FREQUENTLY ASKED QUESTIONS ABOUT:
2020 Fire Hazard Severity Zones

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, slope and fire weather. There are three zones, based on increasing fire hazard…medium, high and very high.

How are FHSZ determined?
Answer: CAL FIRE used the best available science and data at the time to develop and field test a model that served as the basis of zone assignments. The model evaluated properties using characteristics that affect the probability of the area burning and potential fire behavior in the area. Many factors were included such as fire history, vegetation, flame length, blowing embers, terrain, weather and the likelihood of buildings igniting.

When were the maps last updated?
Answer: In 2007, CAL FIRE updated the FHSZs for the entire State Responsibility Area. Between 2008-2011 the department worked with local governments to make recommendations of the very high Fire Hazard Severity Zones within Local Responsibility Areas.

When will the maps be updated?
Answer: CAL FIRE has begun the planning process for updating the FHSZs in 2020. The latest technologies will be used in the mapping and will include new factors now available including land use changes, new significant wind event data, as well as a model that is more spatially detailed.

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 will incorporate new science in local climate data and improved fire spread modeling in determining hazard ratings.

QUESTIONS ABOUT FIRE HAZARD SEVERITY ZONES

What does FHSZ measure?
Answer: Fire Hazard Severity Zone maps evaluate "**hazard," not "risk**". They are like 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.

Where do Fire Hazard Severity Zones apply?
Answer: Fire Hazard Severity Zones are found in areas where the State has financial responsibility for wildfire protection and prevention, called the State Responsibility Area. More than 31 million acres are in this area. Very high Fire Hazard Severity Zones are found in local jurisdictions as well.

What are the uses of Fire Hazard Severity Zones?
Answer: The zones are used for several purposes including to designate areas where California's defensible space standards and wildland urban interface building codes are required. They can be a factor in real estate disclosure, as well as Local governments consider them in their general plan.

Is there an easy way to determine the Fire Hazard Severity Zone of my property?
Answer: If you know your address you can find the designation on the web at:
https://egis.fire.ca.gov/FHSZ/

QUESTIONS ABOUT THE FHSZ MODEL USED BY CAL FIRE

What are the key elements of the Fire Hazard Severity Zone model?
Answer: The fire hazard severity model for wildland fire has two key elements: probability of burning and probable fire behavior. 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. FHSZs are not however a structure loss model.

In the model, Fire Hazard Severity Zones are areas that have similar burn probabilities and fire behavior characteristics. In wildland areas, expected fire behavior is based on typical fire intensity on a normally severe fire weather day. The calculation also incorporates the potential of vegetation to be ignited by an ember and expectations based on fire history over the last 50 years.

What is the difference between the various Fire Hazard Severity Zones?
Answer: 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. 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. Final zone class (moderate, high and very high) is based on the averaged scores for the zone.

Why does the model place an emphasis on the spread of burning embers?
Answer: Embers spread wildfire because they can travel long distances in the wind and ignite vegetation, roofs, attics (by getting into vents), and decks.

QUESTIONS ABOUT FHSZ AND BUILDING STANDARDS IN THE STATE RESPONSIBILITY AREA

What is "State Responsibility Area," or SRA?
Answer: State responsibility area is a legal term defining the area where the State has financial responsibility for wildland fire protection and prevention. Incorporated cities and federal ownership are not included. Within the SRA, CAL FIRE is responsible for fire prevention and suppression. There are more than 31 million acres in SRA with an estimated 1.7 million people and 800,000 existing homes.

How is state responsibility area determined?
Answer: The Board of Forestry and Fire Protection (Board) classifies land as state responsibility area. The legal definition of SRA is found in the Public Resources Code Section 4125. The Board has developed detailed procedures to classify lands as state responsibility area. Lands are removed from SRA when they become incorporated by a city, change in ownership to the federal government, become more densely populated, or are converted to intensive agriculture that minimizes the risk of wildfire. While some lands are removed from SRA automatically, the Board typically reviews changes every five years.

What Fire Hazard Severity Zones are in state responsibility area?
Answer: All of the state responsibility area is in a Fire Hazard Severity Zone. Lands are either ranked as moderate, high or very high Fire Hazard Severity Zones.

What are the wildland urban interface building codes in state responsibility area?
Answer: The 2008 building codes (Chapter 7A) 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 state responsibility area regardless of the fire hazard severity ranking. Ember-resistant building materials can be found at:
https://www.readyforwildfire.org/prepare-for-wildfire/get-ready/hardening-your-home/

QUESTIONS ABOUT VERY HIGH FIRE HAZARD SEVERITY ZONES IN LOCAL RESPONSIBILITY AREAS

What is "Local Responsibility Area", or LRA?
Answer: Local Responsibility Areas (LRA) are incorporated cities, urban regions, agriculture lands, and portions of the desert where the local government is responsible for wildfire protection. This is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract.

What is the "Bates Bill"?
Answer: The "Bates Bill" (AB 337), Government Code Section 51175, was prompted by the devastating Oakland Hills Fire of 1991. This mid-1990s legislation calls for CAL FIRE to evaluate fire hazard severity in local responsibility area and to make a recommendation to the local jurisdiction where very high FHSZs exist. The Government Code then provides direction for the local jurisdiction to take appropriate action.

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.

What are the requirements for landowners in very high FHSZs in local responsibility areas?
Answer: California's wildland building codes (Chapter 7A) apply to the design and construction of new buildings located in very high FHSZs in local responsibility areas. 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 a local government has passed a more stringent requirement, the 100 foot defensible space clearance apply.

How does CAL FIRE assist Local Governments in very high Fire Hazard Severity Zones?
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 56 counties with FHSZ.

What is the process for developing very high Fire Hazard Severity Zones in LRA?
Answer: CAL FIRE uses the same modeling data that is used to map the State Responsibility Area. 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.

OTHER QUESTIONS

How do the Fire Hazard Severity Zone Maps differ from the CPUC Fire Threat Maps
Answer: The California Public Utilities Commission (CPUC) sponsored map, known as "CPUC Fire-Threat Map," includes similar factors as those in the FHSZ maps, however the CPUC Fire Threat Map is designed specifically for the purpose of identifying areas where there is an increased risk for utility associated wildfires. As such, the map includes fire hazards associated with historical powerline wildfires.