

# Update for Fire Hazard Severity Maps

5/14/25

Planning and Economic Development Commission Meeting  
Mammoth Lakes



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Mammoth Lakes Fire Department

# Background

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- CAL FIRE required by state law to determine ‘hazard severity’ of all state and local areas of the state
- Local Agency required by state law to adopt maps
- Update from original maps (2007) due to updated model
  - Original maps only designated “Very High” zones
  - Update now includes “High” and “Moderate” zones
- Designation can affect:
  - What building/fire codes apply to the parcel
  - Whether inspections are required for real estate disclosures/sales

# Fire Hazard Severity Zone Remap



## How are the Zones determined?

- CAL FIRE used best available science/data to develop and field test the model. Model evaluated probability of area burning and potential fire behavior.

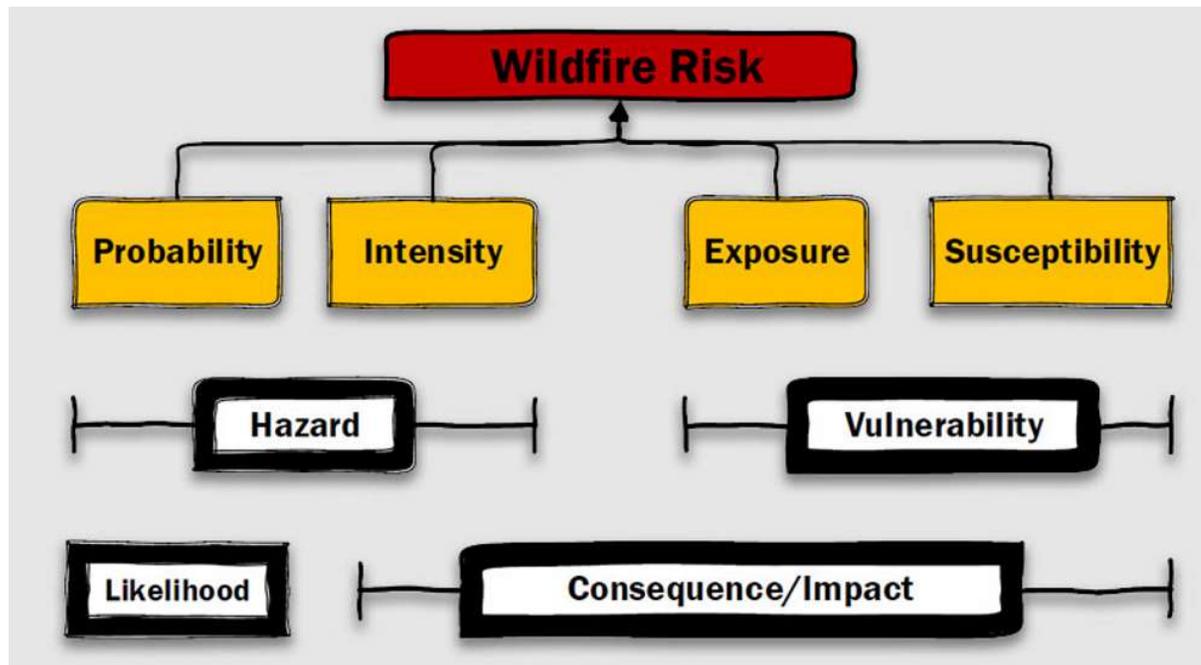
“probability of fire” + “expected fire behavior” = “hazard”

- Factors: fire history, vegetation, flame length, blowing embers, proximity to wildland, terrain, and weather
  - E.g., where fires/embers would be generated and where weather/topography would carry those embers
  - Key difference for Mammoth:
    - Old model estimated 20mph winds, statewide
    - New model uses 95<sup>th</sup> percentile local wind history of last 20-30 years



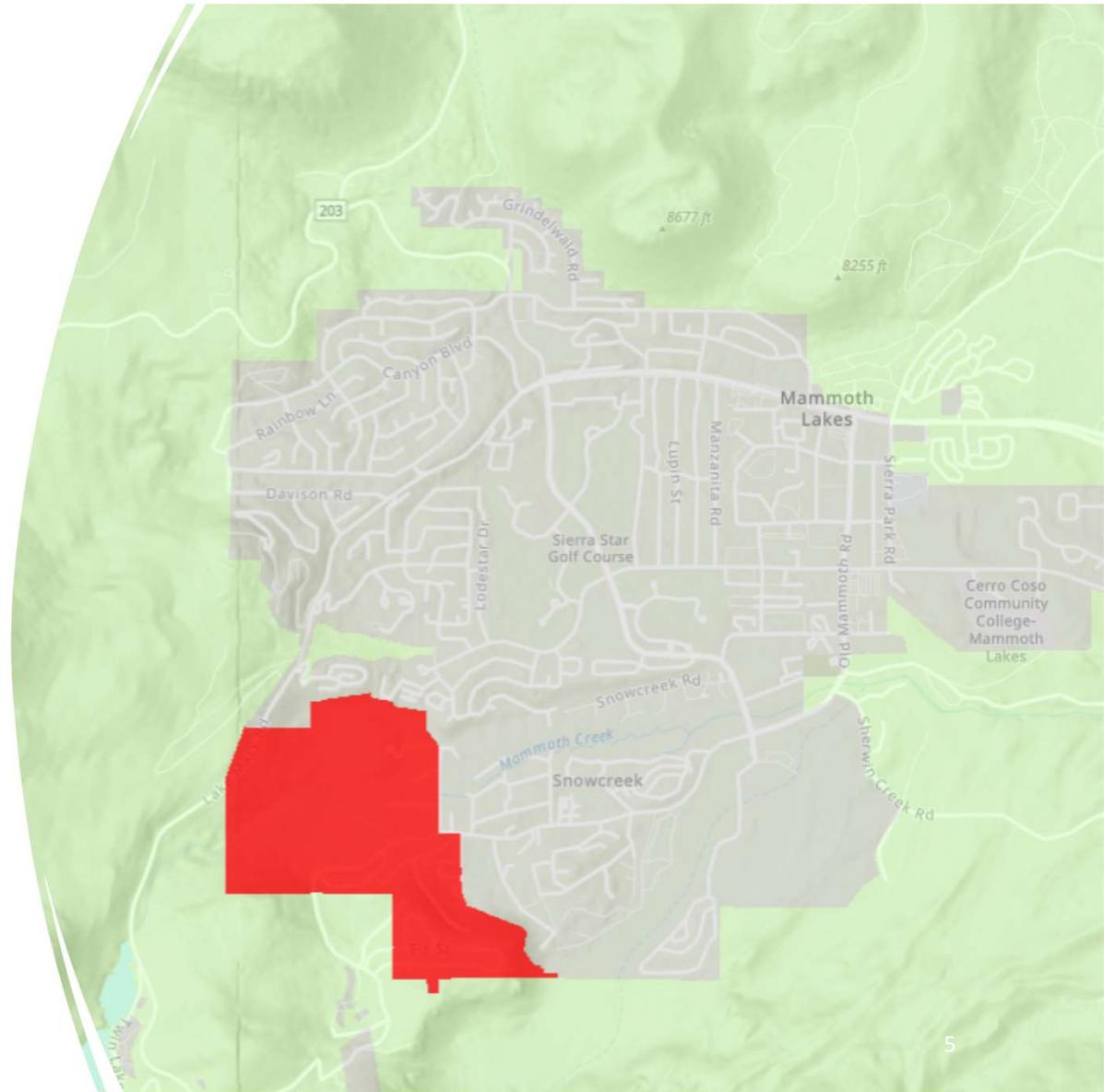
# Hazard vs. Risk

- “Hazard” based on probability of and expected behavior of fire
- “Risk” is potential damage a fire can do, accounting for existing conditions (susceptibility of house to catch fire, defensible space around house, etc.)



# Original 2007 Map

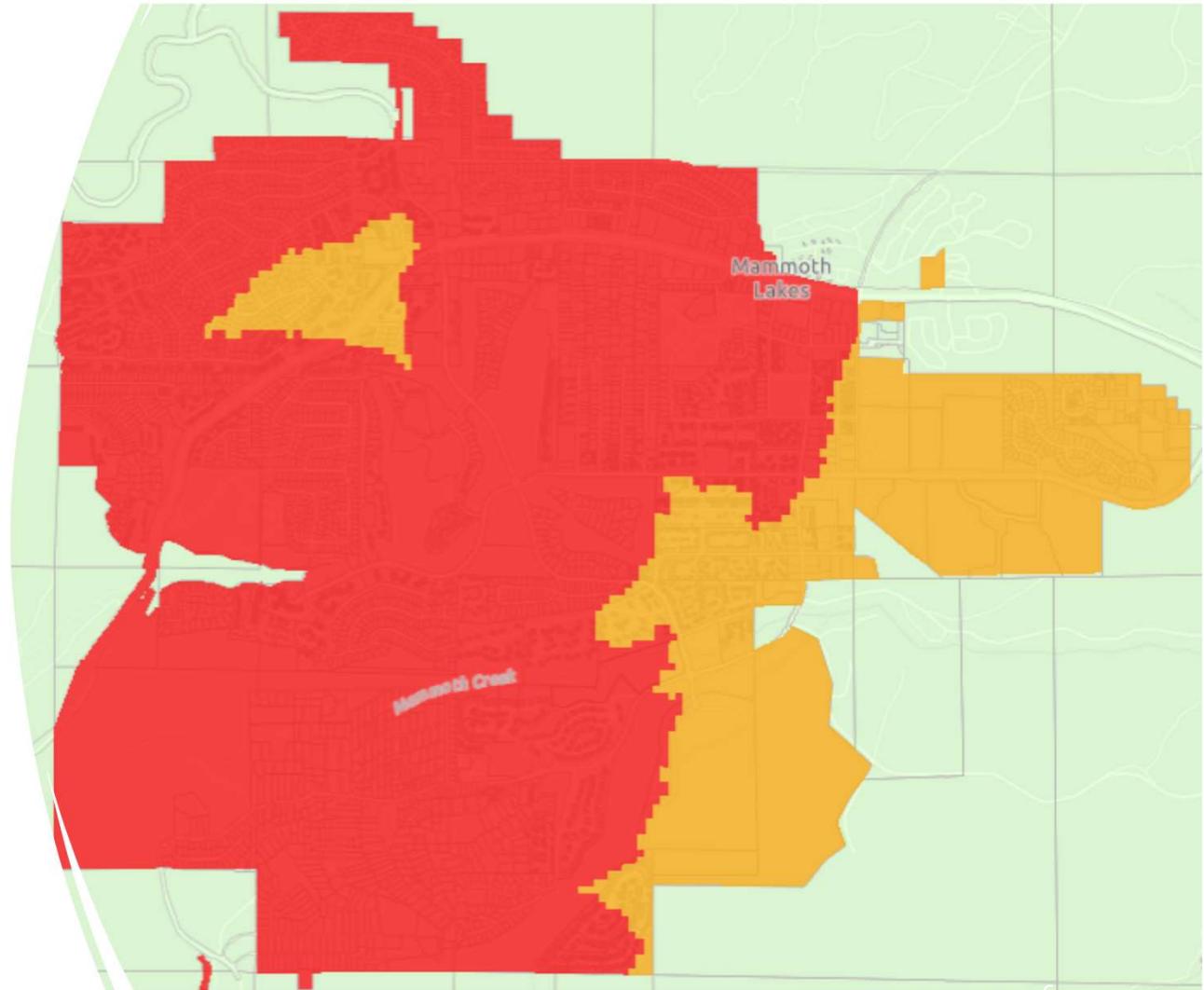
- “Very High” zone only in Old Mammoth area



# Updated Map

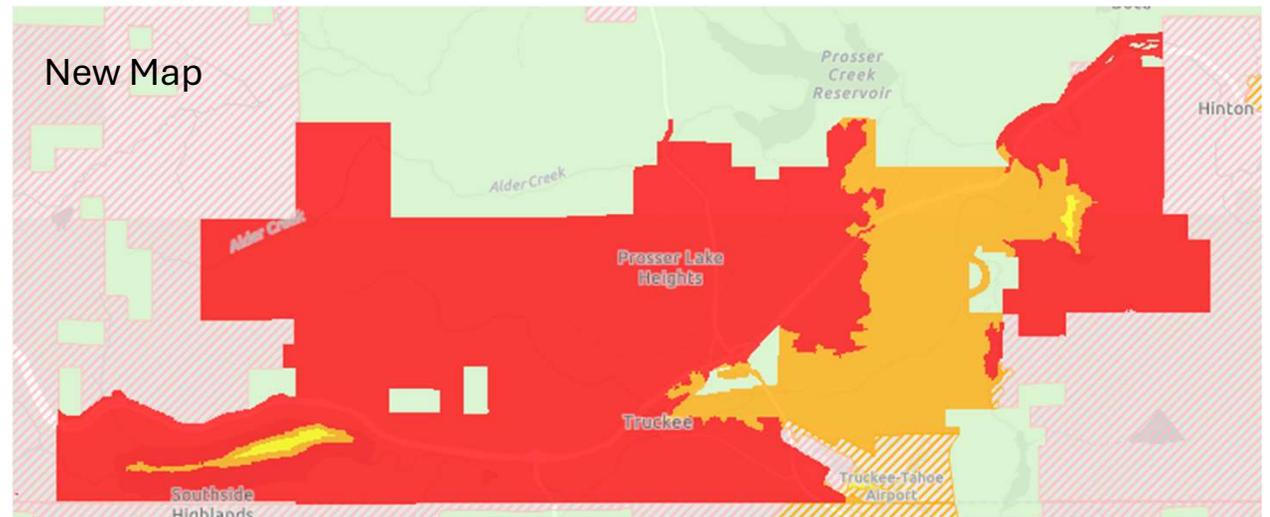
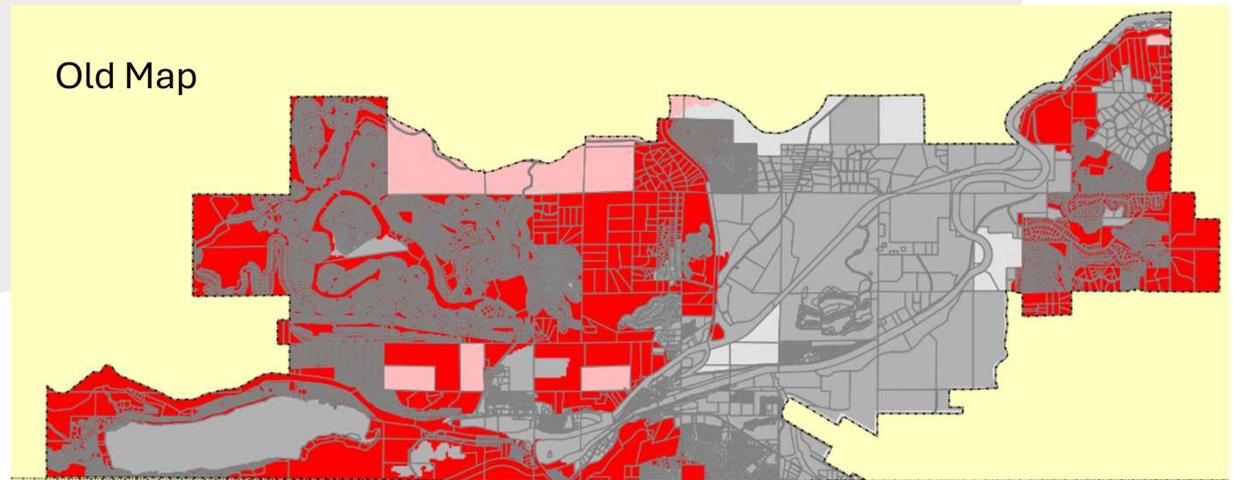
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- “Very High” zone (red) now covers vast majority of town
- “High” zone (orange) covers remainder



Mammoth is  
not unique:

Truckee had  
similar changes



# Impacts



## Building Codes/Inspections:

Since 2008, MLFD fire code has already required new construction throughout town to build to most stringent “WUI” code

- E.g., materials for roofing, siding, decks and defensible space around the structure

Real Estate disclosure law requires defensible space inspection upon sale (Very High & High)

- Will apply to all property sales in town in the future.



## Insurance:

Companies already model for ‘risk’ (not hazard) and costs to rebuild

Hazard is part of the risk piece but doesn’t reflect anything about the dwelling (e.g., defensible space, home hardening, type of roof, size, etc.)



# What Happens Next?

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- New map was released 3/24/25
- Two tasks required for MLFD:
  - 30 days to get the map out for public notice
  - 120 days to get local ordinance adopted recognizing the map

