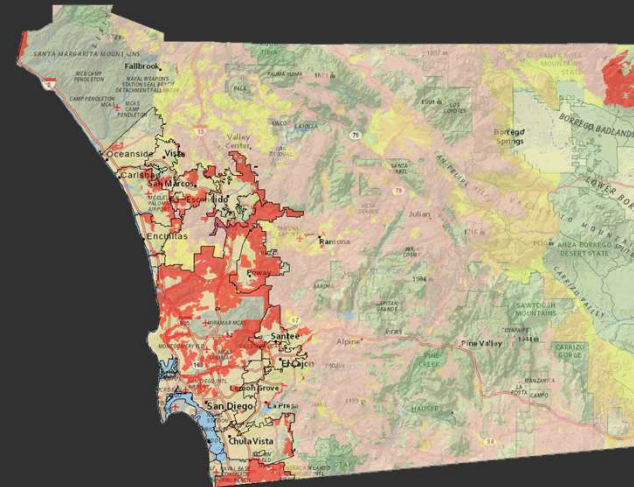


# Fire Hazard Severity Zones



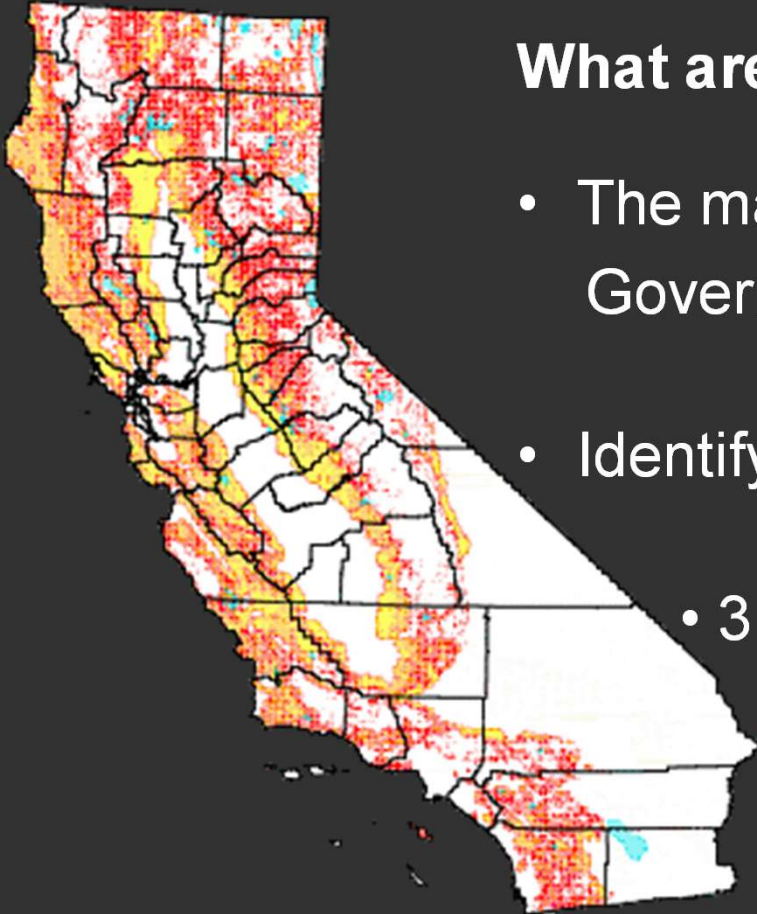
***CAL FIRE***

# Fire Hazard Severity Zones



## What are the Zones?

- The maps are required by Government Code 51178 & 51179
- Identify levels of fire hazard
  - 3 levels (Moderate, High, & Very High)



# Fire Hazard Severity Zones



## How are the Zones determined?

- CAL FIRE used the best available science and data to develop, and field test a model that served as the basis of zone assignments. The model evaluated the probability of the area burning and potential fire behavior in the area.
- Factors: fire history, vegetation, flame length, blowing embers, proximity to wildland, terrain, and weather



# Fire Hazard Severity Zones



## New Updates



- Updated burn probabilities for wildland areas (inclusive of 2020 fires)
- Updated fire environment footprints (urban/developed)
- Updated Vegetation density for urban areas
- Inclusion of slope in the urban zoning model
- **Localized fire weather used in both wildland and urban models**
- **New firebrand production and transport model using discrete local wind vector distributions**

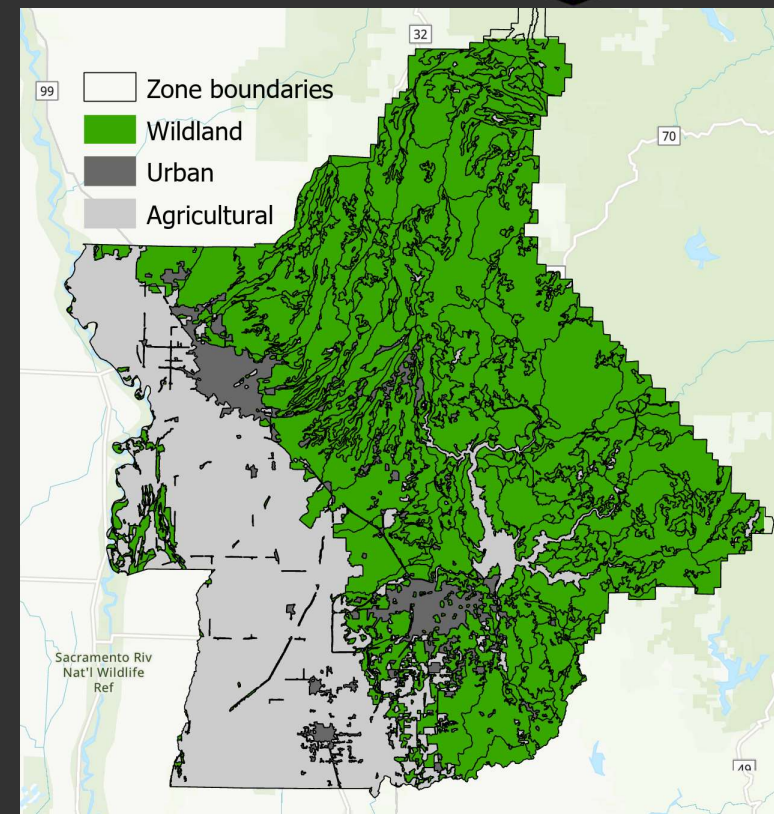


# Fire Hazard Severity Zones



## Wildland vs. Non-wildland Zones

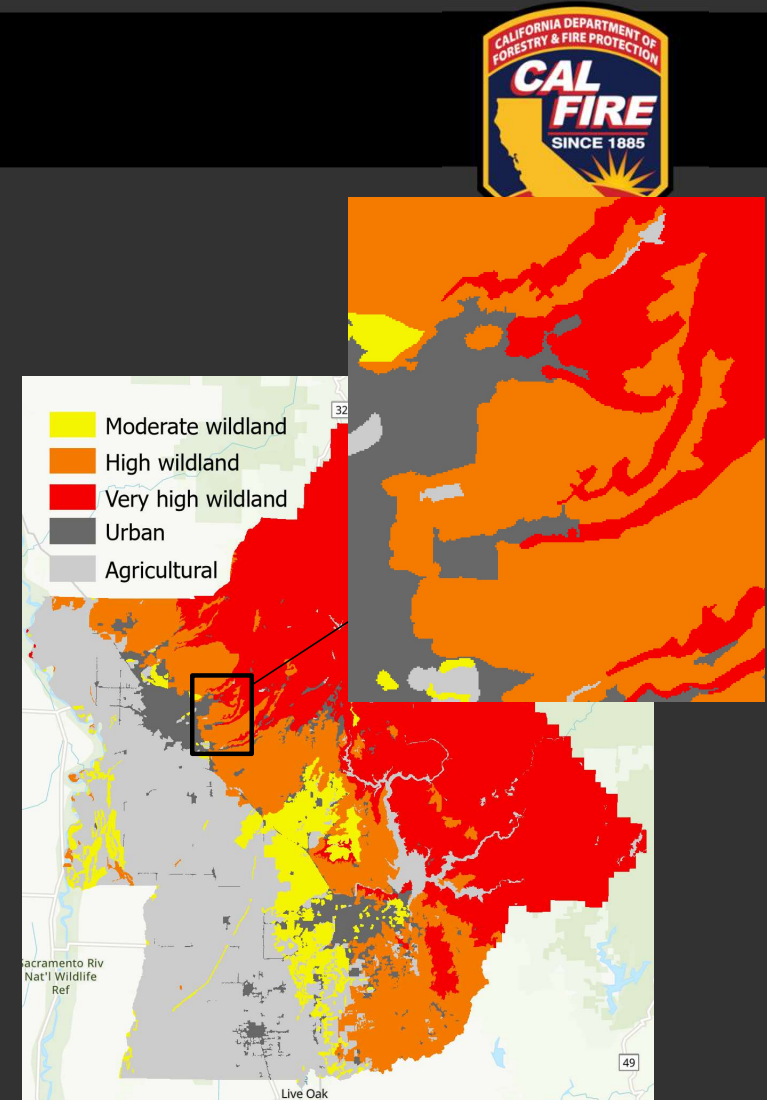
- Zones are areas with relatively homogeneous slope and vegetation
- Hazard map is produced at 30 m resolution
- Scores are averaged within a zone
- Wildland is scored independently of urban and agricultural
- Urban zones scored using additional model steps



# Fire Hazard Severity Zones

## Wildland FHSZ

- Minimum size of 200 acres
- Burn probability
  - Based on fire occurrence from 1991-2020
- Fire intensity
  - Vegetation type
  - Slope
  - Local fire weather – how hot/dry/windy are the worst conditions at a given location (based on 2 km data from 2003-2018)

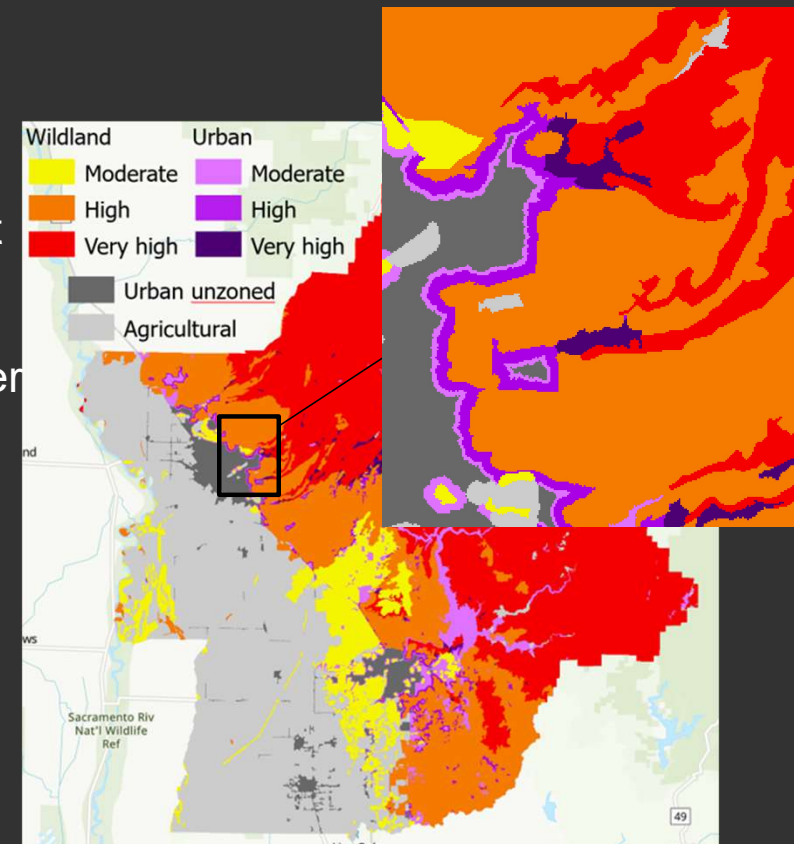


# Fire Hazard Severity Zones



## Urban FHSZ

- Minimum size of 20 acres for isolated islands of vegetation embedded in non-wildland.
- Based on distance to wildland and hazard level of adjacent wildland
- Ember production based on vegetation type and fire weather
- Ember transport based on wind speed/direction observed under the most extreme fire weather at a given location
- Width of moderate, high and very high bands in urban are based on ember load, urban tree cover and slope



# Fire Hazard Severity Zones



## What is the map for?

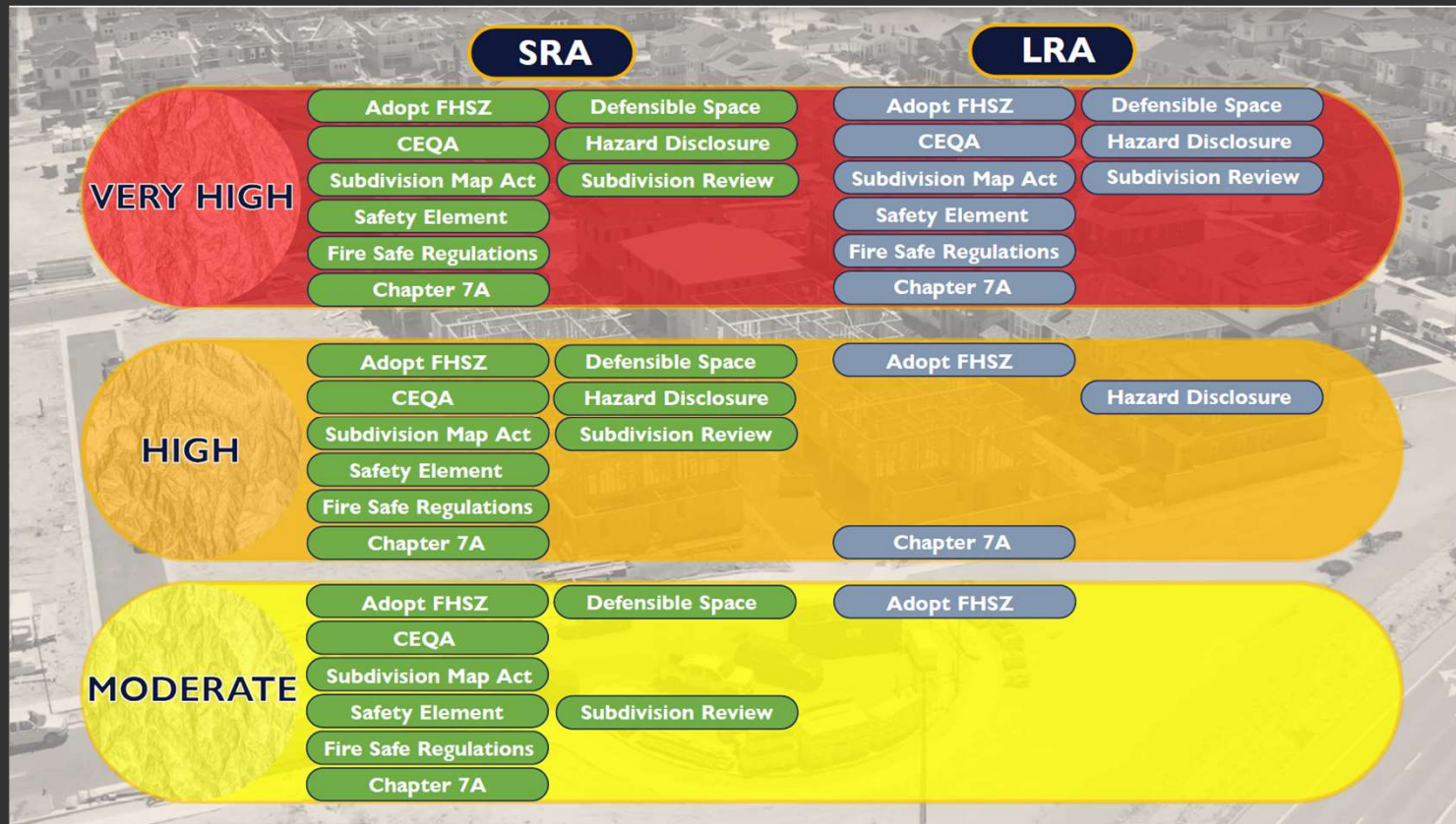
- Building standards for new construction in the Wildland-Urban Interface (California Building Code Chapter 7A)
- Property development standards such as road widths, water supply and signage (Fire Safe Regulations)
- Defensible Space Requirements (Government Code 51182)
- Natural hazard real estate disclosure



# Fire Hazard Severity Zones

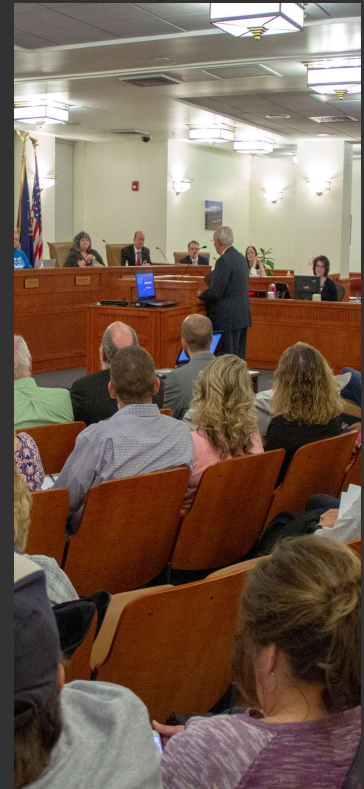


## What's Impacted...



# Fire Hazard Severity Zones

Adoption Timeline:



# Questions?



# osfm.fire.ca.gov/fhsz

