
COMMUNICATIONS:

Suggested Fire Hazard Severity Zone and Building Standards Revision Messages



California Department of Forestry and Fire Protection Office of the State Fire Marshal

<This is a Working Document and will change over time>

SUGGESTED FHSZ MESSAGES

BACKGROUND

- The highest wildfire losses typically take place during hot, windy days or nights when flames spread so fast that many buildings catch fire and overwhelm available resources.
- Many buildings ignite when burning embers land on wood roofs, blow in through vents, pile up in cracks, or become lodged under boards.
- Constructing buildings in a way that reduces the ability of embers to enter the building reduces a major cause of structure ignition.
- Recently adopted building codes reduce the risk of buildings being ignited by burning embers. Codes are already in effect for roofs and attic vents. Application of roofing standards depend on the Fire Hazard Severity Zone of a property.
- New building codes for California require siding, exterior doors, decking, windows, eaves, wall vents and enclosed overhanging decks, to meet new test standards.
- The new codes are triggered by the Fire Hazard Severity Zone rating of a building site.
- The new codes apply throughout areas where the State has financial responsibility for fire protection and areas in local jurisdiction designated as a very high Fire Hazard Severity Zones.

FIRE HAZARD SEVERITY ZONES

- California law requires CAL FIRE to identify areas based on the severity of fire hazard that is expected to prevail in those areas.
- These areas, or "zones," are based on factors such as fuel (material that can burn), slope, fire weather and fire history.

- Fire hazard severity zones are used for several purposes.
 - Designate areas where building code apply to improve ignition resistance of new structures
 - Used in natural hazard disclosure during real estate sales
 - Relevant to the county general plan review process.

FIRE HAZARD SEVERITY ZONE MODEL

- CAL FIRE has developed a model that uses the latest fire science and data as the basis for Fire Hazard Severity Zone assignments.
- Fire hazard severity zone maps evaluate “hazard,” not “risk”. They are similar in concept to flood zone maps.
 - “Hazard” is based on the physical conditions that give a likelihood that an area will burn over a 30 to 50-year period without considering modifications such as fuel reduction efforts.
 - “Risk” is the potential damage a fire can do to the area under existing conditions, including any modifications such as defensible space, irrigation and sprinklers, and ignition resistant building construction.
 - Hazard is not risk, but is an important component in determining risk.
- The Fire Hazard Severity Zone model has two key wildland fire elements: probability of burning and probable fire behavior when it burns. Hence, the factors considered in determining fire hazard are how often an area will burn and, when it does burn, what characteristics might lead to buildings being ignited.
- In the model, Fire Hazard Severity Zones are areas that have similar burn probabilities and fire behavior characteristics that result in damage to buildings.
- The minimum zone size varies from 20 acres in urbanized areas to 200 acres in wildland areas.
- In wildland areas, expected fire behavior is based on typical severe fire intensity. The calculation also incorporates the potential of a forest fuel type to be ignited by an ember (firebrand) and expectations based on fire history over the last 50 years.
- Urban areas have different fire hazards because they have different types of fuels.
- Urban zones are classified by wildland hazard adjacent to the developed area, the vegetation density in the developed area, and the likely zone of influence of nearby firebrands.

- Model results were reviewed extensively in four counties with very different conditions: Butte, Calaveras, Sonoma, and San Diego. These four counties were selected to represent the different fuel conditions found in California. Further, results were reviewed and field validated in the 56 counties with SRA.

RELEASE OF REVISED FIRE HAZARD SEVERITY ZONE MAPS

- There will be two separate map releases: one for state responsibility area Fire Hazard Severity Zones and one for local responsibility area very high Fire Hazard Severity Zones.
- A hearing on the proposed maps will be held by CAL FIRE in each of the 56 counties with state responsibility area lands during June and July. A single statewide hearing will be held in late summer by CAL FIRE where input from all of the county hearings will be considered. If needed, revisions will be made to the map and final adoption is set for December 2007.
- Local responsibility area Fire Hazard Severity Zones are part of the second release. Focus will be only on very high Fire Hazard Severity Zones in local responsibility areas. Additional opportunities will be given by CAL FIRE to local agencies to study and comment on draft maps over late spring through early fall.
- Formal recommendations by CAL FIRE to local agencies for very high Fire Hazard Severity Zones in local responsible areas will be made in January 2008. Local agencies then have 30 days to make the map public and 120 days to adopt local ordinances establishing very high Fire Hazard Severity Zones.

STATE/LOCAL RESPONSIBILITY AREA FRAMEWORK

- Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. Local responsibility areas include incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.
- State Responsibility Area is a legal term defining the area where the State has financial responsibility for wildland fire protection. Incorporated cities and federal ownership are not included.
- The Board of Forestry and Fire Protection (Board) classifies land as state responsibility area.
- There are over 31 million acres in state responsibility area with an estimated 1.7 million people and 750,000 existing homes.
- The majority of state responsibility area lands also have local fire districts that provide life and property protection and other public safety services.

- All of state responsibility is in a Fire Hazard Severity Zone. Lands are ranked in a moderate, high or very high Fire Hazard Severity Zone.