

Wildfire Mitigation & Disaster Resilience in California

**COSCDA Program Manager's Conference
March 20, 2023**

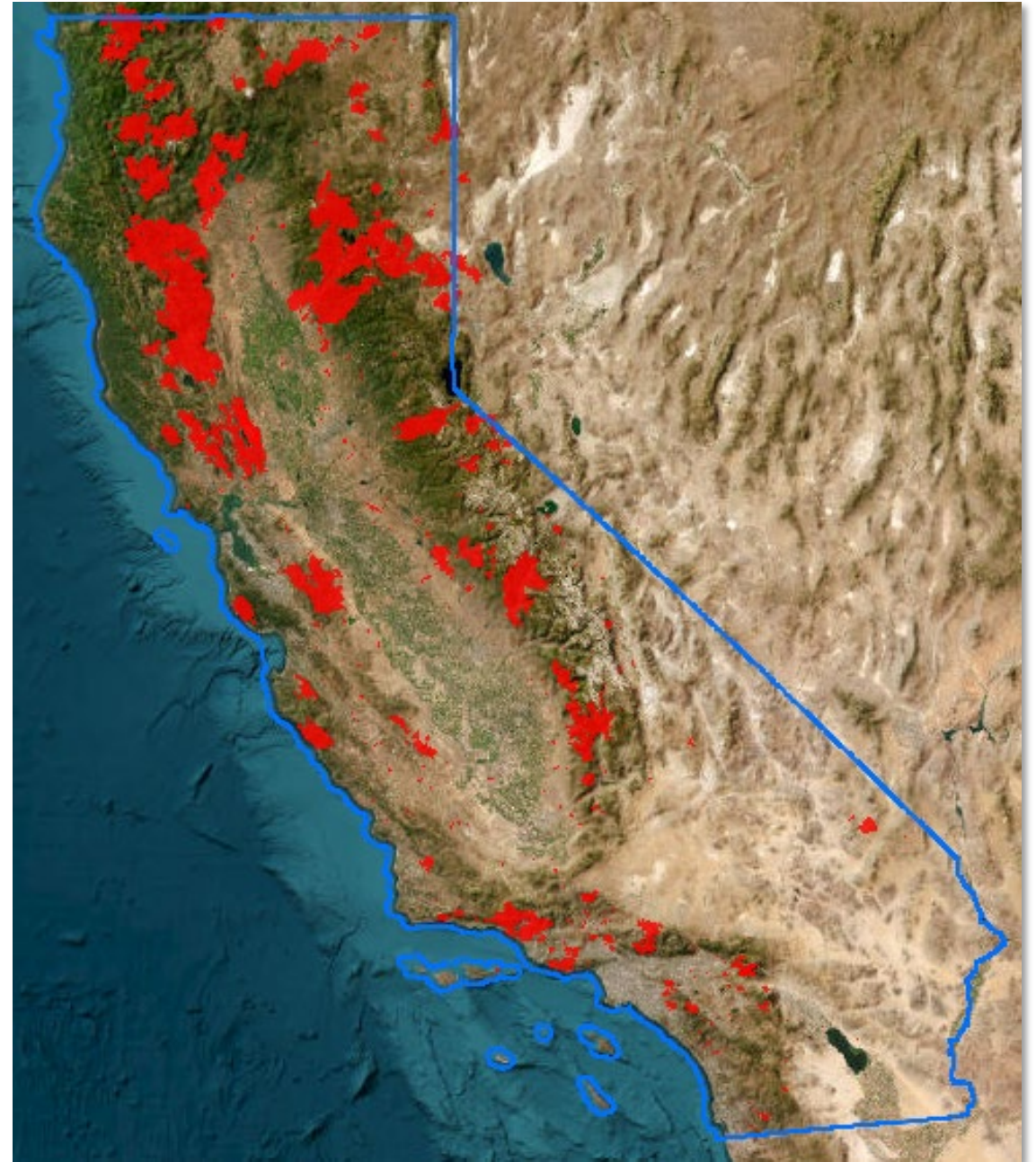




Agenda and Goals

1. Wildfire vulnerability and impacts
2. Wildfire codes & standards
3. HCD Programs for Mitigation

California Fire Perimeters 2017-2021

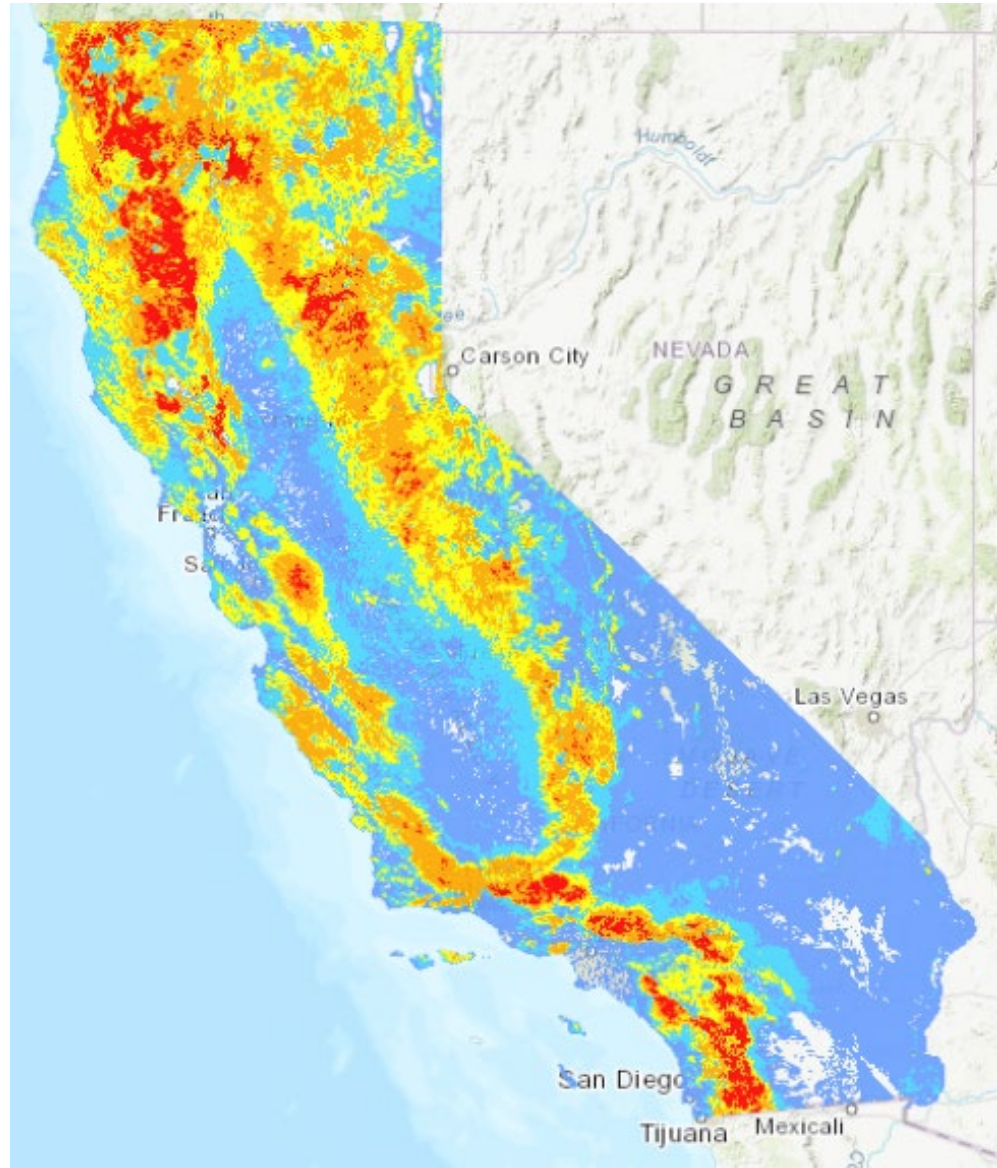




Wildfires & Housing

- Wildfires have destroyed over 64,000 structures in California since 2005.
- California has about 4.5 million homes in the WUI (32% of housing units)
- Projected 14% WUI population increase by 2050
- 41% of wildfire disaster-impacted households in California have been renters.

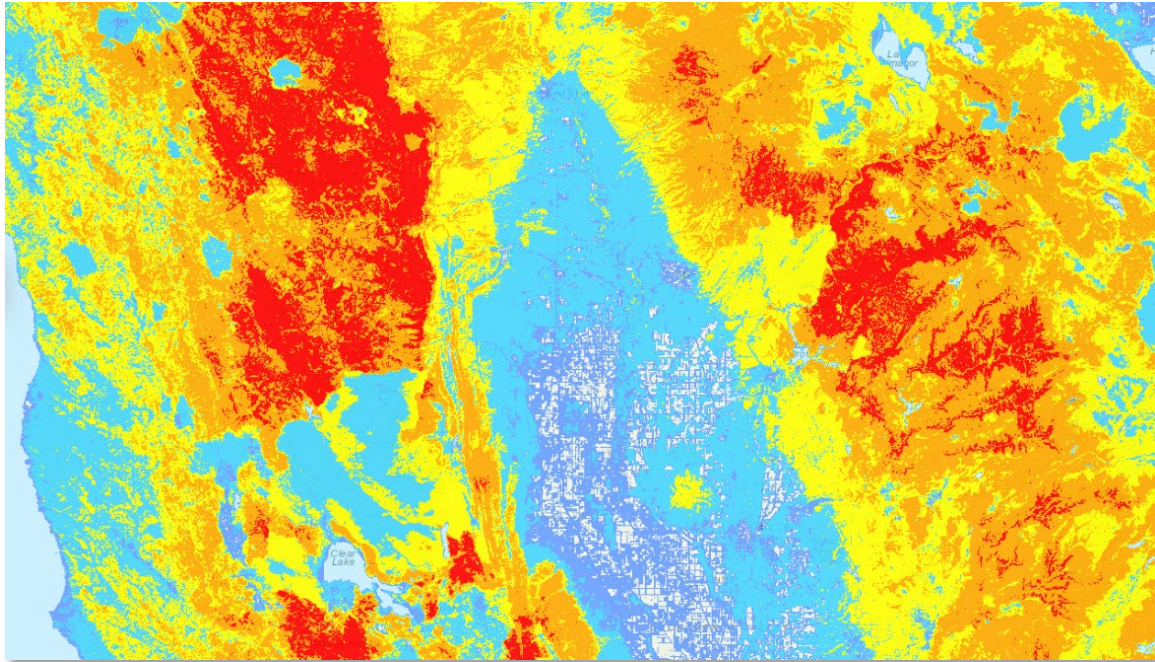
Hazard exposure



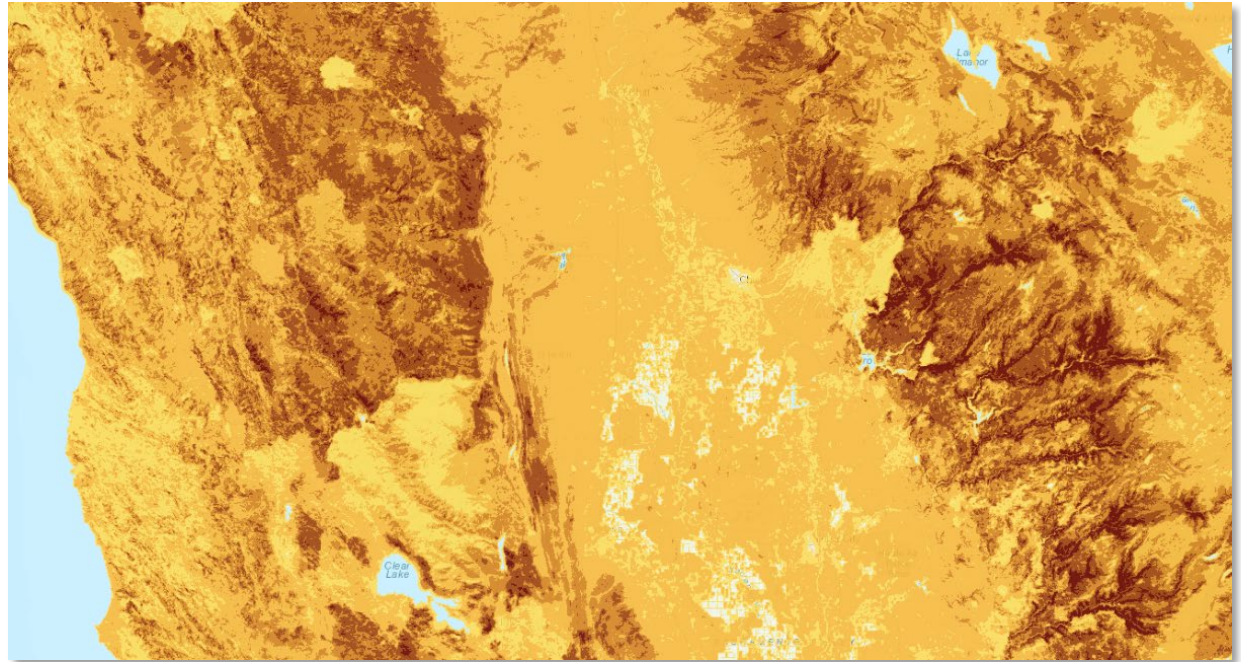
Burn probability



Hazard exposure



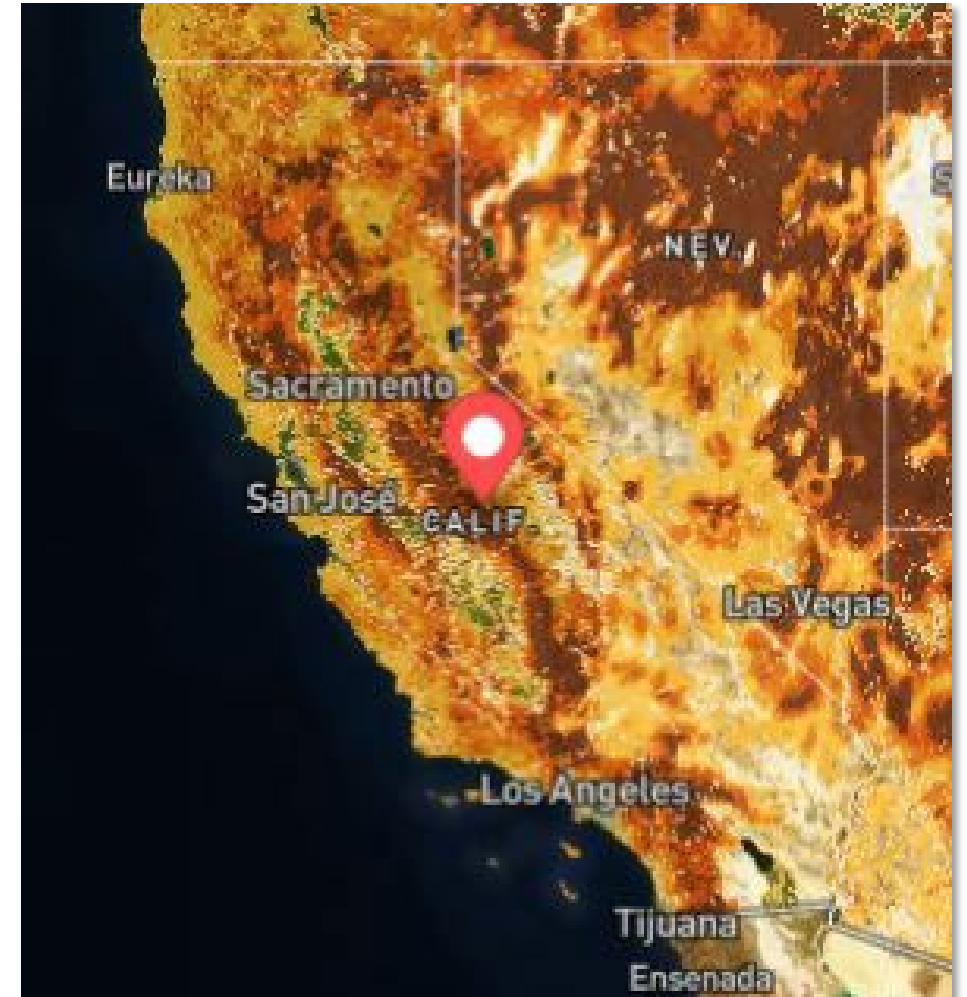
Burn probability



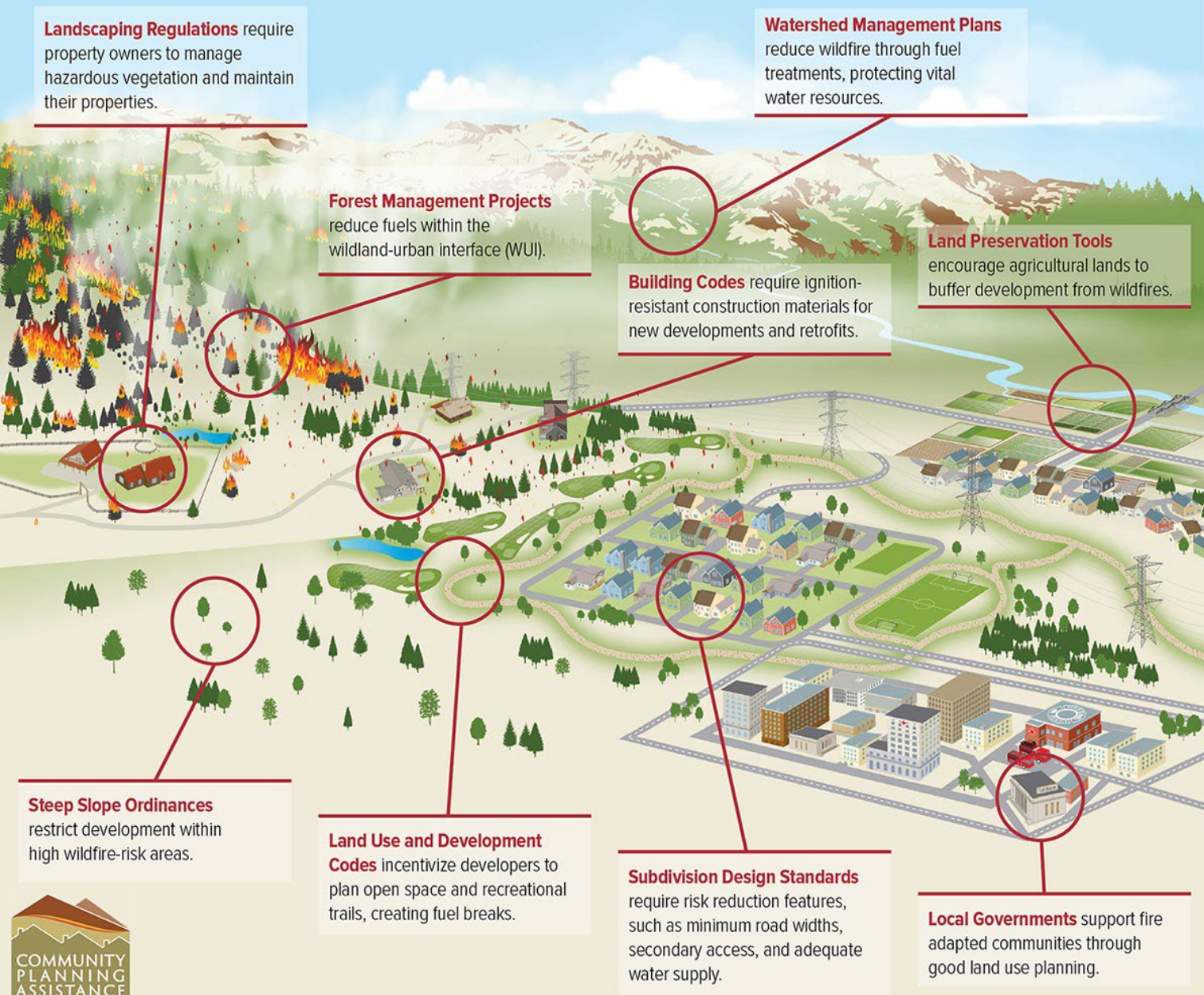


Wildfire Property Risk

- State hazard maps are not risk maps
- First Street Foundation risk assessments and maps bridge gap between public hazard exposure maps and insurance industry risk maps/catastrophe models
- Estimated 7.13 M properties are risk today and 7.54 M properties at risk in 2053 – 66 percent of all properties in California



Examples of Community Tools



Codes & Standards

- Chapter 7A WUI Building Code
- State Minimum Fire Safe Regulations – development standards
- Safer from Wildfires insurance regulations
- Local land use ordinances



Funding & Coordination

- HCD recovery and hazard mitigation funds are just a slice of a larger resilience funding puzzle that are designed to target vulnerable populations and communities
- Need to align program targeting and eligible activities with similar programs to advance State climate & housing goals

FEMA Cal OES

- BRIC & HMGP
- Prepare CA
- California Wildfire Mitigation Program

HUD HCD

- OOR-MIT
- MHP-MIT
- MIT-RIP
- MIT-PPS

CAL FIRE

- Wildfire Prevention Grant Program

OPR/SGC

- Adaptation Planning Grant
- Regional Resilience Grant
- Community Resilience Centers

Local

- Assessments
- General Funds



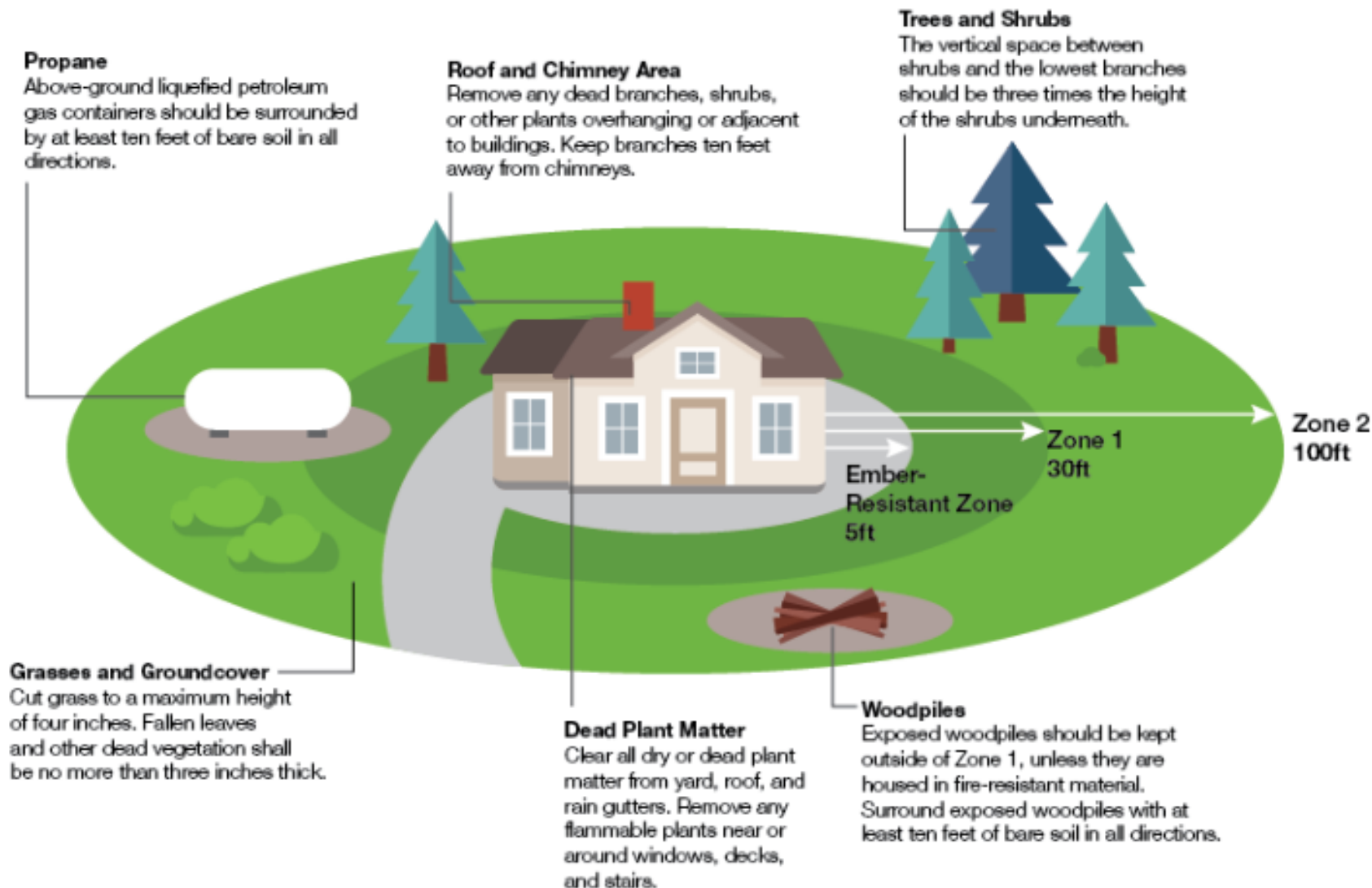
Home Hardening



Source: IBHS

Homeowner Requirements in Defensible Space Zones

Under State Law





Housing Mitigation

- OOR-Mitigation
 - Up to \$50k per unit
- MHP-Mitigation
 - Up to \$350k per property owner



Department of Insurance

Safer from Wildfires Framework

1 Protecting the structure



- Class-A Fire rated roof
- Maintain a 5 foot ember-resistant zone around a home (including fencing within 5 feet)
- Noncombustible 6 inches at the bottom of exterior walls
- Ember and fire-resistant vents (See Low-Cost Retrofit List, and Chapter 7A)
- Upgraded windows (Double paned or added shutters)
- Enclosed eaves

2 Protecting the immediate surroundings



- Cleared vegetation and debris from under decks
- Removal of combustible sheds and other outbuildings from the immediate surroundings of the home, to at least a distance of 30 feet
- Defensible space compliance (including trimming trees, removal of brush and debris from yard, and compliance with state law and local ordinances)

3 Working together as a community



- The Partnership recognized the benefit of community-wide mitigation plans where the community has a clearly defined boundary, a local risk assessment in consultation with the local fire district or state fire agency, and clear funding sources to implement community mitigation activities and meet risk reduction goals.
- Current examples include Fire Risk Reduction Communities designated by the Board of Forestry and Fire Protection and Firewise USA communities in good standing.



HCD's Mitigation Tiering

Level 1 Importance Items

- Pea Gravel under Home and decks/porches if necessary over weed prevention barrier and extend 5ft around home with no planted vegetation
- Fire resistant skirting around home plus trim and paint
- Enclose underside of elevated porches/decks with metal mesh ember resistant skirting
- Fire Retardant Paint type application to porches/decks
- Stump grinding
- Tree Removal
- Defensible Space Landscaping within zones "0" and zone "1"

Level 2 Importance Items

- Enclose Soffits and Fascia with fire resistant material such as fiber-cement material (including screens and flame/ember resistant strip vents)
- Install Metal gutters with gutter guards
- Fiber Cement Exterior Siding plus trim and paint
- Roofing with Class A asphalt shingles, with underlayment, ridge vent, drip edge, flashing, ember- resistant exhaust caps for roof penetrations

Level 3 Importance Items

- Install metal exterior doors
- Install metal Garage doors
- Install dual paned Windows (one pane tempered glass) with screens



Planning & Infrastructure

- Resilient Infrastructure Program (MIT-RIP)
- Planning & Public Services Program (MIT-PPS)
- FEMA Public Assistance Local Match



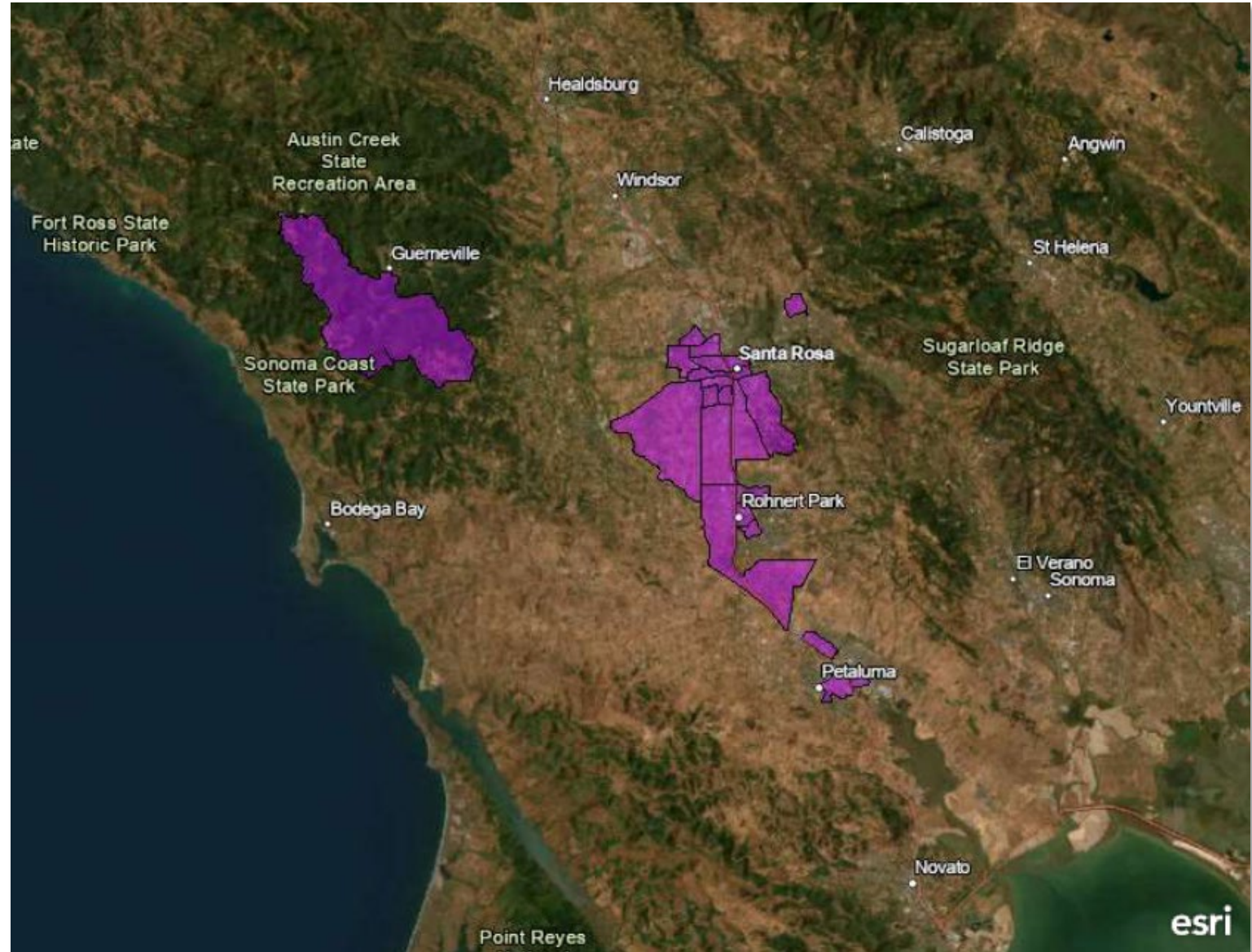
Measuring Disaster Vulnerability

- Example: Resilient Infrastructure Program (MIT-RIP)
- Includes a disaster vulnerability eligibility criteria aligned with Cal OES PrepareCA program
 - Prioritizing census tracts with elevated hazard exposure and social vulnerability score
 - Includes the CDC SVI and various state/federal hazard risk data sources



Example: Disaster Vulnerable Tracts in Sonoma County

- Total hazard risk percentile > 0.6
- Single hazard risk percentile > 0.8
- SVI > 0.5
- Ratio of census tract median household income to statewide median household income < 0.8



Questions?

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