



**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



# California Wildfire Mitigation Program

## Home Hardening Initiative

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Joint Powers Authority Public Meeting

June 24, 2022



# Program Vision

- Develop a robust program model that empowers and enables California communities to create successful wildfire home hardening programs
- Community hardening approach
- Targeting low income and socially vulnerable homeowners
- Locally-led programs with state support

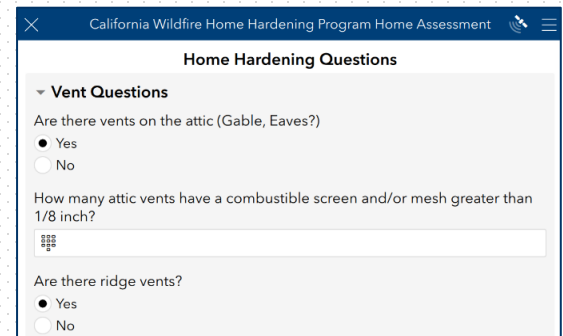


# Program Framework

- Program Implementation Guidance and Doctrine
  - Local Implementation Development and Process Guidance
  - Home Hardening Treatment Measures
- Local Project Management System
  - Application Intake to Closeout
- Outreach Toolkit
  - Internal and External Products
- Homeowner Application
  - Paper; Online Portal; English + Spanish
- Home Assessment Mobile App
  - Outputs property specific treatments actions
- Home Hardening HMGP Subapplication Guide
  - Simplified Guidance and Plug and Play Format



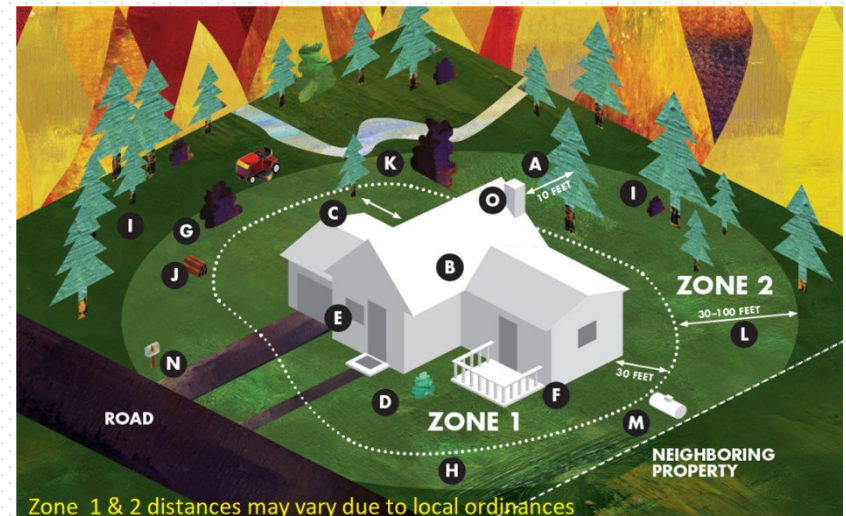
*Homeowner Application Portal,  
launches 11/01/21*



*Home Assessment Mobile App*

# Defensible Space

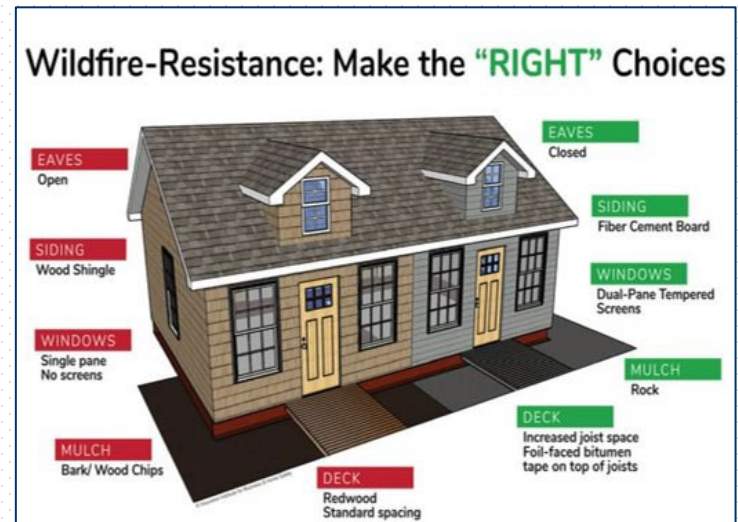
- Compliant defensible space will be completed prior to retrofit actions in zones 1 and 2
- Local ordinances for defensible space requirements will be part of the program
- 0–5-foot zone: Best management practices (awaiting Board of Forestry regulation) or local ordinances
  - Flammable vegetation
  - Combustibles
  - Attachments to the structure (fences, retaining walls)





# Retrofits

- Retrofit guide being developed cooperatively with CAL FIRE, NIST, IBHS, and subject matter experts
- Hardening for embers and flame (includes, direct flame impingement and radiant, convective and conductive heat)
- Retrofits account for high, medium and low-density communities
- Retrofits to align with current Chapter 7A and additional recommendations beyond Chapter 7A



# Wildland-Urban Intermix (low to medium density)

**Primary objective is to harden for embers**

- Replace wood shingle roofs
- Upgrade roof and crawl space vents
- Install double-pane windows
- Move or harden auxiliary buildings or structures and other combustible items



# Wildland-Urban Intermix (high density)

- **Primary objective is to harden for direct flame**
- **Ember hardening required**
- **Additional hardening actions to residence**
  - Metal window screens
  - Replace windows (both panes tempered glass)
  - Replace siding
  - Wood fences and connections to residences
  - Harden auxiliary buildings or structures and other combustible items.



# Costs to Homeowner

**To achieve mitigation benefits, we must encourage participation of as many homeowners in the demonstration areas as possible**

- A sliding scale will allow all homeowners in target neighborhoods to participate to achieve maximum resiliency benefits without allocating substantial state funds to non-LMI participants.
- Participation limits ensure lower income neighborhoods are prioritized.

## Cost Scale by Income Bracket

This table shows the distribution and source of funding based on household income.

Income bracket	Limits on Participation	Homeowner contribution	State contribution	HMGP contribution
<120% AMI	<30%	0%	25% (up to \$10k)	75% (up to \$30k)
120-200% AMI		10%	15% (up to \$6k)	75% (up to \$30k)
>200% AMI		25%	0%	75% (up to \$30k)

\*AMI – Area Median Income



# Demonstration Community Selection

- State-wide analysis at the parcel and census-tract level using data on fire risk, climate change risk factors, and social vulnerability.
- Only considered census tracts in the Fire Hazard Severity Zones.
- Project areas within these counties were selected with input of local representatives based on local expertise but were required to be areas that are at high risk for wildfire, and with high proportions of socially vulnerable residents.
- Prioritized pilot locations that ranged in physical and social characteristics to ensure that the program would be flexible for implementation in diverse communities:
  - Vegetation type
  - Housing density
  - Region
  - Type of implementing entity
  - Inputs required for the Benefit Costs Analysis for HMGP, such as home values, replacement costs, and burn recurrence intervals.

# Community Selection Analysis

Categories	
Environmental Threat	Parcels in Moderate, High, or Very High Fire Hazard Severity Zone (FHSZ)
	Fire threat probability
	Fire threat under climate change
Socioeconomic Risk	Residents in poverty
	Residents over age 65
	Residents with a disability
	Residents with limited English
	Residents with no vehicle

# San Diego County



## Expansion communities

All selected communities are Low-to-Moderate Income and are in High or Very High Fire Hazard Severity Zones





# San Diego County

## (Demonstration Site: Dulzura)

- Local Lead: San Diego County - SD Fire Protection District
- All key positions supporting the project for Year 1 are in place and have been trained
- HMGP sub-application submitted to FEMA. Currently procuring SMEs and conducting Environmental and Historic Preservation (EHP) surveys before funds can be obligated.
- Total project cost: \$23.5M (\$5.9M state share)
- Year 1 Goal: 10-25 homes
  - 18 homeowner applications received
  - 9 home assessments completed
- Expansion areas: Campo and Potrero

# Shasta County



**Demonstration  
community**



**Expansion  
communities**

All selected  
communities are  
**Low-to-Moderate  
Income** and are in  
**High or Very High  
Fire Hazard Severity  
Zones**



# Shasta County

## (Demonstration Site: Whitmore)

- Local Lead: Shasta County Fire Safe Council (in partnership with the Western Shasta Resource Conservation District)
- All key positions supporting the project for Year 1 are in place. Construction Manager and project manager recently onboarded will need home assessment training.
- HMGP sub-application submitted to FEMA. Currently procuring SMEs and conducting Environmental and Historic Preservation (EHP) surveys before funds can be obligated.
- Total project cost: \$23.5M (\$5.9M state share)
- Year 1 Goal: 10-25 homes
  - 37 homeowner applications received
  - 24 home assessments completed
- Expansion areas: Lakehead and Oak Run



# Lake County



## Demonstration community

All selected communities are **Low-to-Moderate Income** and are in **High or Very High Fire Hazard Severity Zones**



**Kelseyville Riviera**

**Lake County**

AB-38 Home Hardening



# Lake County

## (Demonstration Site: Kelseyville Riviera)

- Local Lead: North Coast Opportunities (with strong partnership from Lake County Board of Supervisors)
- Most key personnel have been onboarded. When team is completely in place, will deliver outreach, CWMP portal, and home assessment training.
- HMGP sub-application is with Cal OES – will submit once EHP deliverables are complete. Currently procuring SMEs and conducting Environmental and Historic Preservation (EHP) surveys before funds can be obligated.
- Total project cost: \$22.2M (\$5.5M state share)
- Year 1 Goal: 10-25 homes
- Capturing an interested homeowners list; will open applications closer to FEMA approval date.
  - 28 homeowners on contact list for launch

# Questions/Comments