



Date: January 3, 2018
To: Jessica Jones, Supervising Planner
From: Scott Moon, Division Chief Fire Marshal
Subject: Mapping and Development in the Wildland-Urban Interface Fire Area

This purpose of this memo is to detail the specifics of the Wildland-Urban Interface Fire Area map boundaries for the City of Santa Rosa Local Responsibility Areas (LRA's), in comparison to the areas identified by the Director of Cal Fire as Moderate, High and Very High Fire Hazard Severity Zones, and how they relate to enhanced building and fire code requirements. The significance of this designation relates to the building requirements that are imposed on new structural development and vegetation management within designated areas within the LRA's.

After the 1991 Oakland Hill fires the Bates Bill was enacted and a requirement for the Director of the California Department of Forestry and Fire Protection to evaluate all State and Local Responsibility Areas for vulnerability to wildland fire risk/threats. In 1994 a map was produced for the City of Santa Rosa Local Responsibility Area (LRA) and that map covered approximately 25% of the City of Santa Rosa. Since adoption of the Santa Rosa LRA map for the Very High Fire Hazard Severity Zones the boundary has grown as areas have been annexed, and the area is now approximately 30% of the community.

In 2007 and 2008 the Director of Cal Fire re-evaluated all of the areas formerly identified as VHFHSZ's and based on criteria such as; weather, fuel types, topography, fire history and development within the VHFHSZ's created three zones. The zones were Moderate, High and Very High Fire Hazard Severity Zones. For the City of Santa Rosa, we saw a great reduction in the size of our VHFHSZ's, but no reduction in our perceived threat or risk in our community. After the mapping was completed by Cal Fire the City had the ability to adopt the updated maps, or adopt a local ordinance declaring a Wildland-Urban Interface Fire Area (WUI). The importance of this designation lies in the local authority's ability to enforce more restrictive building and fire code requirements for this area. The enhanced building and fire codes were intended to apply to all Fire Hazard Severity Zones in the State Responsibility areas and only the Very High Fire Hazard Severity Zones in the Local Responsibility Zones (which as mentioned our VHFHSZ's were greatly reduced after the re-mapping in 2007/2008), unless a local authority adopted a Wildland Urban Interface Fire Area map, which the City of Santa Rosa chose to do. By locally adopting a WUIFA map we maintained our former 30% coverage map, previously entitled the Very High Fire Hazard Severity Zone map, and retitled it the Wildland-Urban Interface Fire Area map.

Even though most of the buildable area within these WUI locations were near buildout, it was the desire of the Fire Department to be able to apply the current enhanced building standards to all newly constructed buildings after July 1, 2008.

With regard to construction enhancements for projects located in the WUI areas there were two phases that occurred during the following periods:

Phase 1 - Effective December 1, 2005:

- Roof coverings
- Attic vents

Phase 2 – Effective July 1, 2008:

- Exterior siding
- Exterior wall vents
- Exterior doors
- Windows
- Decking surfaces
- Floor projections

The California Building (Chapter 7A) and Fire Code (Chapter 49) enhancements for the WUI area exceed what is required for building construction located outside of the WUI and are as follows with some exceptions:

1. Vegetation Management compliance – per CFC, Ch. 49, Section 4906, Public Resources Code 4291 and the California Government Code Section 51182.
2. Building materials are required to meet specific qualifications by testing, and materials shall be approved or listed by the Office of the State Fire Marshal or identified in a current report by an approved agency.
3. Materials and material assemblies tested in accordance with the requirements of section 703A shall bear an identification label showing the fire testing results.
4. Apply requirements for ignition resistant construction materials – Noncombustible materials, Fire retardant treated wood and fire retardant treated wood shingles and shakes.
5. Roofing requirements specific to; roof covering, roof valleys and roof gutters.
6. Vent requirements – there shall be modification to vent opening as to resist building ignition from the intrusion of burning embers and flames through the ventilation openings. There are several criteria that must be met for compliance with this requirement.
7. Exterior coverings – specific to the materials and construction methods used to resist building ignition and/or safeguard against the intrusion of flames resulting from small ember and short term direct flame contact exposure. These include; exterior wall covering materials, exterior wall assembly, exterior exposed underside of roof eave overhangs, exterior exposed underside of roof eave soffits, exposed underside of exterior porch ceilings, exterior underside of floor projections and exterior underfloor areas.
8. Exterior window and door requirements – exterior glazing and tempered requirements for windows. Doors must meet one of the following; non-combustible, solid core wood that complies with specific requirements, have a 20-minute rating in accordance with testing to NFPA 252 or meet the performance requirements of SFM Standard 12-7A-1.
9. Decking – materials shall meet one of the specific requirements when located within 10 feet of the building; ignition resistant materials meeting specific SFM Standards, exterior fire retardant treated wood, noncombustible materials or any material that complies with the performance requirements of SFM Standard 12-7A-4A when attached exterior wall covering is also either noncombustible or ignition resistant.
10. Accessory structure requirements – if they pose a significant exterior exposure hazard shall be constructed to conform to ignition resistant requirements of the accessory structure section.

There are also five initial express terms for the proposed Building Standards of the Office of the State Fire Marshal, regarding proposed changes to 2016 California Building Code California Code of Regulations, Title 24, Part 2. These items look to address the following within the WUI areas:

1. Adding conditions for skylights to the windows and doors section of CBC Ch. 7A.
2. Adding a requirement for weather stripping. All exterior doors including garage doors shall be provided with weather stripping to resist the intrusion of embers from entering through gaps between doors and door openings.
3. Specific requirements addressing accessory structures in the WUI.
4. Referenced Standards in the WUI Areas clarifications and modifications.
5. Editorial modifications of regulations for vegetation management in the WUI.

These items will become enforceable in Ch. 7A of the CBC on July 1, 2018.