Frequently Asked Questions

FIRE HAZARD SEVERITY ZONES (FHSZ) AND NEW BUILDING CODES FOR CALIFORNIA’S WILDLAND URBAN INTERFACE

GENERAL QUESTIONS

1. What can be done to reduce building loss from wildfire?

Answer: Years of experience by fire agencies and others have led to a State of California statutory strategy for reducing the chance of building loss or damage. It is a two-pronged approach: 1) defensible space – reduce flammable material around homes to keep direct flames and heat away from the side of the building. (The law already requires property owners to create 100 feet of defensible space around buildings); 2) exterior wildfire exposure protection - construct buildings so that they have less chance of catching fire from burning embers. We have learned that we must make changes to the surrounding property and to the buildings themselves.

2. Can the new building codes protect my home from fire?

Answer: Fire safe building practices can’t make your home fire proof but they can improve the chances that it will still be standing after the wildfire is out.

3. What is the “Bates” bill?

Answer: The “Bates” bill, Government Code Section 51175, was prompted by the devastating Oakland Hills Fire of 1991. This mid-1990s legislation calls for the CAL FIRE Director to evaluate fire hazard severity in local responsibility area and to make a recommendation to the local jurisdiction where Very High Fire Hazard Severity Zones exist. The Government Code then provides direction for the local jurisdiction to take appropriate action.

4. What is “Local Responsibility Area”, or LRA?

Answer: 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. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.
5. **Will there be a single map that shows FHSZ statewide? Countywide?**

**Answer:** There will be a single map that shows FHSZ on state responsibility areas statewide and for each county within state responsibility areas. There will be an initial map of Very High FHSZ recommended by CAL FIRE for local responsibility areas. Local jurisdictions statewide, including San Diego, validated the map with reflective fuels on the ground, correcting minor model errors and updating areas where development had occurred and was not reflected in the State’s vegetation layer. This information was transmitted to CAL FIRE. Once local jurisdictions receive the final map from CAL FIRE, there is no reporting requirement for local government to report back to CAL FIRE.

6. **Will the Very High Fire Hazard Severity Zone in Local Responsibility Area affect the cost and availability of fire insurance?**

**Answer:** Insurance rates are determined by a variety of factors, including Fire Risk. Fire Risk is different from Fire Hazard. Fire Hazard is the focus of the Fire Hazard Severity Zone (FHSZ) maps, not Fire Risk. Fire Hazard is based on factors such as fuel (material that can burn), slope and fire weather. Fire Risk considers the potential for damage based on factors such as the ability of a fire to ignite the structure, the flammability of the construction material, and mitigation measures that reduce the risk. These mitigation measures include defensible space, building design, ignition resistant building materials, and ignition resistant construction techniques.

Ultimately, it is not possible to state that insurers will ignore the limitations of the focus of FHSZ maps. However, to respond to such issues, the California Department of Insurance and CAL FIRE have established a partnership and joint commitment to protecting Californians from fire losses. A Memorandum of Understanding (MOU) was signed by the Insurance Commissioner and the Director of CAL FIRE, October, 2007 to mutually promote awareness and collaboration among fire officials, the insurance industry, and the public to prevent and mitigate fire losses.


**QUESTIONS ABOUT FIRE HAZARD SEVERITY ZONES**

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

**Answer:** California law requires CAL FIRE to identify areas based on the severity of fire hazard that is expected to prevail there. These areas, or “zones,” are based on factors such as fuel (material that can burn), slope and fire weather. There are three zones, based on increasing fire hazard—medium, high and very high.
8. What does FHSZ measure?

Answer: The Fire Hazard Severity Zone map evaluates “hazard,” not “risk”. It is like the flood zone maps. “Hazard” is based on the physical conditions that create 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.

9. Where do Fire Hazard Severity Zones apply?

Answer: Fire Hazard Severity Zones are found in areas where the State has financial responsibility for fire protection, called State Responsibility Areas. Very High Fire Hazard Severity Zones are found in local jurisdictions responsible for fire protection, called Local Responsibility Areas.

10. What is the timeline for implementation of San Diego’s Very High Fire Hazard Severity Map?

Answer: In accordance with the California Government Code, San Diego City identified Very High Fire Hazard Severity Zones and submitted its draft map to CAL FIRE. San Diego City staff worked closely with CAL FIRE in establishing these zones. Also mandated by the Government Code, once the Director of CAL FIRE transmits the final map and letter, local jurisdictions shall make the information available to the public for review for 30 days and 120 days from receipt to adopt the map by local ordinance. However, since San Diego has not yet received this formal letter and final map from CAL FIRE, San Diego intends to publish its draft map in March 2009 for a 60-day public review period.

11. Why are Fire Hazard Severity Maps being updated?

Answer: The hazard maps are being updated to more accurately reflect the zones in California that are susceptible to wildfire. The hazard mapping process incorporates new science and technology in determining hazard ratings.

12. How often will the Fire Hazard Severity Zone Maps be updated?

Answer: The State of California, CAL FIRE, has advised this map will be updated approximately every five years.

13. Is there an easy way to determine if my property is in a Very High Fire Hazard Severity Zone?

Answer: Yes, if you know the address of the property, you can find the designation by accessing the link for the Very High Fire Hazard Severity Map on the City’s Fire-Rescue Department’s website by simply clicking on the Very High Fire Hazard Severity Map. This map will also be available in hard copy at your local library.
14. How are Fire Hazard Severity Zones determined in local responsibility areas?

**Answer:** CAL FIRE uses an extension of the state responsibility area Fire Hazard Severity Zone model as the basis for evaluating fire hazard in local responsibility area. The local responsibility area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area. Scientists at the U. C. Berkeley Center for Fire Research and Outreach provided an urban fuels model that was incorporated in the hazard rating.

15. What does the City of San Diego Very High Fire Hazard Severity Zone (VHFHSZ) map encompass and will it supersede the 300 ft map layer currently in effect?

**Answer:** The proposed Very High Fire Hazard Severity Zone map (VHFHSZ) map will include both the areas mapped by the State as well as the 300 ft buffer zone.

QUESTIONS ABOUT FIRE HAZARD SEVERITY ZONES AND BUILDING STANDARDS IN LOCAL RESPONSIBILITY AREAS

16. What are the additional regulations that will apply when a building is located on a lot within the Very High Fire Hazard Severity Zone Map?

**Answer:** Chapter 7A of the 2007 California Building Code, as adopted and amended by the City of San Diego, (Chapter 7A) Includes additional building standards applicable to new construction for projects located within the VHFHSZ map. The additional building standards in Chapter 14 Article 5 Division 38 of the Municipal Code apply in conjunction with the requirements of Chapter 7A.

17. My building is located on a lot that is partially located within the Very High Fire Severity Map. Do the requirements of Chapter 7A apply to my project?

**Answer:** Yes, if any portion of the lot falls within the VHFHSZ map, the requirements of Chapter 7A apply.

18. What types of projects do the building standards in Chapter 7A apply to?

**Answer:** The building standards in Chapter 7A apply to all new buildings, additions to existing buildings and to exterior alterations to existing buildings impacting one or all of the regulated building features addressed in Chapter 7A.

19. Do additions to existing buildings need to comply with the building standards in Chapter 7A?

**Answer:** Yes, the building standards in Chapter 7A apply to additions to existing buildings.
20. Do interior alterations to a building trigger compliance with the building standards in Chapter 7A?

**Answer:** No. Interior alterations do not trigger compliance with Chapter 7A since they are not within the scope of the regulations.

21. What types of exterior building alterations trigger compliance with the building standards in Chapter 7A?

**Answer:** The requirements of Chapter 7A apply to exterior alterations to items regulated by Chapter 7A.

For example:

- The replacement of roof coverings will require compliance with the flashing and underlayment requirements of Chapter 7A.
- Alterations or additions to attic ventilation shall comply with Chapter 7A. New ventilation openings and alterations to ventilation openings shall comply with limitations and construction standards of Chapter 7A.
- The replacement of exterior doors or windows or other glazed openings will also subject the alteration to comply with door and glazing standards in Chapter 7A.

22. What if a building permit is not required for a particular scope of work; am I exempt from compliance with Chapter 7A?

**Answer:** No. Section 129.0203 (d) of the San Diego Municipal Code makes clear that exemption from the permit requirements of the Building Regulations does not authorize any work to be done in any manner in violation of the provisions of the Building Regulations or any other applicable local or state regulations.

23. When will compliance with Chapter 7A be required in the City of San Diego?

**Answer:** Chapter 7A will be in effect within the City of San Diego after adoption of the Very High Fire Hazard Severity Map. Building standards are minimum standards and nothing precludes a property owner from complying with the building standards prior to them being in effect on a mandatory basis.

24. Will the Building Standards in Chapter 7A apply to mobile homes in mobile home parks?

**Answer:** No. Mobile home parks are regulated under Title 25 of the California Code of Regulations and Building Standards in Title 24 do not apply to them. However, and as a result of recently adopted rule making, the State has adopted emergency ignition resistant construction standards for mobile homes based on standards in Chapter 7A in the 2007 California Building Code and these new standards are in effect as of January 21, 2009 and will apply to newly installed and relocated mobile homes. For more
QUESTIONS ABOUT SAN DIEGO’S VERY HIGH FIRE HAZARD SEVERITY ZONE MODEL

25. What are the key elements and methodology of San Diego’s Very High Fire Hazard Severity Zone model?

Answer: San Diego conducted a fire risk assessment utilizing spatial analysis tools and the City’s Geographical Information System (GIS) and developed a Fire Severity Map for the City. The National Fire Protection Association (NFPA) 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire, the Wildland/Urban Interface Danger Rating System as well as the International Wildland/Urban Interface Code were used to identify risk factors and to assign risk values. The rating system used five factors from NFPA’s standard: density of vegetation; slope severity; five minute fire department response time; road class/proximity, and proximity to fire hydrants and CAL FIRE’s vegetation cover and fire behavior/fuel spread model. Using the software-based GIS tools, including ESRI’s ArcGIS Spatial Analyst Extension, a relative risk was assigned to features described by data which was then combined to create a cumulative dataset identifying very high wildland fire risk across the City.

26. Why don’t the maps reflect the fuel reduction and defensible space work done in an area?

Answer: Fire hazard and fire risk are not the same. Actions such as creating defensible space around buildings or thinning vegetation reduce the fire risk to that area but they do not significantly change the fire hazard. Hazard + Mitigations = Risk.

27. Why didn’t CAL FIRE include areas within the City of San Diego?

Answer: These areas did not meet the State’s modeling criteria. For example, CAL FIRE’s model uses a minimum grid of 20 acres of wildland vegetation; thus, anything less than that would not be zoned.