
FREQUENTLY ASKED QUESTIONS:

Fire Hazard Severity Zones



QUESTIONS ABOUT FIRE HAZARD SEVERITY ZONES

What is a “Fire Hazard Severity Zone,” or FHSZ?

Answer: An FHSZ is a mapped area that designates zones (based on factors such as fuel, slope, and fire weather) with varying degrees of fire hazard (i.e., moderate, high, and very high). While FHSZ zones do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards could be more severe and therefore are of greater concern.

FHSZ maps evaluate wildfire hazards, which are physical conditions that create a likelihood that an area will burn over a 30- to 50-year period. They do not take into account modifications such as fuel reduction efforts.

What are FHSZs meant to accomplish?

Answer: FHSZs are meant to help limit wildfire damage to structures through planning, prevention, and mitigation activities/requirements that reduce risk.

Where do FHSZs apply?

Answer: Moderate, high, and very high FHSZs are found in areas where the State has financial responsibility for fire protection and prevention, called the State Responsibility Area (SRA). Only very high FHSZs are found in Local Responsibility Areas (LRAs).

How are FHSZ classifications determined?

Answer: The classification of a zone as moderate, high, or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings.

Zone boundaries and hazard levels are determined based on vegetation. For wildland areas, the current FHSZ model uses burn probability and expected fire behavior based on weather, fuel, and terrain conditions. For urban areas, zone boundaries and hazard levels are based on vegetation density, adjacent wildland FHSZ scores, and distance from wildland areas.

Each area of the map gets a score for flame length, embers, and the likelihood of the area burning. Scores are then averaged over the zone areas.

How are FHSZs used?

Answer: The FHSZs serve several purposes: they are used to designate areas where California’s wildland urban interface building codes apply to new buildings; they can be a factor in real estate disclosure; and local governments consider fire hazard severity in the safety elements of their general plans.

Are FHSZ maps required by law?

Answer: Yes. FHSZ mapping has legislative authority in two places, both created in legislative sessions after notable catastrophic wildland-urban fires:

1. Public Resources Code Sections 4201-5 (Chapter 806, Statutes of 1982) requires CAL FIRE to map FHSZ on all SRA lands. This legislation was enacted after the Panorama Fire in San Bernardino (1980). Specifically, the intent of this requirement was to use the maps to develop local roof standards (class A, B, and C) to be scoped to moderate, high, and very high FHSZs, respectively.

2. Government Code Sections 51175-89 (Chapter 1118, Statutes of 1992) also known as the "Bates Bill," requires CAL FIRE to make recommendations for very high FHSZ areas to LRA for adoption via a local ordinance. It also provides direction for the local jurisdiction to take appropriate action that will mitigate the rate of fire spread, and reduce the potential intensity of uncontrolled fires that threaten to destroy life, property, or resources. This legislation was enacted after the 1991 Oakland Tunnel Fire. It also requires SRA to have consistent Statewide fire protection measures (e.g., defensible space requirements listed in Public Resources Code Sections 4290-91).

All areas designated via either above mechanisms carry requirements for real estate hazard disclosure, and ignitions-resistant building codes adopted by the California Building Commission in 2007 for new construction.

When were the maps last updated?

Answer: CAL FIRE updated the FHSZs for the entire SRA in 2007. Between 2008 and 2011 CAL FIRE worked with local governments to make recommendations of the very high FHSZs within LRAs. CAL FIRE has no statutory or regulatory authority to enforce map adoption; it is up to local governments to decide whether they adopt CAL FIRE recommendations for very high FHSZ areas in LRA.

When will the maps be updated?

Answer: CAL FIRE is in the planning stages to update FHSZ for all SRA counties in 2018 and upon completion will make recommendations to LRAs. Again, CAL FIRE has no statutory or regulatory authority to enforce map adoption; it is up to local governments to decide whether they adopt CAL FIRE recommendations for very high FHSZ areas in LRA. The latest technologies will be used to complete the new FHSZ maps and will include new factors now available such as land use changes and new significant wind event data.

Specific draft targets for the map rollout include:

- FHSZ model development in 3 pilot counties: June 2018
- FHSZ updates, hearings, and adoption in all SRA counties: November 2018
- CAL FIRE draft recommendations to LRAs: February 2019
- Deliveries of LRA final recommendations: December 2019

Why are FHSZ maps being updated?

Answer: FHSZ maps are meant to reflect fire hazard conditions spanning multiple years, but they do require periodic review and revision to reflect a changing environment and changes to wildfire protection responsibility. The FHSZ maps are being updated to reevaluate the FHSZs in California that are susceptible to wildfire, as well as enhance findings by incorporating new science and technology in the mapping process to determine hazard ratings.

How do I determine the FHSZ of my property?

Answer: You can use your address to find the designation for SRA lands on the web at: www.myhazards.caloes.ca.gov. For LRA designations, please contact your local building department.

What is the process for developing very high FHSZs in LRA?

Answer: CAL FIRE uses the same modeling data that is used to map the SRA. The Department works with local jurisdictions for input into the mapping. The map, along with a model ordinance, are then sent to the governing body for adoption.

What happens when a local government adopts very high FHSZ recommendations?

Answer: Adoption of very high FHSZs triggers requirements for the use of more fire-resistant building materials as described in Chapter 7A of the California Building Code. These requirements can be found at:

http://www.fire.ca.gov/fire_prevention/downloads/ICC_2009_Ch7A_2007_rev_1Jan09_Supplement.pdf

http://www.fire.ca.gov/fire_protection/downloads/Part_2_CA_Building_Code_CH_7Av2.pdf

In addition, cities can adopt local ordinances with more stringent requirements.

What are the requirements for landowners in very high FHSZs in LRAs?

Answer: California's wildland building codes (Chapter 7A) apply to the design and construction of new buildings located in very high FHSZs in LRAs. Local ordinances may require ignition resistant construction for remodel projects. Check with your local building department to determine which ignition resistant building codes apply to your project. In addition, Government Code Section 51182 calls for defensible space clearance and other wildland fire safety practices for buildings. Owners are also required to make a natural hazard disclosure as part of a real estate transfer. For information regarding "home hardening" and defensible space clearance, visit www.ReadyForWildfire.org.

Does the designation of very high FHSZ in the LRA trigger the 100-foot clearance requirement?

Answer: Yes, unless exempted by local government under specified conditions, the 100-foot defensible space clearance requirements apply.

How does CAL FIRE assist Local Governments in very high FHSZs?

Answer: CAL FIRE's Land Use Planning Program is a specialized unit that provides support to local governments by providing fire safety expertise on the State's wildland urban interface building codes, wildfire safety codes, as well as helping in the development of the safety elements in general plans. Currently there are 189 cities and 35 counties with LRA FHSZ.

QUESTIONS ABOUT THE FIRE HAZARD SEVERITY ZONE MODEL USED BY CAL FIRE

Why does the FHSZ model place an emphasis on the spread of burning embers?

Answer: Embers can travel long distances in the wind and ignite vegetation, land on roofs, slip through vents in attics, and ignite decks.

QUESTIONS ABOUT WILDLAND-URBAN INTERFACE BUILDING STANDARDS

What are the wildland urban interface building codes in SRA?

Answer: Chapter 7A building codes (most recently updated in 2016) reduce the risk of burning embers fanned by wind-blown wildfires from igniting buildings. Roofing standards vary by the fire hazard zone rating of the site. The codes for siding, decking, windows, and vents apply throughout all SRA regardless of the fire hazard severity ranking. Ember-resistant building materials can be found at: www.ReadyForWildfire.org/Hardening-Your-Home