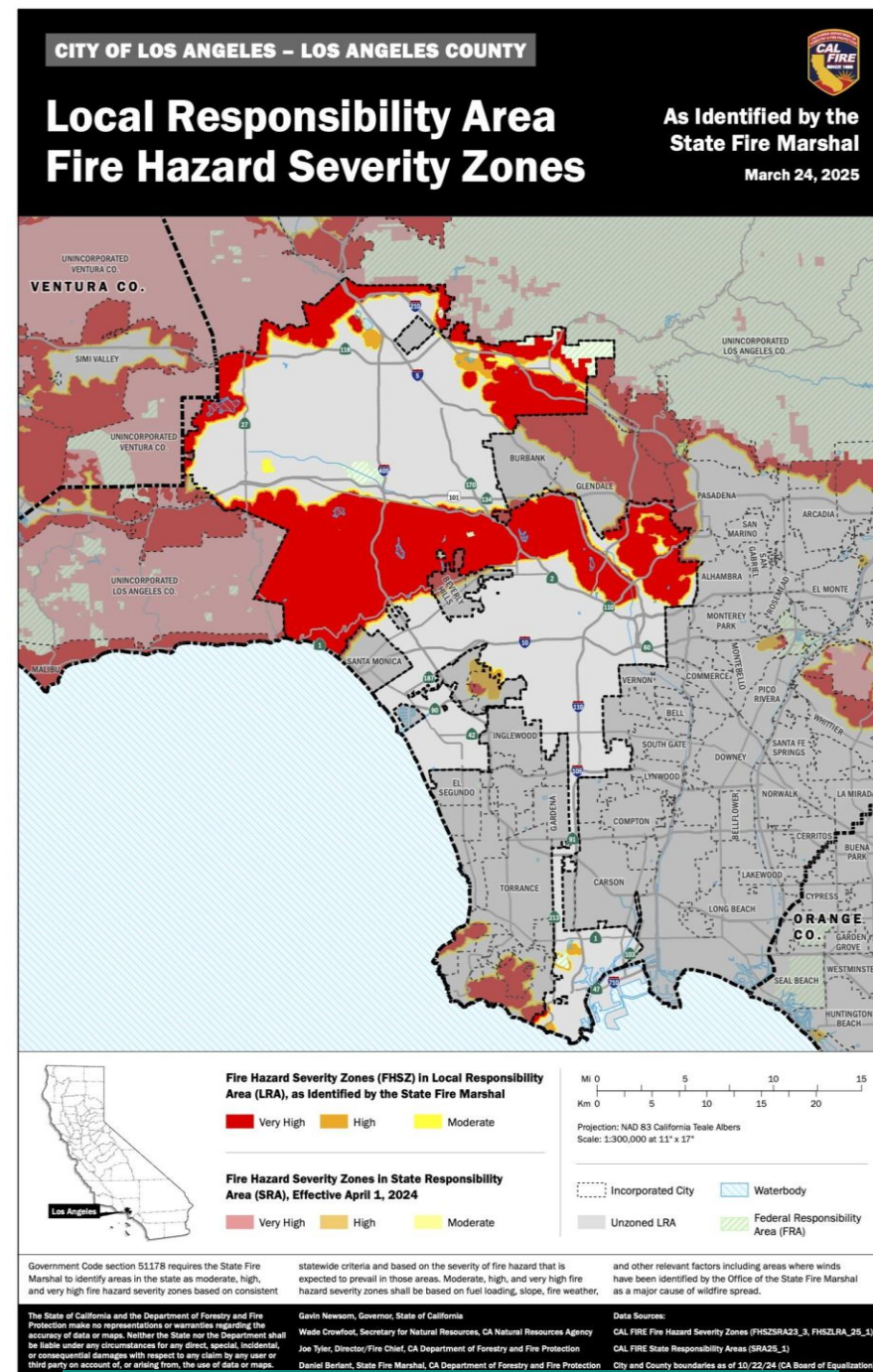


Photo Source: CalFire

# High-Fire Hazard Zones

- Many homes in Pacific Palisades are located in High or Very High Fire Hazard Severity Zones
- In Altadena, some areas are also designated high fire risk
- Even if a property is outside these zones, building with fire-resilient standards is still strongly recommended
- According to Wildfire Resilience Requirements (WUI Code), homes in high fire hazard areas must be built using fire-resistant materials and construction methods.



## Santa Ana Winds & Fire Risk

- Santa Ana winds increase fire spread, blowing southwest toward the coast
- Highest exposure in Los Angeles foothills, passes, and canyons—especially San Fernando Valley and San Gabriel Valley

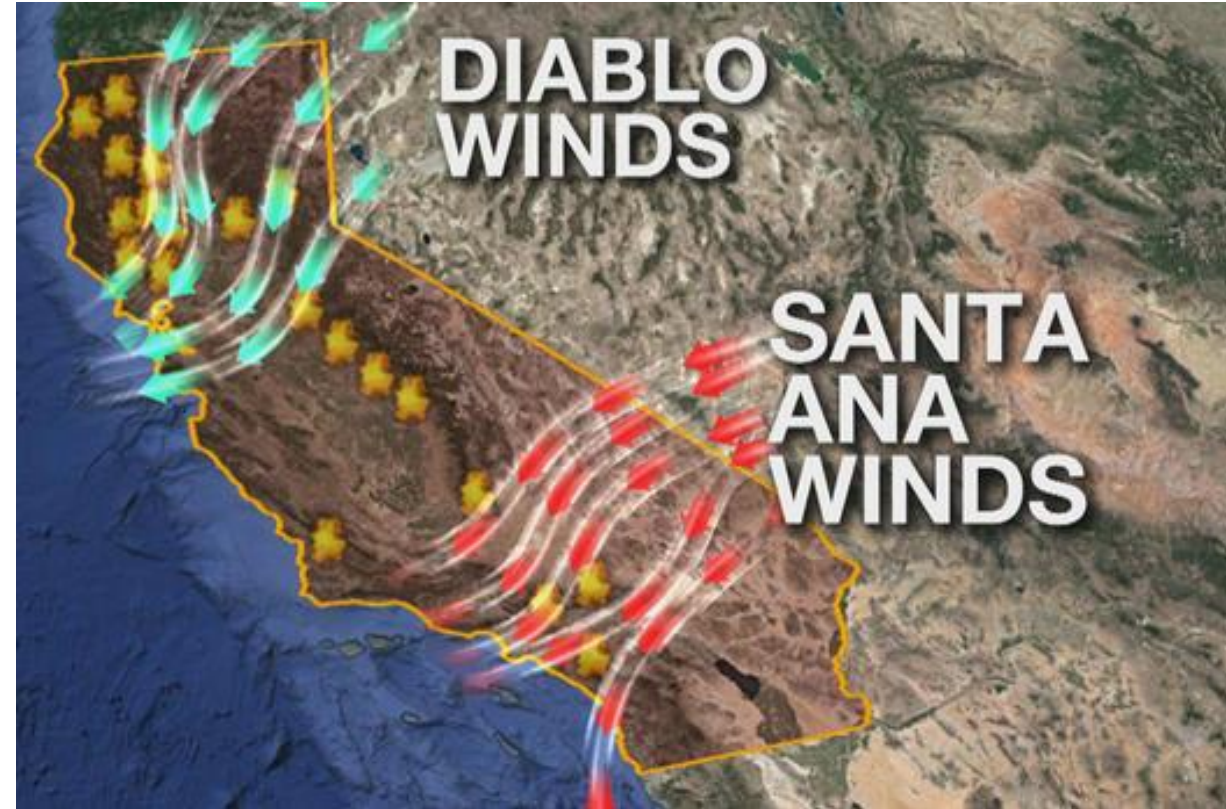


Photo Source: Cambridge Mask Co.

# Which wildfire resilience strategy would you like to learn more about?

Community  
Resilience  
Planning

Defensible  
Space

Fire resilient roofs,  
vents, and  
windows

# California Rebuilding Requirements

Code	What It Covers	Who It Applies To	Focus Area	What It Means for Homeowners
California Residential Code (CRC)	Building standards specifically for single-family homes and small residential buildings	Most homeowners rebuilding single-family homes, duplexes, and townhomes	Simplified residential construction requirements	This is the main code your contractor will follow when rebuilding your home
California Energy Code (Title 24, Part 6)	Energy efficiency standards for buildings	All new construction and major rebuilds (residential + commercial)	Energy use, insulation, windows, heating/cooling systems	Requires energy-efficient upgrades that can lower utility bills
Wildland-Urban Interface (WUI) Standards (CWUIC)	Fire-resistant construction requirements in wildfire-prone areas	Homes located in designated fire hazard zones	Wildfire resilience (embers, heat, flames)	Requires fire-resistant materials (roof, vents, siding) and design features to reduce wildfire risk

# Wildfire Resilience Requirements (WUI Code) - Key Requirements

## ROOFING & GUTTERS

Roofs are highly vulnerable to embers which is why material choice, design, and maintenance matter.

- Install a Class A fire-rated roof
- Use simple roof designs to reduce ember buildup
- Seal gaps with noncombustible materials (bird stops)
- Add noncombustible gutter covers and keep them clear of debris



Photo Source: Deschutes Roofing



# Wildfire Resilience Requirements (WUI Code) - Key Requirements

## CHIMNEYS & VENTS

Openings to attics and interiors can allow embers inside, so protection is critical.

- Install spark arrestors on chimneys using 3/8" to 1/2" corrosion-resistant metal mesh
- Use ember- and flame-resistant or baffled vents to block ember entry
- Cover all exterior vents with 1/8" metal mesh screening
- Consider unvented assemblies where code-compliant for improved protection and energy efficiency



Photo Source: Wildfire Partners



# Wildfire Resilience Requirements (WUI Code) - Key Requirements

## WINDOWS & SIDING

Fire-resilient windows and siding help protect against heat and embers.

- Install multi-pane, tempered glass windows
- Use noncombustible or ignition-resistant siding and decking
- Cover skylights and vents with 1/8" metal mesh
- Add metal flashing at deck-to-wall intersections

### SuperLite II-XL - How it works:

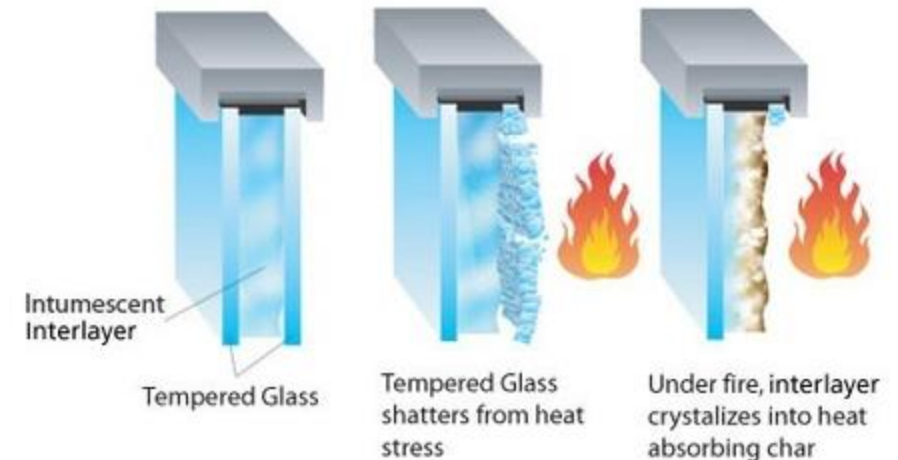


Photo Source: Rato Glass

# Wildfire Resilience Requirements (WUI Code) - Key Requirements

## DEFENSIBLE SPACE

Wildland-Urban Interface (WUI) requires creating a 100-foot defensible space buffer or to the property line

- **Zone 0 (0–5 ft):** Use noncombustible materials and keep area completely clear of debris and vegetation
- **Zone 1 (5–30 ft):** Remove dead plants and keep landscaping lean, clean, and well-spaced
- **Zone 2 (30–100 ft):** Reduce fuel by spacing trees and removing dead vegetation

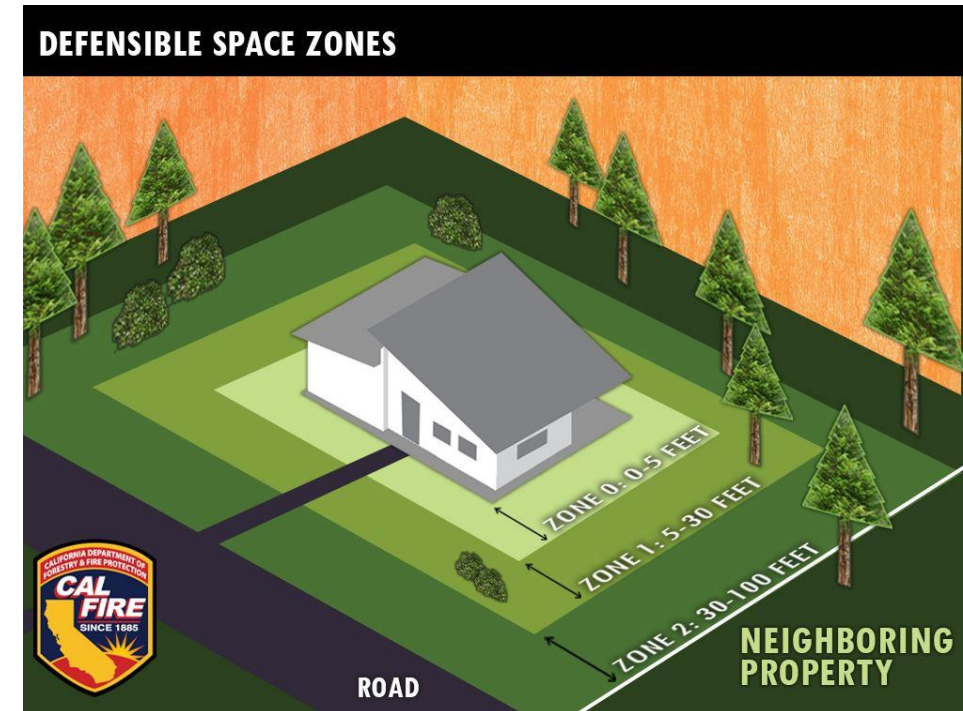


Photo Source: CalFire

# Wildfire Resilience Requirements (WUI Code) - Key Requirements

## CLEAN AND MAINTAIN

- Clear leaves and debris from roofs, gutters, decks, and walls
- Remove combustibles within 5 feet of your home

## VEGETATION AND LANDSCAPING

- Keep plants and mulch at least 5 feet away from structures
- Replace mulch with gravel, stone, or bare soil
- Remove dead plants and space out vegetation within 30 feet

## STORAGE AND OUTDOOR ITEMS

- Store firewood at least 30 feet away from the home
- Keep outdoor furniture and items away during high-risk periods
- Store or secure umbrellas and awnings



Photo Source: CalFire

# ESTIMATED REBUILD COST

Single Family Home – Altadena

**Total Square Feet of Home - 1,650 sq. ft.**

Category	Estimated Cost Range	Typical % of Total
Architecture & Design	\$55,000–\$95,000	5%–10%
Engineering	\$20,000–\$35,000	2%–3%
Permitting	\$15,000–\$30,000	1%–3%
Construction	\$850,000–\$925,940+	78%–84%
Upgrades / Resilience Improvements	\$25,000–\$50,000	2%–5%
Legal	\$5,000–\$20,000	0.5%–2%
Contingency	\$40,000–\$100,000	4%–9%
Misc. / Owner Costs	\$10,000–\$20,000	1%–2%



## Factory Built: Wildfire-ready homes



### 1. Class A fire-rated roof

Approved fire-rated roofing with compliant underlayment designed to help prevent fire from spreading through the roof.

### 2. Ember-resistant vents

Ember-resistant vents that may help prevent embers from entering the attic.

### 3. Fire-resistant siding

Cementitious and fiber cement board siding may help resist ignition from radiant heat and embers.

### 4. Fire-rated exterior doors

Doors meeting California WUI code requirements, including 20-minute fire-rated options to help protect the primary entry point.

### 5. Multi-pane tempered glass windows

Multi-pane windows with at least one tempered glass pane, per California WUI standards, designed to resist radiant heat.

*Villa homes built in designated fire hazard severity zones are designed to align with the California Wildland-Urban Interface Code (Part 7, Title 24, California Code of Regulations). For more information on Fire Hazard Severity Zones and WUI compliant building materials, visit [osfm.fire.ca.gov](https://osfm.fire.ca.gov).*

## Additional Fire Resilient Upgrades

Upgrades not required by law but some homeowners are taking advantage of

- Home wildfire sprinkler or exterior suppression systems
- Smart monitoring and early fire detection tools



Photo Source: Wildfire Roof Sprinklers

## Community Collaboration & Assistance

- Wildfire resilience is strongest when neighbors act together because fire risk crosses property lines.
- Coordinated neighborhood action strengthens defensible space and improves overall protection.
- Neighbors can also support one another by sharing tools, resources, and knowledge.

# GUEST SPEAKER

## GLOBAL EMERGENCY RELIEF RECOVERY & RECONSTRUCTION



# Wildfire Resilience in Altadena



# GLOBAL EMERGENCY RELIEF, RECOVERY & RECONSTRUCTION

## WHO WE ARE

Global Emergency Relief, Recovery and Reconstruction (GER<sup>3</sup>) is 501c3 nonprofit organization that supports the relief and recovery of crisis-affected communities.

## OUR SERVICES

GER<sup>3</sup> supports communities by addressing their most urgent needs in the aftermath of disasters. In Altadena, we have:

- Hardened 61 homes and 1 community center, with 7 achieving IBHS Base Certification
- Issued 28 gravel vouchers
- Conducted 77 wildfire resilience assessments
- Remediated 17 homes
- Tested 19 homes and 1 community center
- Soil testing for 55 lots



# OUR PARTNER: INSURANCE INSTITUTE FOR BUSINESS AND HOME SAFETY (IBHS)

**WILDFIRE PREPARED**  
— A PROGRAM OF IBHS —

wildfireprepared.org

**ADDITIONAL REQUIREMENTS FOR PLUS**

- ✓ Cover gutters.
- ✓ Enclose eaves.
- ✓ Install noncombustible siding.
- ✓ Upgrade windows & doors.
- ✓ Upgrade to a noncombustible deck.
- ✓ Move accessory structures at least 30 feet away.
- ✓ Remove parallel fencing.

**BASE REQUIREMENTS**

**ROOF**

- ✓ Ensure the roof covering is Class A fire-rated & maintained clear of debris.
- ✓ Choose noncombustible gutters & downspouts.

**BUILDING FEATURES**

- ✓ Install flame- and ember-resistant vents or 1/8-inch metal mesh over vents.
- ✓ Ensure 6-inch vertical noncombustible clearance at the base of exterior walls.
- ✓ Clear & maintain the underdeck area; enclose low-elevation decks.

**0-5 FOOT NONCOMBUSTIBLE ZONE**

- ✓ Establish a **0-5 foot noncombustible zone** around the home and decks; remove overhanging branches; replace combustible fences within 5 feet.

**5-30 FOOT DEFENSIBLE SPACE ZONE**

- ✓ Maintain yard with spaced vegetation, structures, & other connective fuels; clear debris; remove firewood.
- ✓ Move structures at least 10 feet away & maintain a 0-5 foot noncombustible zone around them.

32 This program focuses on how homes burn, not from giant flames but from embers. Certification savings vary significantly by insurer and state – but generally, there is a 5%-20% discount in annual premiums.

## MAKING ALTADENA MORE RESILIENT

Modeled after the IBHS Wildfire Prepared Home Program, GER<sup>3</sup> implemented the following upgrades:

- Creation of Zone 0 (defensible space)
- Installation of ember-resistant mesh over exterior vents
- Installation of noncombustible siding
- Installation of noncombustible gutter guards or replacement of combustible gutters
- Replacement of wooden fences and gates in Zone 0
- Targeted Zone 1 vegetation



## DEFENSIBLE SPACE, MESH AND FENCING



Importance of 5ft defensible space



Wildfire Defense Mesh  
(1/8 inch or small)



Replace all wooden fencing with wrought iron, or a metal fence option like MWF (pictured here)

**GUEST SPEAKER**

**USGBC-CA**



# Resilient Rebuild: Incorporating Fire-Resistance Standards

May 13, 2026



Our vision for the future

**Transforming California  
into a more sustainable,  
resilient, and equitable  
place, for all.**

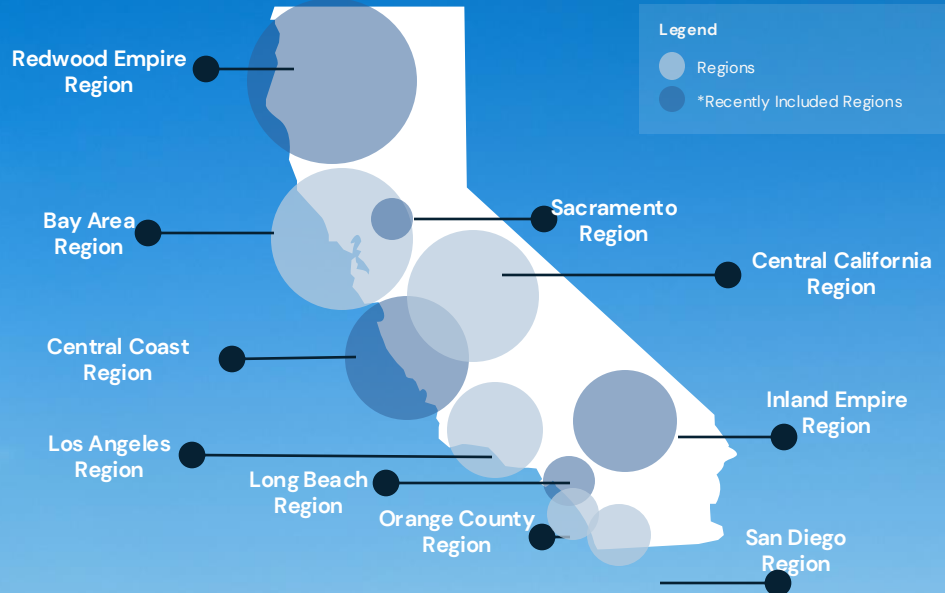


# Rooted in Purpose

After uniting California's green building communities in 2024, USGBC California brought together board members, advisors, and staff to shape a bold new vision to carry us through 2028. This plan is both aspirational and actionable, rooted in clear goals, programs, and milestones. As you read, we invite you to imagine your role in this journey, share it with others, and help us shape what comes next.

**Our Mission** Transforming California through the built environment into a more sustainable, resilient, and equitable place for all.

## USGBC California Regions



# How We Create Change

In a state facing urgent environmental and social challenges, we see an opportunity for transformation. Through bold leadership, education, connection, and advocacy, we work to drive lasting, systemic change across California.

## We do this by:



### Leading

Inspiring leaders throughout our communities to take action on climate change, public health, and environmental justice.



### Educating

Developing and empowering a diverse talent pipeline through training, mentorship, and direct engagement.



### Connecting

Convening interdisciplinary perspectives and collaborating to create positive systemic change.



### Advocating

Promoting innovative and impactful policy solutions to address the urgent environmental and social challenges of our time.



Overview

# Climate Action & Resiliency

In 2025, we advanced climate action and resilience by engaging communities at scale across education, outreach, workforce training, and industry networks. This work strengthened the people and systems helping California respond to rising climate risk.

# 11,000

## Californians engaged in climate resilience efforts

Across wildfire defense, rebuilding workshops, community events, schools, workforce training, and climate-focused programs, we mobilized people with practical tools to strengthen their homes, businesses, and communities.

Impact on People



Learn more on the next page!



### Turning Climate Challenges into Community Strength

By centering health, safety, and community connection, we helped turn participation into practical resilience, supporting residents, professionals, and local leaders with tools they can apply in real life.



## We equipped Communities to Rebuild Safer After the 2025 Wildfires

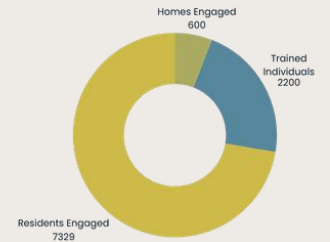
### Launched the California Wildfire Rebuilding & Recovery Site

Designed to support homeowners, contractors, and local leaders, the site made trusted, actionable resources accessible when communities needed them most.

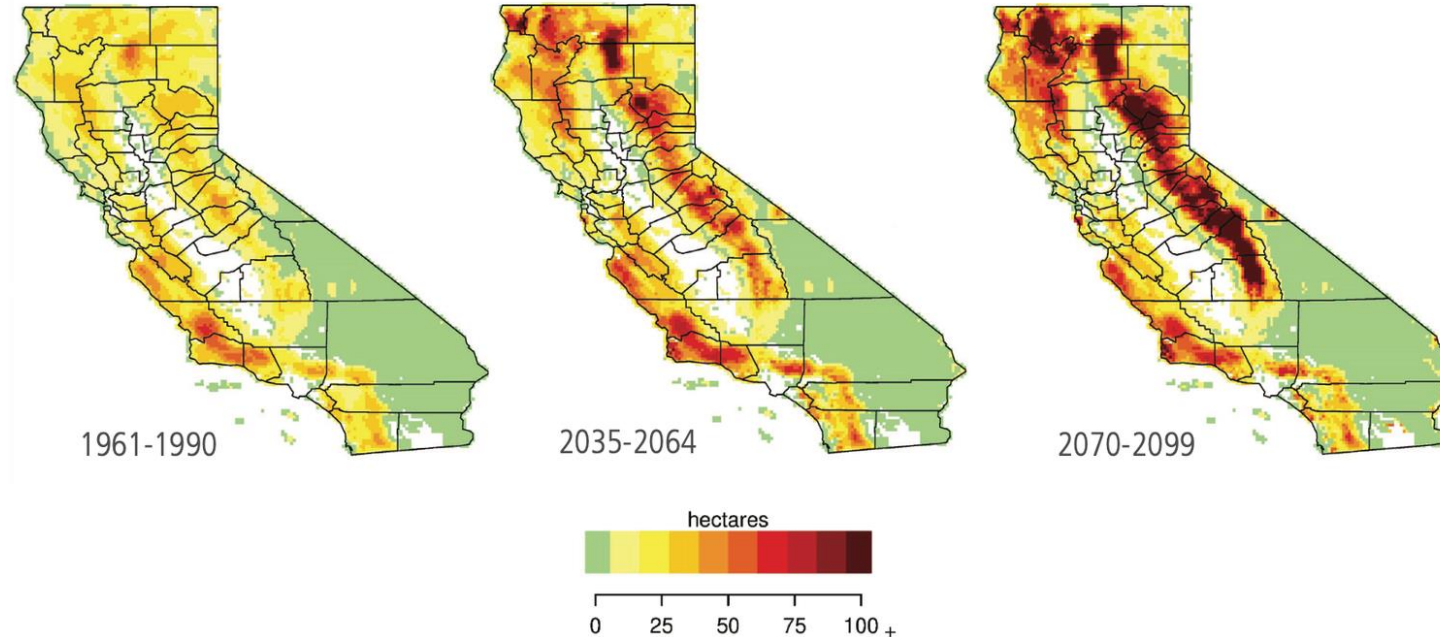


### Immediate and Lasting Impact

We supported wildfire-ready rebuilding, trained communities in fire-resilient strategies, and equipped residents with practical tools to create safer, more efficient homes, strengthening recovery and long-term resilience.



# California Wildfire Trend - This will happen again.



This image shows the modeled area burned by wildfires from current time (modeled as 1961-1990), for mid-century (2035-2064), and for late century (2070-2099). By the end of the century, California could experience wildfires that burn up to a maximum of 178% more acres per year than current averages.

Source: California's Fourth Climate Change Assessment - California's Changing Climate 2018

# Wildfire Defense Education

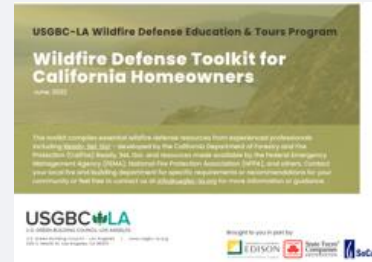


## Green Rebuilding Initiative

Community workshops & Free assistance to homeowners affected by the Thomas and Woolsey fires

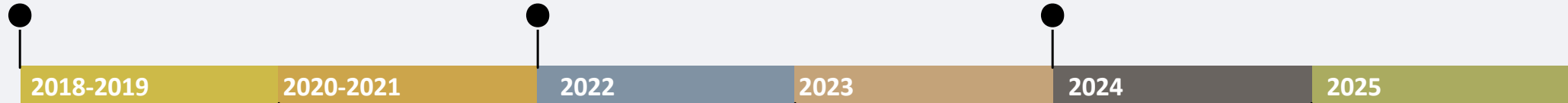
## Group, Training, and Resources

- Advisory Group with local experts
- Wildfire Defense Toolkit for homeowners
- Professional Training for landscapers and contractors



## New courses, platform, and unification

- Spanish Courses launched
- LMS launched
- Home Retrofit Tours in person
- Statewide expansion
- RFP for statewide trainers



## Wildfire Defense Ed. & Tours Program

Educational workshops, panel discussions with experts and tour of firewise properties

## Expansion & Partners

2023 Training sponsored by SoCalGas  
Awarded CAL FIRE Grant for 3 years to expand the Wildfire Defense Training & Tours

## What is next?

- Ongoing classes and tours
- Updates to training content
- Rebuilding Guide
- Community workshops
- Statewide expansion

# Wildfire Rebuilding Resources

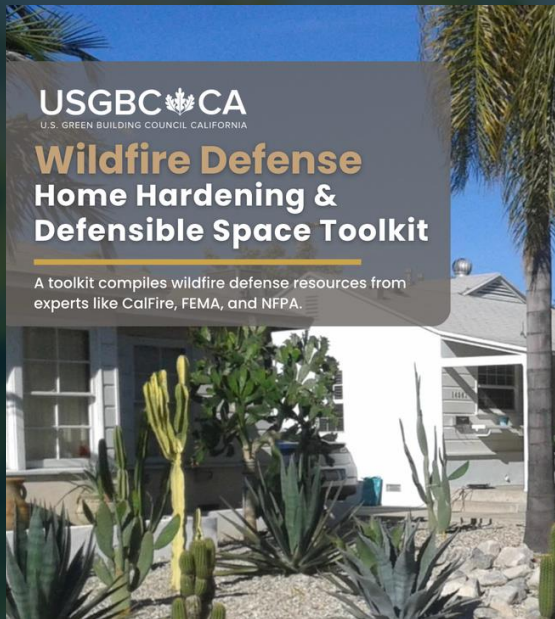
## Wildfire Defense Rebuilding Support and Recovery Resources

After the 2025 Los Angeles Regional Fires, we stand alongside fire-affected communities on their path to healing and recovery. Together, we can rebuild what was lost—homes, landscapes, and hope. Visit our Wildfire Defense Rebuilding Support and Recovery Resources page to access tools, join workshops, and connect with experts in green rebuilding and resilience.

WE'RE HERE TO SUPPORT YOU EVERY STEP OF THE WAY →



[usgbc-ca.org/wildfire-defense-rebuilding](https://usgbc-ca.org/wildfire-defense-rebuilding)



### What do you or your community need?

#### Are you in need of resources for your home or community?

To get more information on green rebuilding strategies, wildfire-resistant materials, landscapes, or anything your fire-affected community needs, click to fill out the form below.

FILL OUT THIS FORM →

CURSO A CUALQUIER HORA

Defensa contra Incendios para Profesionales de la Construcción

- Rebuilding Guide
- Wildfire Defense Home Hardening Toolkit for Homeowners
- Matchmaking with resources and professionals
- Professional Directory

# Upcoming Wildfire Training & Events



## TRAINING + CERTIFICATE Wildfire Defense for Construction Professionals

 Online via Zoom

 Thu, May 14  
3:00 PM - 5:30 PM PT



# Upcoming Wildfire Training & Events



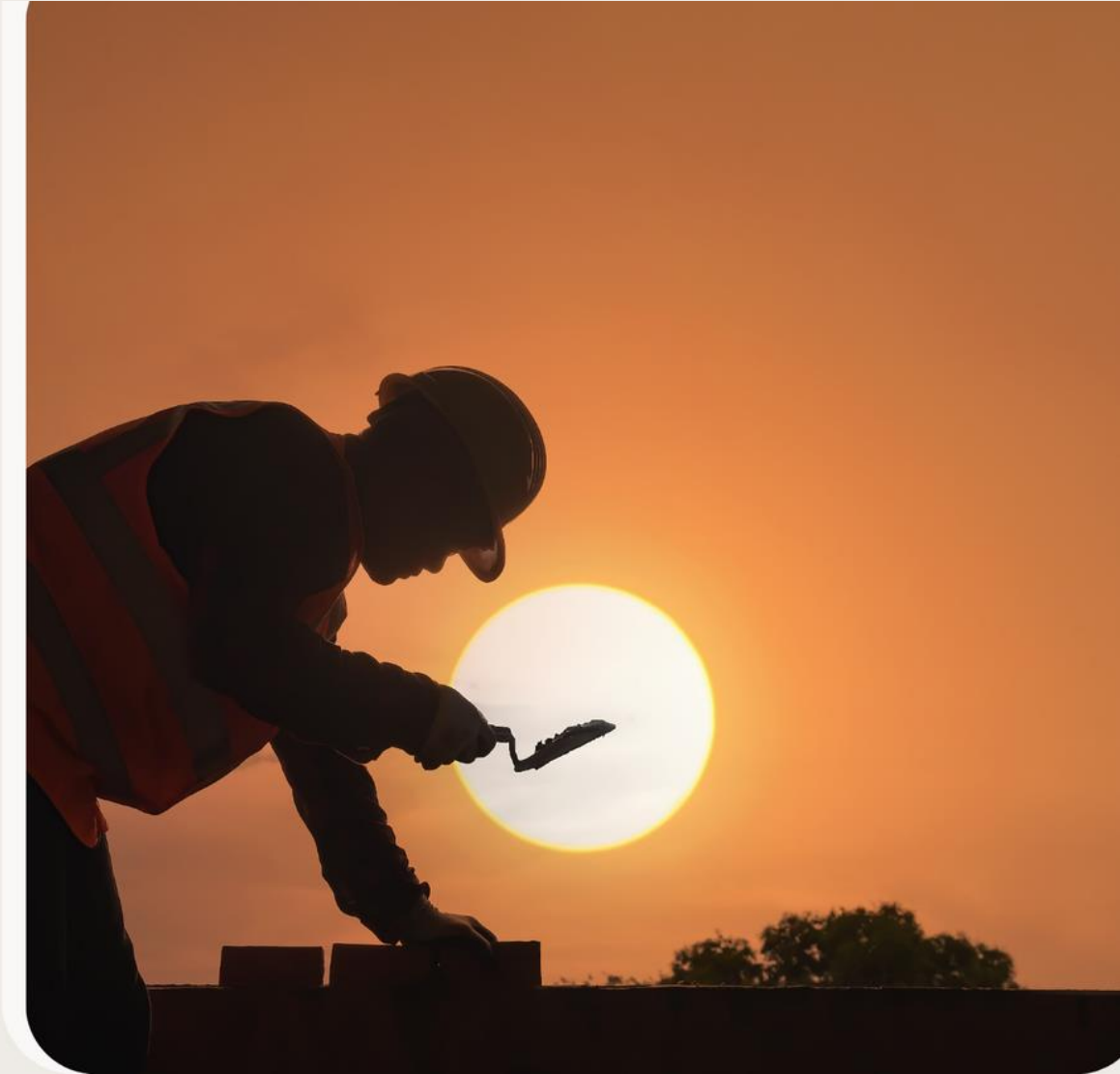
**Metro**<sup>®</sup>

**VIRTUAL TRAINING + CERTIFICATE**  
**Extreme Heat for**  
**Contractors and**  
**Landscapers**

Earn 3 GBCI CEU credits upon completion!

 Online via Zoom

 **Wed, May 20th**  
**1:00 PM – 3:30 PM PT**



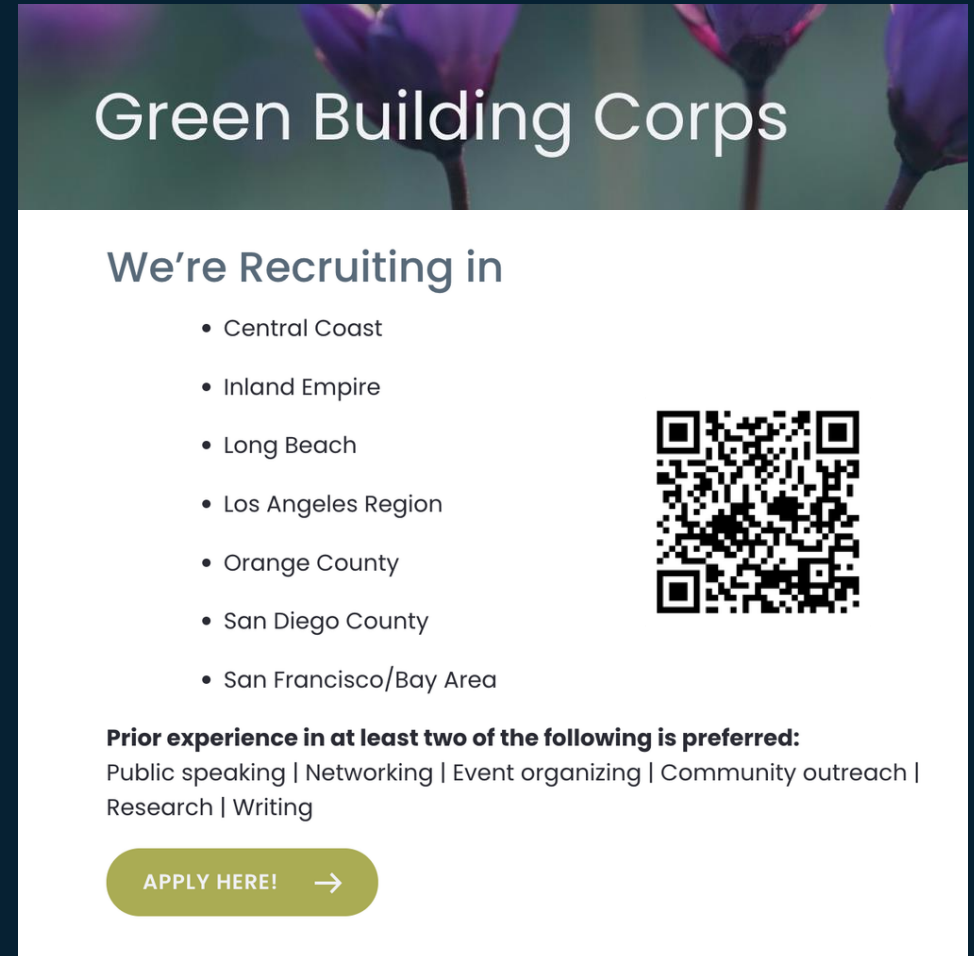
# Defensible Space Training Ambassadors

- Paid Workforce Development Program for Defensible Space Ambassadors!
- \$20 for 20 hrs per week for 6 months
- Info Session in August
- Second Cohort Starts September 2026!
- Applications open soon!

<https://usgbc-ca.org/programs/green-building-corps/>

**Southern California Only - focus on the San Gabriel Valley**


**Must be 18 yrs to apply**



**Green Building Corps**

**We're Recruiting in**

- Central Coast
- Inland Empire
- Long Beach
- Los Angeles Region
- Orange County
- San Diego County
- San Francisco/Bay Area



**Prior experience in at least two of the following is preferred:**  
Public speaking | Networking | Event organizing | Community outreach | Research | Writing

**APPLY HERE! →**

ARUP

**USGBC CA**  
U.S. GREEN BUILDING COUNCIL CALIFORNIA

# California Wildfire Rebuilding Guide

A guide to rebuilding stronger, safer,  
and more resilient structures.

April 2025






**Version 1.0**

*An updated version with  
incentives will be released  
this month!*



Download  
Version 1.0  
Here

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# What's good?

## How to read this guide

### What improves fire performance

Wildfire risk mitigation strategy types:

**Passively prevent accumulation of fuel like leaves**  
e.g., roof geometry

**Actively prevent accumulation of fuel**  
e.g., tree maintenance (requires occupant action)

"Harden" your home's exterior with **non-combustible building materials**  
e.g., non-combustible roof covering

**Passively prevent landing place for embers**  
e.g., roof geometry

**Passively limit ember entry**  
e.g., mesh over vents

**Actively prevent ember entry**  
e.g., close windows and doors

Reducing wildfire damage risk is the core of what's included in this guide.

While response during an event is important, the building and landscape design should focus on making things safe without requiring much effort from you (i.e., **passive design**).

Reducing wildfire risk **and what?** There's more to high performance design - these tags help distinguish other benefits to consider in how you build back.

### Co-benefits to consider



#### Savings

Tagged **IF** design choice reduces first costs or operational costs:

- **Material costs** (e.g., equipment, products, availability)
- **Labor costs** (e.g., installation)
- **Operational costs** (e.g., energy use, ongoing maintenance)
- **Durability** (e.g., less susceptible to leaks, equipment with longer life spans, etc.)



#### Safer

Tagged **IF** design choice will either help protect occupants through or reduce damage from other hazards (direct and indirect) like:

- **Airborne contaminants** (e.g., smoke, dust, fumes, etc.)
- **Earthquakes**
- **High winds**
- **Heat waves**
- **Mudslides**
- **Heavy rain & flooding**
- **Power outages**
- **Utility water disruptions**



#### Sustainable

Tagged **IF** design choice will simultaneously achieve any of the following:

- **Healthy indoor environments** (e.g., through materials and system choices, protecting your family's [health](#))
- **Energy efficient, high performance buildings**
- **Reduce greenhouse gas (GHG) emissions** (e.g., support solar panels)
- **Low embodied carbon**
- **Support biodiversity and ecological health**
- **Sustainable water use** (i.e., capture, conservation, efficiency, re-use)





This document is designed to inform homeowners, designers, and contractors as they navigate the challenges of rebuilding single-family homes in the aftermath of the 2025 Los Angeles fires.

## What is this guide?

The January 2025 wildfires were not the first time Angelenos lost homes, and it won't be the last. The decision of how - and whether - to rebuild is complex and personal. For those who do decide to rebuild, this guide is intended to make you aware of design concepts that could **enhance the safety of your home and reduce your future risk.**

The aim of this guide is to clarify **resilient, sustainable, and cost-effective** options, helping you make informed choices during the rebuilding process.

This document is tailored to address the specific challenges faced in Southern California, including recurring droughts, fires, floods, and earthquakes. **"Building back better" involves making strategic design choices at the property level and seizing opportunities to collaborate with your community to enhance overall preparedness.**

Rebuilding offers a pivotal opportunity to set both your property and community up for long-term safety and livability. **Not all upgrades cost more than standard options.** Where the enhancement does come at cost, it's important to consider how choices can be investments. These can pay off over time through benefits like more durable materials, lower operational costs, less risk of water damage, and healthier living environments. Throughout, co-benefits and resources for more green building design guidance are highlighted.

## Who is this guide for?

 **Homeowners** working with their neighbors to rebuild their lives and homes with resilience in mind.

 **Designers and Contractors** committed to supporting these homeowners in creating safer, more sustainable living spaces.



## How is it different?

While there is wealth of excellent wildfire guidance available, much of it is geared towards retrofitting existing buildings and focuses solely on wildfires. This resource, drawing from established sources like the California Department of Forestry and Fire Protection (CAL FIRE), National Fire Protection Association (NFPA), and the Insurance Institute for Business & Home Safety (IBHS), sets itself apart in several critical ways:

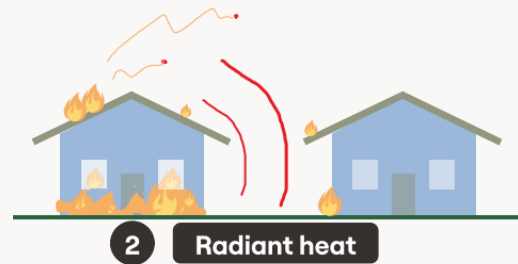
- **Suburban/Urban Context:** Tailored specifically for suburban and urban settings like Altadena and Pacific Palisades where lot lines are set and sites may be constrained.
- **Rebuild Focus:** Designed for rebuilding rather than retrofitting, offering new insights for existing sites.
- **Multi-Hazard Safety:** Though a primary focus on wildfires, addresses a variety of hazards pertinent to Southern California like earthquakes and heat.
- **Cost Efficiency:** Identifies options that are cost-effective when rebuilding and will reduce long-term maintenance expenses.
- **Sustainability:** Highlights sustainable practices throughout the rebuilding process.
- **Community Scale:** Includes strategies that improve both individual property and community-wide resilience.

# Key Concepts

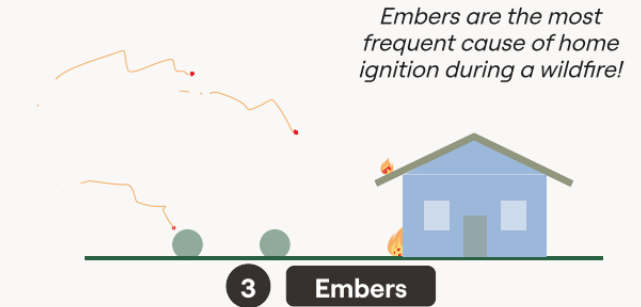
## How do houses catch on fire?



Fire spreads when flames touch materials that can burn (e.g., dry vegetation, wood shingles). Wind, such as the Santa Ana Winds, makes this happen much faster.

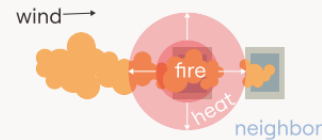
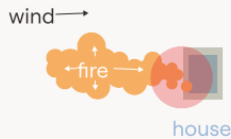


There doesn't have to be a flame for materials to catch fire - just heat can do it. Wildfires can reach over [2,000°F. For comparison, wood ignites at 570°F.](#)



Fires create embers that the wind can blow for long distances. When these embers land on plants, roofs, or walls that can catch fire, they can start new fires far away. That's why this guide will explore many ways to be "ember-resistant."

Bird's eye view:



# Managing Fire Together



1 Work together to create **buffer zones and physical fire breaks** around the community.



2 Help neighbors learn about and use fire resistant design and construction.

California Wildfire Prevention + Preparation Transdisciplinary Studio course taught by Guillaume Wolf.  
Image source: Juan Pasado / artcenter.edu



3 Work together to actively maintain vegetation, gutters, roofs and other spaces to limit fuel, such as by having community clearing days and helping those who don't have ability or resources to do it themselves.



Wildfire risk affects not just one property but the whole neighborhood. This means everyone needs to work together to manage it.

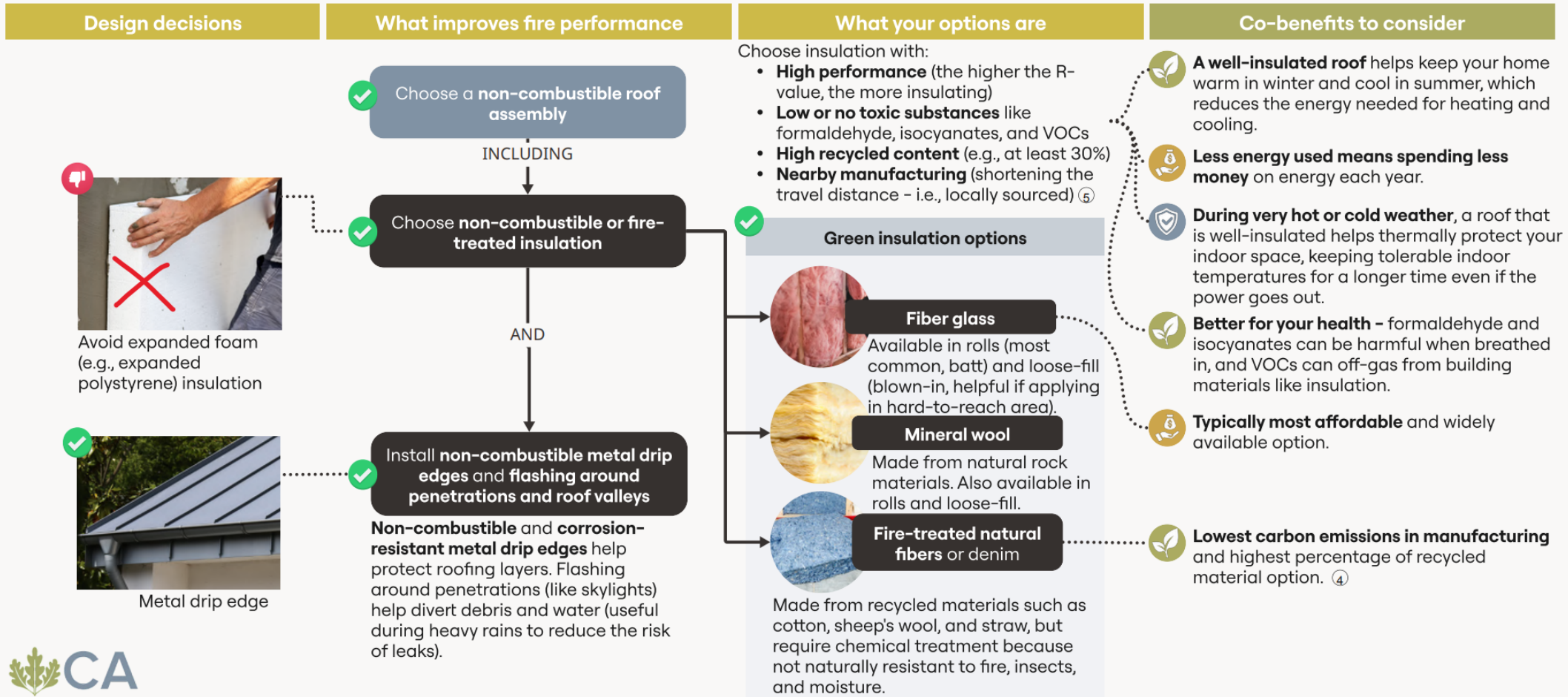
For more information about **banding together as a community** to reduce wildfire risk, see:

[NFPA - Firewise USA®](#)



# Roofs

Legend  Savings  Safer  Sustainable



# Landscaping

Legend  Savings  Safer  Sustainable

**Design decisions**      **What improves fire performance**      **What your options are**      **Co-benefits to consider**

**Selecting what to plant**

And, what about **5 to 30 ft** around the home?

AND how do I plant them?

See spacing guidance on the next page

*Key action*  
Plant **low-flammability vegetation**, spaced widely




WHAT IF I have salvageable trees already in this zone or want to plant trees?

Be careful with tree selection and trim low-hanging branches



**DON'T** select trees that are high in waxes, oils or resins (think Eucalyptus).

**Low-flammability vegetation options**

- 1**  Fire-smart plants
- 2**  Spaced out shrubs
- 3**  Compost or heavy mulch  
Keep mulch 10 ft or further from structures to be safe.

Work with a **native plant nursery** to select diverse fire adapted species for the right zones and the right spacing.

**Choose drought-tolerant plants.**

**Plan** to regularly irrigate and maintain landscapes. Well-hydrated native California plants are the best because they have adapted to handle fire, and their roots stay hydrated.

For a great resource on plant selection (including selecting native plants), see [defensiblespace.org](https://defensiblespace.org): [Sustainable Defensible Space](https://defensiblespace.org)

**Gardens provide** habitat, shade, groundwater infiltration and many other benefits.

**Mulch** helps build soil and retain water.

**Native options help support biodiversity and local ecosystem health** (e.g., butterflies).

The California Native Plant Society provides an excellent guide for **fire recovery landscaping**: [CNPS Fire Recovery Guide](https://www.cnpns.org/landscaping)

**Certain ground cover** can support soil and reduce the risk of erosion.

**Lower the chance of wind-blown debris** (like flying branches) by keeping trees healthy and well-maintained.



# Building Systems

Legend  Savings  Safer  Sustainable

Design decisions | What improves performance | What your options are | Co-benefits to consider

## Prepare for Public Safety Power Shutoffs (PSPS)

How can I be **ready for power outages**?

**Add a battery**

Like a panel battery system, so you have power available if the utility power gets disrupted. (By energy code, you need to be battery-ready anyway.)



The sonnenEvo, an all-in-one, AC-coupled solar battery storage system. Image source: sonnen / sonnen.usa.com

**Install solar**

To charge that battery and extend its use. Note that most new homes will be required to add solar to comply with the energy code. ②



Solar panels can be installed on carports, on the ground, or most commonly on roofs due to cost, space use considerations, and best solar access. ④

**Pair with efficient, all-electric appliances**

High-performing, energy-efficient buildings reduce the amount of solar and backup power you need (as does a high-performing envelope). In terms of efficiency, at a minimum, choose ENERGY STAR-rated appliances and systems.



**Efficient, all-electric appliances**

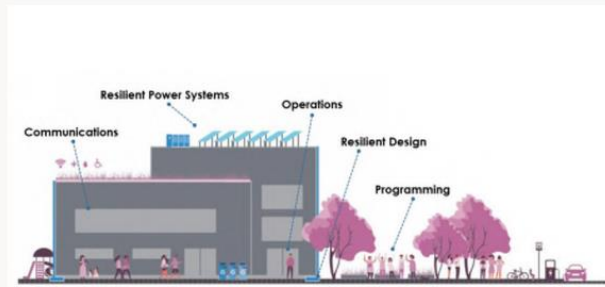
- Induction cooking**
- Water heater**  
Heat pump or solar water heater  
A heat pump water heater by A.O. Smith. Image source: A.O. Smith / lowes.com

-  **Keep food in your fridge/freezer from spoiling** by connecting to back-up power.
-  **Keep lights on** (injuries during power outages are common) and/or air conditioning going.
-  **Battery and solar** enables you to shift your energy use to times when energy is cheaper.
-  **Solar energy is a renewable** energy resource.
-  **There's no risk of a gas leak with an all-electric home.** Plus, post-earthquake, it will take time for the gas service to be restored (automatic shut-offs need to be reset at each home by the utility).
-  **Efficient appliances save money.**
-  **Improves indoor air quality** day-to-day compared to gas combustion alternatives; this can reduce asthma symptoms and asthma development in children.
-  **No open flame** - cooking is the number one cause of home fires.
-  **Increased heat production efficiency**, up to 3 times, as compared to burning gas.



# Shared Energy Resilience

Increases in extreme weather will put pressure on the energy grid. **Community-scale energy approaches can keep carbon emissions low while helping communities keep power when the grid goes down.**



An example of a community resilience hub.  
Image source: Department of Energy and Environment / [doee.dc.gov/](https://doee.dc.gov/)

**Community Resilience Hubs** are facilities that provide resources to communities during emergencies. They can be equipped with backup power for things like heating and cooling during extreme conditions, device and vehicle charging or refrigeration during power outages.

Good candidates are community centers, libraries or local community non-profits.

See resources from Urban Sustainability Directors Network:

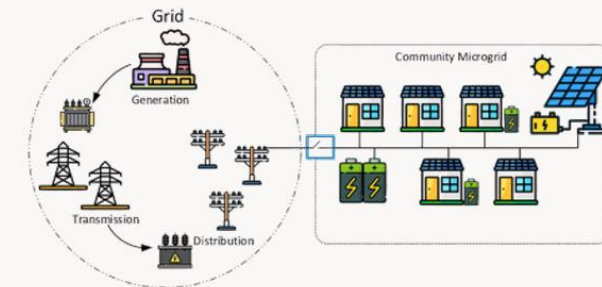


[Resilience Hubs](#)



**Zonal decarbonization** refers to neighborhoods that together agree not to use natural gas, limiting the need for the utility to extend or maintain the gas infrastructure. Gas is highly flammable and contributes significantly to climate change.

Communities on the outer edge of gas service can be expensive for utilities to maintain. California SB 1221 requires establishment of zonal decarbonization pilot projects across the state.



A community microgrid.  
Image source: RMIT University / [communitymicrogrid.net](https://communitymicrogrid.net)

**Community-scale microgrids** allow communities to make the most of local clean power resources and disconnect from the grid to maintain power during outages.

They can be paired with local solar and zonal decarbonization approaches to create clean and energy resilient neighborhoods.

**Note: These approaches require working closely with the utilities.**

# Shared Purchasing Power

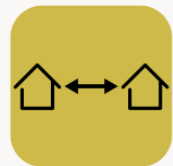
After the fires, many people will be rebuilding at the same time. That puts demand on local supplies and workforces and drives up prices. **Work together to leverage economies of scale** to help reduce overall costs.



**Hire architects and contractors together** to "mass produce" design and construction.



**Share designs to streamline local permitting**, especially for alternative approaches like rammed earth, super adobe and straw bale.



**Maximize spacing between buildings** to reduce the risk of building-to-building fire spread.



**Purchase materials together**, including building materials, fixtures, systems, and finishes.



**Work with the same modular housing companies** to enable establishment of local manufacturing and local jobs.



**Consider sharing solar and battery installers.** This can help you vet options and may lower costs.



**Work with local native nurseries** to bulk purchase plant material in advance.



**Include diverse, fire resistant plants** to support local biodiversity.



# Marketplace & Group Purchasing

Rebuilding stronger, smarter, together.

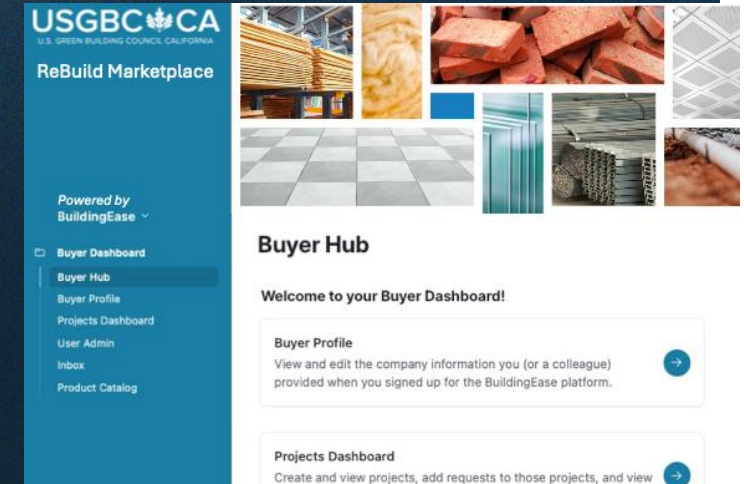
Our Rebuild Marketplace is a group purchasing and procurement platform powered by BuildingEase that is designed to support individuals, contractors, architects, and ultimately communities in rebuilding, with resilience, sustainability, and cost at the forefront. Whether you're a homeowner, developer, builder, or supplier, our platform connects you to high-quality materials, equipment, supplies, and services through streamlined collaboration.



- Group Buying Power
- Trusted Supplier Network
- End to End Support



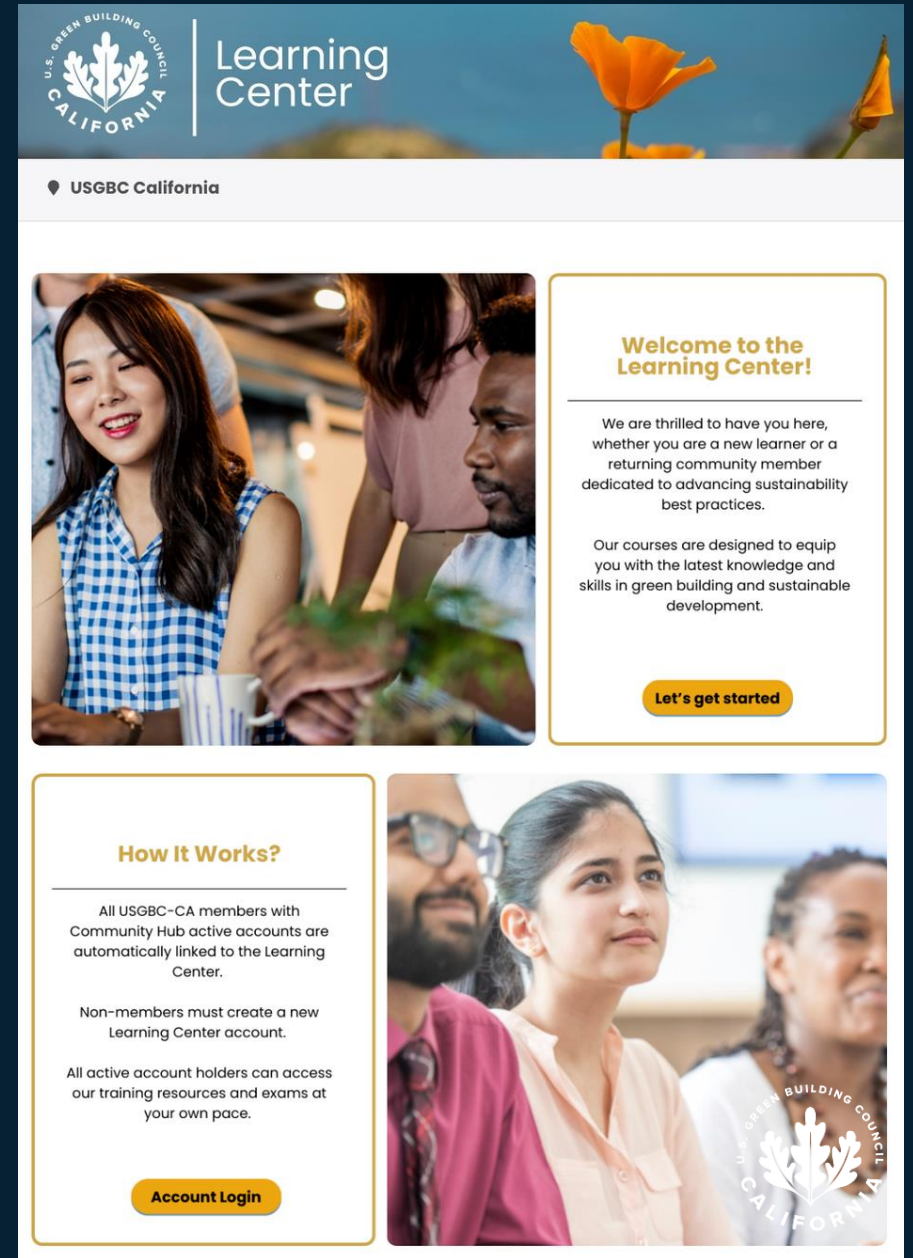
Learn More!



# Learning Center

The Learning Center will serve as the cornerstone of your professional development in green building, sustainability, and beyond. Through the Learning Center you can:

- Register for upcoming Wildfire Defense training
- Take the Wildfire Defense for Professionals Exam
- Download your certificate from the Learning Center



The banner features the USGBC California logo in the top left, the text 'Learning Center' in a large font, and a background image of orange poppies. Below the header is a navigation bar with 'USGBC California' and a location pin icon. The main content is divided into two columns. The left column contains two images: one of three people looking at a plant and another of a woman looking thoughtful. The right column contains two text boxes with yellow borders and buttons. The top text box is titled 'Welcome to the Learning Center!' and includes a 'Let's get started' button. The bottom text box is titled 'How It Works?' and includes an 'Account Login' button.

**U.S. GREEN BUILDING COUNCIL CALIFORNIA** | Learning Center

📍 USGBC California

### Welcome to the Learning Center!

We are thrilled to have you here, whether you are a new learner or a returning community member dedicated to advancing sustainability best practices.

Our courses are designed to equip you with the latest knowledge and skills in green building and sustainable development.

[Let's get started](#)

### How It Works?

All USGBC-CA members with Community Hub active accounts are automatically linked to the Learning Center.

Non-members must create a new Learning Center account.

All active account holders can access our training resources and exams at your own pace.

[Account Login](#)

**U.S. GREEN BUILDING COUNCIL CALIFORNIA**

# Professionals Directory

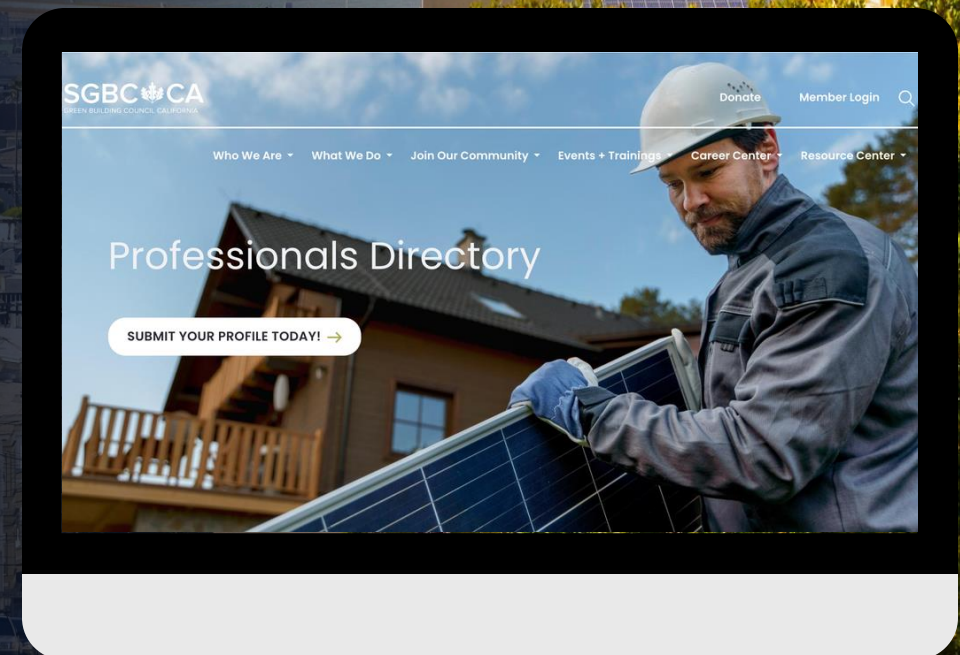
Connect with top sustainable experts in California. Search by credentials, business type, location, and services.

Find support for LEED projects, energy-efficient design, or sustainable materials.

Explore, share your expertise, and join for free!



Scan now to access the Professionals Directory!





[usgbc.ca/californiaconference](https://usgbc.ca/californiaconference)



25th Annual

**CALIFORNIA**  
**GREEN BUILDING**  
**CONFERENCE** 2026

May 28, 2026 | Berkeley, CA



USGBC-CA Members: Login to the Community Hub to access your  
Conference Member Code [here](#)

# Stay connected



@usgbcca



**GUEST SPEAKER**

**NPHS**



# Financing Resilience

**Home Hardening, Reducing Risk,  
& Economic Savings**

# About NPHS

## Mission

NPHS and its affiliates build resilient, thriving communities through innovative housing and financial solutions that elevate the well-being of underserved individuals and families, revitalize economically distressed neighborhoods, and strengthen local economic opportunity.

## Vision

A future where all families are financially prosperous and live in healthy, resilient, and economically vibrant communities.

## Our Four Areas of Impact

Affordable Housing Development

Community Lending

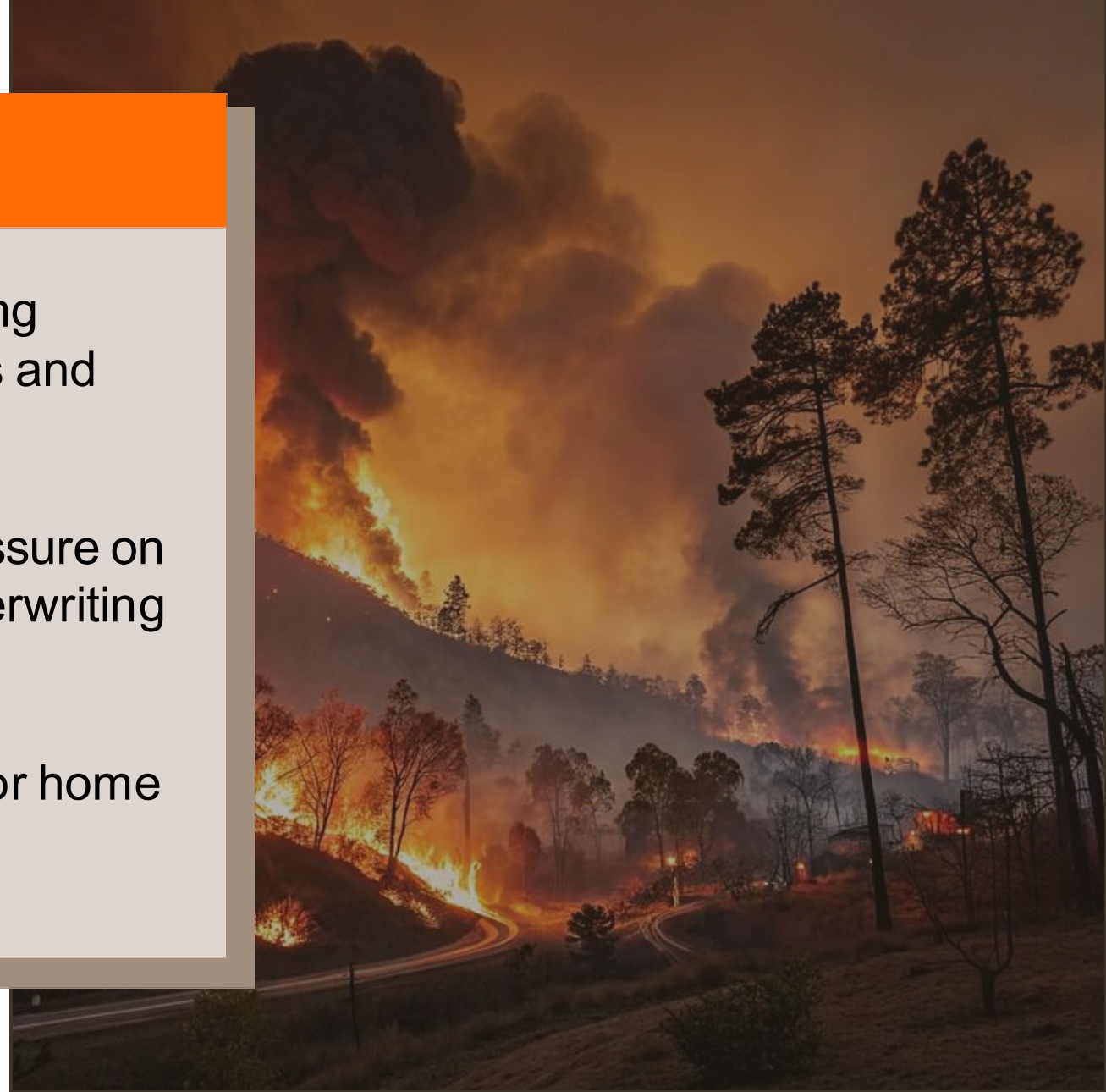
Policy & Research

Financial & Homeownership  
Education



# The Problems

- Lack of affordability in urban cores, forcing Californians to push further into wildlands and FHSZs to find affordable housing.
- Growing losses from wildfires putting pressure on Insurers to be more selective in their underwriting and raising costs.
- Few financing options & incentives exist for home hardening.



# Solutions

## Partnerships

- California Wildfire Mitigation Program (CWMPA)
- CDFI Peers
- Insurance Institute for Business & Home Safety (IBHS)
- Insurance Carriers

## Mitigate

### Resilience Loans

Resilience Now  
Resilience  
Resilience Rebuild

## Incentivize

- CDFI Tax Credit Model
- Reduced insurance premiums for qualified homes
- More hardened homes means safer communities



# Resilience Loans

## Resilience Now

For homeowners to prevent policies from being cancelled.

- Immediate assistance
- Up to \$5,000
- Intended to remedy notices from carriers

## Resilience Retrofit

For longer-term and intermediate projects to ultimately obtain IBHS Wildfire Prepared Designation.

- Up to \$50,000
- To retrofit and harden home
- Obtain IBHS Wildfire Prepared Designation
- Retrofits lower insurance premiums

## Resilience Rebuild

Long term rebuilds from ground construction or manufactured housing builds.

- Larger scope that may include developments, multifamily, and single-family homes
- All new construction that would still carry IBHS Wildfire Prepared Designation



# Common Scenario

---

- Insurance Carrier issues Letter of Non-Compliance to Homeowner
- Homeowner does not have enough funds for repair.
- Has to either apply for a HELOC or do a refi-cashout in a very volatile rate environment. Or, a high interest personal loan.



# Resilience Now

Personal loan for renovations required to correct notices from Insurers for homeowners facing possible non-renewals or substantial increase in rates

<b>Transaction Type</b>	Second Lien Position Debt
<b>Property Types</b>	Residential, Multifamily, Commercial
<b>Minimum / Maximum Loan Amount</b>	\$5,000 / \$10,000
<b>Maximum LTV</b>	80%
<b>Loan Duration</b>	5 Years
<b>Minimum Credit Score</b>	620
<b>Target Interest Rate</b>	5.99%
<b>Borrower Paid Fees</b>	1% Origination Fee, \$800 underwriting & processing fees, \$35 Credit Report Fee
<b>Education Requirements</b>	Resiliency and Community Hardening Class

# Common Scenario

---

- Low-to-Moderate Income (LMI) Household homeowner is facing rising insurance rates with little reprieve.
- Needs several upgrades to harden home. Needs access to capital.
- Once again faced with the choice of doing a cash-out refinance at a significantly higher rate, a HELOC, or a high-interest personal loan.  
**Or - more commonly, leave home unprepared for wildfire.**



# Resilience

Retrofit loans to help homeowners achieve IBHS Wildfire Prepared Designation

<b>Transaction Types</b>	Second Lien Position Debt
<b>Property Types</b>	Residential, Multifamily
<b>Minimum / Maximum Loan Amount</b>	\$50,000
<b>Maximum LTV</b>	80%
<b>Loan Duration</b>	15 Years - first 12 months Interest Only
<b>Minimum Credit Score</b>	620
<b>Target Interest Rate(s)</b>	6.99% initial rate; 5.99% once “Base” reached, 5.49% once “Plus” reached
<b>Borrower Paid Fees</b>	1% Origination Fee, \$800 underwriting & processing fees, \$35 Credit Report Fee
<b>Education Requirements</b>	Resiliency and Community Hardening Class

# Common Scenario

---

- Affected Homeowner of a recent wildfire has been given capital to rebuild house.
- However, there is a gap between what they would need to rebuild normally and what they would need to rebuild to a IBHS designation.
- Does the homeowner rebuild and the community faces the same problem for the next wildfire?  
What options do they have to access more funds in order to reach a IBHS designation?



# Resilience Rebuild

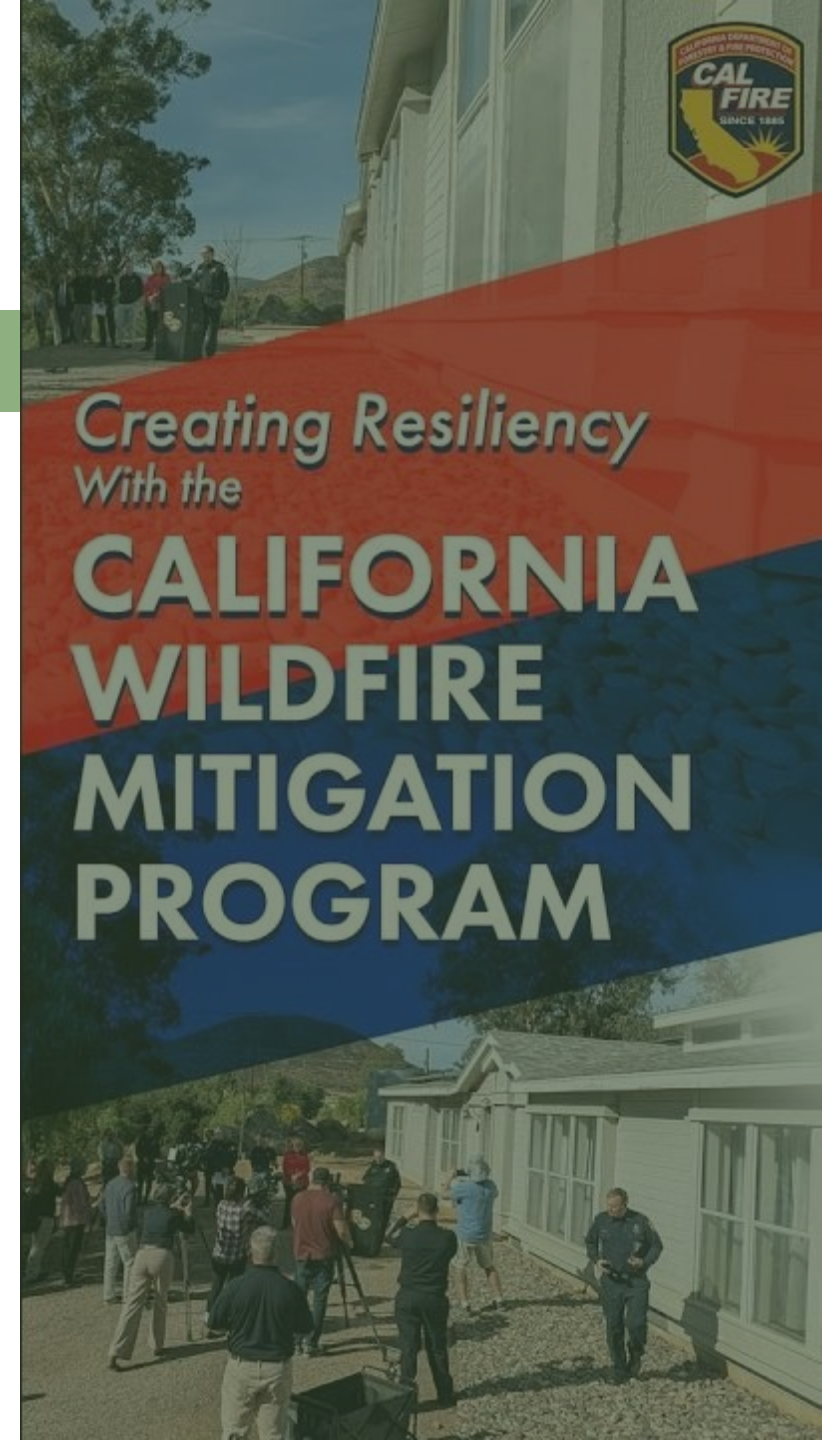
Retrofit loans to help homeowners achieve IBHS Wildfire Prepared Designation. Intended to bridge gap needed to help get rebuilt homes to IBHS designation.

<b>Transaction Types</b>	Second Lien Position Debt
<b>Property Types</b>	Residential, Multifamily
<b>Minimum / Maximum Loan Amount</b>	\$100,000
<b>Maximum LTV</b>	80%
<b>Loan Duration</b>	15 Years - first 12 months Interest Only
<b>Minimum Credit Score</b>	620
<b>Target Interest Rate(s)</b>	5.99% initial rate; 4.99% once IBHS "Base" or "Plus" reached
<b>Borrower Paid Fees</b>	1% Origination Fee, \$800 underwriting & processing fees, \$35 Credit Report Fee
<b>Education Requirements</b>	Resiliency and Community Hardening Class

# Innovative Partnership Model

## Partnership with CWMPA

- NPHS received approval from California Wildfire Mitigation Program Authority (CWMPA) to develop and pilot and partnership to leverage CWMPA's grant program with NPHS's Resilience Loan Product to maximize homeowner support.
- We will jointly develop a framework where CWMPA grants can cover upfront wildfire mitigation costs, while NPHS loans extend financing for remaining or additional resilience improvements.
- Engaged in discussion on bringing private capital into wildfire resilience program to scale impact across vulnerable communities.
- Exploring co-branding and shared homeowner intake processes to reduce barriers and streamline assistance.



# Creative Investment Model

## Leveraging Tax Credits & Capital Stacking

- Exploring the use of tax credits to further increase private investment with COIN, CA Treasury, & CCCI
- Positioning NPHS's CDFI platform to attract private investment by pairing loans with tax incentives and public subsidies.
- Developing models that combine philanthropic, public, and tax credit equity to scale wildfire preparedness financing.
- This type of collaboration has the potential to catalyze meaningful systems change by demonstrating how insurance providers can actively reduce risk and help stabilize premiums by investing directly in the communities they serve.

## Impact to Date

- Expanded homeowner access to critical fire-hardening funds.
- Helped position NPHS and CWMPA as complementary partners in delivering a blended grant + Loan solution
- Created a scalable model for leveraging CDFI capital to meet statewide wildfire preparedness needs.

# What's Next?

## Next Steps

- Continue collaboration with CWMPA to launch pilot projects.
- Seek additional philanthropic and government support to blend with private capital.
- Expand outreach to vulnerable homeowners, including seniors and households in disadvantaged communities.
- Track and report data on Resilience upgrades financed and homes hardened against wildfire risk.
- Continue working with CCCI members to develop financial products and strategies for capitalization utilizing tax credits, private investments, and means of creating future liquidity.
- Collaborate with insurance providers to educate homeowners on available financial resources and provide technical assistance for construction & management.



# POLICY CORNER

# CA Policy Updates

California is requesting a 12-month extension of federal disaster assistance for Los Angeles fire survivors to ensure thousands of families can continue accessing housing and financial support as they rebuild.

- The Individuals and Households Program (IHP) through the Federal Emergency Management Agency (FEMA) provides financial and housing assistance to disaster survivors.
- **The extension would allow eligible survivors to continue receiving support through July 9, 2027**

# CLOSING

# Stronger Together: Disaster Resource Guides

Our team has gathered expert advice and online tools to develop a series of guides that help affordable housing providers prepare for and navigate future emergencies.

## Resource guides:

- **Mitigating and Preparing for Wildfires** – outlines practical steps to reduce wildfire risk, respond effectively and support long-term resilience.
- **HUD Funding for Recovery and Mitigation** – helps guide stakeholders through complicated federal funding programs and processes for disaster funding
- **Creating a Hazard Mitigation Plan** – step-by-step guide to coordinate a hazard mitigation planning process in your community
- **Trauma Informed Disaster Response** – guidance on embedding trauma-informed principles into programs and policies
- **Creating a Disaster Recovery Plan** – support in building community connections and setting up strong systems for coordination

Learn more: <https://www.enterprisecommunity.org/community-highlights/stronger-together>



## About Wildfires

Wildfires have long been part of California's landscape, but since 2017 the state's fire seasons have intensified in strength, duration, and size, setting [records year after year](#). Urban sprawl into the Wildland-Urban Interface (WUI) – where the natural land meets human settlement – has increased fire risk for communities and the natural environment.

The high cost of housing has forced more Californians to move into the WUI, in what's known as Fire Severity Zones, to find affordable housing. Many of these homes, however, are not ready for wildfires. To see fire risk zones across the state, [view the map from Cal Fire](#). As fire risk grows across the state, Cal Fire updates its maps to reflect the changing danger.

California's communities can and must learn to live with fire risk and manage it effectively through housing design, construction, infrastructure, land sites, and housing operations. Wildfire has always been part of the ecosystem. Native Americans used fire as a tool to care for the land and prevent wildfires, a practice called cultural burning or controlled burning.

For the last century, fire suppression became the leading mitigation approach, creating more risk and volatility in wildfire incidents. In addition, underfunded land management, use of non-native plants, reduction in fire-resistant forests, and poor water management became common practices, contributing to the devastating wildfires today. Finally, greenhouse gas emissions and climate change have led to a hotter, drier west, dramatically exacerbating an already hazardous wildfire landscape.

## Impacts on Frontline Communities

Wildfires have severe impacts on frontline communities. People with low incomes are more likely to lose their homes and to struggle to recover. People who are undocumented receive little support to prepare or to recover. Evacuation is harder for people who do not speak English, people with disabilities, people with low incomes, and seniors. Planned power shutoffs are common occurrences as an attempt to limit fire ignition on risky days. However, losing electricity for hours or days is devastating for people with certain medical conditions and families on fixed incomes that cannot spare to lose perishable food.

# TRAUMA-INFORMED REBUILDING COUNSELING & CASE MANAGEMENT

OFFICE OF:  
OFFICE



*Phone: 213.282.8123*

*Email: [office@officeofoffice.com](mailto:office@officeofoffice.com)*

# Mental Health Resources

## [Didi Hirsch – Wildfire Recovery Therapy](#)

- Free individual therapy for those impacted by trauma or disaster.

## [Dena Heals](#)

- Holistic and culturally grounded mental health support.

## [Altadena Healing Village](#)

- Therapy, mindfulness sessions, and holistic wellness services.

## [Soul Force Project](#)

- Healing spaces through music, art, and community therapy experiences.

## [Foothill Family – Flourish Program](#)

- **Comprehensive family and mental health support programs.**

## [NAMI \(National Alliance on Mental Illness\)](#)


- **Information, support groups, and mental health advocacy.**


## [Gooden Center](#)

- **Trauma-informed counseling and holistic mental health services**

## Community Focus Group

# Join us this weekend!



 Enterprise

**Community Focus Group:  
Imagining Housing for All in  
Altadena**


**SATURDAY MAY 16<sup>TH</sup>**  
11:00 AM – 1:00 PM


**Eaton Fire Collaboratory Space**  
540 West Woodbury Road  
Altadena, CA 91001


*This focus group will bring together nonprofit partners, community leaders, residents, and other key stakeholders to explore rental housing and urban design ideas.*

*Coffee, refreshments, and lunch provided. Community resources and support for impacted residents onsite.*

**RSVP [HERE](#)** or contact Araceli Palafox at [apalafox@enterprisecommunity.org](mailto:apalafox@enterprisecommunity.org)

 do  
day one

 Emergency Housing and  
Stabilization Committee

 EATON FIRE  
COLLABORATORY

## Los Angeles County Wildfire Recovery Series

The Road to Recovery - Understanding your Options	2/25/2026	12:00 – 1:30 PM
How to Rebuild: Financing 101	4/1/2026	12:00 - 1:30 PM
How to Rebuild: Manufactured, Factory-Built Home & ADUs	4/22/2026	12:00 - 1:30 PM
Resilient Rebuild: Incorporating Fire-Resistance Standards	5/13/2026	12:00 - 1:30 PM
Returning Home: Supporting Seniors	5/27/2026	12:00 - 1:30 PM
Returning Home: Mobile Home Park Residents and Renters	6/17/2026	12:00 - 1:30 PM

**THANK YOU!**  
**PLEASE COMPLETE THE FEEDBACK**  
**SURVEY**