

Board of Forestry and Fire Protection

Notice of Proposed Emergency Action, (pursuant to GOV § 11346.1)

Zone 0 Defensible Space Notice Date: August 20, 2026

The Board of Forestry and Fire Protection (hereafter "Board") has adopted emergency regulations to establish an ember-resistant zone within five feet of a building or structure as required by changes to Public Resources Code section 4291 and within five feet of an occupied building as required by Government Code section 51182. Pursuant to Government Code section 11346.1, the Board provides notice of this proposed emergency action. This action is being taken in accordance with Government Code sections 11346.1, 11346.5(a)(2) through (6) inclusive, and 11349.6. The Board adopted the emergency regulations at its regular meeting on August 19, 2026 and plans on submitting them to the Office of Administrative Law ("OAL") on or after August 28, 2026.

SUBMITTING COMMENTS

If you wish to comment on the proposed emergency action, you must submit the comment directly to OAL within **five (5) calendar days** of OAL's posting of the proposed emergency regulations on the OAL website. You may submit comments on the proposed emergency action to:

Mail:

OAL Reference Attorney
300 Capitol Mall, Suite 1250
Sacramento, California 95814

Fax:

(916) 323-6826

E-mail:

staff@oal.ca.gov

OAL will accept all comments submitted by the specified deadline.

When you submit a comment to OAL, you must also submit a copy of your comment to the rulemaking agency's specified contact person provided below.

Mail:

Tony Andersen
Executive Officer
Board of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 944244-2460

Fax:

(916) 653-8007

E-mail:

publiccomments@BOF.ca.gov

GOV § 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to OAL, the adopting agency provide a notice of the proposed emergency action with the agency. After submission of the proposed emergency to OAL, OAL shall allow interested persons five (5) calendar days to submit comments on the proposed emergency regulations as set forth in Government Code section 11349.6.

This regulation will likely be submitted to the Office of Administrative Law on or after **August 28, 2026. If the regulation is submitted to OAL on that date and is posted on its website, the public comment period will close on September 2, 2026.**

OAL will confirm that it has received a comment. Pursuant to Title 1, California Code of Regulations (CCR), §§ 55(b)(1) through (4), the comment must state that it is about an emergency regulation and include the topic of the emergency.

The Board is not required and, in this instance, not likely to respond to comments submitted. However, should the Board choose to respond, it must submit its response to OAL within **eight (8) calendar days** following the date of submission of the proposed emergency regulation to OAL, unless specific exceptions are applicable. [Title 1 CCR § 55].

Pursuant to **GOV § 11346.1(a)(2)(A)**, the specific rule text associated with the proposed action immediately follows this notice.

EMERGENCY FINDINGS

Pursuant to **GOV § 11346.1(b)(2)**, following is a description of the facts demonstrating the existence of an emergency and the need for immediate action, and demonstrating, by substantial evidence, the need for the proposed regulation to effectuate the statute being implemented, interpreted, or made specific and to address only the demonstrated emergency.

On September 29, 2020, Governor Newsom signed Assembly Bill 3074 (Stats. 2020, chapter 259) which was then filed with the Secretary of State on September 29, 2020, and became effective January 1, 2021. Assembly Bill 3074 amended Sections 51182, 51186, and 51189 of the Government Code, and Section 4291 of the Public Resources Code, relating to fire prevention. This bill directed the Board to promulgate regulations to create an ember-resistant zone within five feet of a structure within the State Responsibility Area ("SRA") and the Very High Fire Hazard Severity Zone (VHFHSZ) of Local Responsibility Areas ("LRA") on or before January 1, 2023. In 2025, after the Los Angeles fires in January of that year, Governor Newsom issued Executive Order N-18-25, which required the Board create an ember-resistant zone within five feet of a structure on or before January 1, 2025 via the rulemaking process. On October 13, 2025, Governor Newsom signed Assembly Bill 1455 (Stats. 2025, chapter

731) which was then filed with the Secretary of State on September 29, 2020, and became effective January 1, 2026. This bill clarified that the Board had authority over rulemaking for LRAs and clarified that the adoption or readoption of these regulations does not constitute a project for purposes of CEQA. This bill also stated “If adopting the regulations through the regular rulemaking process of the Administrative Procedure Act would inhibit compliance with the deadline in Executive Order No. N-18-25, the bill would require the regulations to be adopted as emergency regulations and would require the Office of Administrative Law to consider the adoption of initial regulations as necessary for the immediate preservation of the public peace, health, safety, and general welfare. The bill would authorize the state board to readopt any of these emergency regulations, as provided, and would make any of these adopted or readopted emergency regulations effective until revised by the state board.”

The Legislature’s finding and determination that a statutory emergency exists necessitates the adoption of these regulations as emergency regulations. The Board concurs with the Legislature’s finding and determination that a statutory emergency exists that necessitates the adoption of Defensible Space Zone 0 as emergency regulations, and that the adoption of regulations related to these exemptions is necessary for the preservation of the public peace, health, safety, and general welfare in the state.

According to the CAL FIRE Incident Archive, in 2025, over half a million acres in California burned in wildfires. 16,627 structures were destroyed, and there were at least 31 fatalities. The compounding loss of structures and lives presents a clear danger to the citizens of the state of California. Pursuant to **Government Code section 11342.545** this situation calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare caused by the continuing and increasing threat of catastrophic wildfires.

The Board is proposing action to implement the ember-resistant zone via adoption of **14 CCR §§ 1298.01, 1298.02, 1298.03, and 1298.04**, and to amend **14 CCR §§ 1299.01, 1299.02, and 1299.03**.

Pursuant to **Government Code section 11346.1(b)(2)**, following is the list of each technical, theoretical and empirical study, report, or similar documents, if any, upon which the Board relied to make the “emergency” finding:

Assembly Bill 3074, Chapter 259, signed by the Governor September 29, 2020, Filed with the Secretary of State September 29, 2020.

Assembly Bill 1455, Chapter 731, signed by the Governor October 13, 2025, Filed with the Secretary of State October 13, 2025.

ASTM E136, Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750 °C, January 12, 2026, ASTM International

Bethke, J. A., Bell, C. E., Gonzales, J., Lima, L., Long, A., & McDonald, C. J. (2016). Research literature review of plant flammability testing, fire-resistant plant lists and relevance of a plant flammability key for ornamental landscape plants in the Western States. *Final report. Farm and Home Advisor’s Office University of California*

Caton, S. E., Hakes, R. S., Gorham, D. J., Zhou, A., & Gollner, M. J. (2017). Review of pathways for building fire spread in the wildland urban interface part I: exposure conditions. *Fire technology*, 53(2), 429-473.

Escobedo, F. J., Yadav, K., Cappelluti, O., & Johnson, N. (2025). Exploring urban vegetation type and defensible space's role in building loss during wildfire-driven events in California. *Landscape and Urban Planning*, 262, 105421.

Executive Order N-18-25, Executive Department State of California, February 6, 2025

Fauss, K., Celebrezze, J. V., Fitch, R. L., Boving, I., Dye, R., & Moritz, M. A. (2025). Landscaping defensible space: Plant flammability testing informs recommendations to reduce community fire hazard. *Landscape and Urban Planning*, 264, 105483.

Giammanco, I.M, Hedayati, F., Hawks, S.R., Sanchez Monroy, X., Sluder, E. The Return of Conflagration in Our Built Environment. Institute for Business & Home Safety Wildfire Research Report. (2023).

Gollner, M., ZamaniAlaei, M., San Martin, D., Theodori, M., Purnomo, D., Tohidi, A., Lautenberger, C., Trouve, A., Qin, Y. (2025). Isolating the Primary Drivers of Fire Risk to Structures in WUI Regions in California.

Hakes, R. S., Caton, S. E., Gorham, D. J., & Gollner, M. J. (2017). A review of pathways for building fire spread in the wildland urban interface part II: response of components and systems and mitigation strategies in the United States. *Fire technology*, 53(2), 475-515.

Hedayati, F., Stansell, C., Gorham, D., & Quarles, S. (2018). Wildfire Research: Near-Building Noncombustible Zone. Insurance Institute for Business & Home Safety (IBHS).

Insurance Institute for Business and Home Safety Post-Event Investigation: California Wildfires of 2017 and 2018. (2020).

Insurance Institute for Business and Home Safety. 2025 LA County Wildfires: Early Insights from Field Observations Insurance Institute for Business & Home Safety. (2025).

Johnsson, E.L., Butler, K.M., Fernandez, M.G., Tang, W., Nazaré, S., Deardorff, P., Arana, S., Maranghides, A. Wind-Driven Fire Spread to a Structure from Landscape Timbers. NIST Technical Note 2307. (2025).

Kerber, S. and Alkonis, D. (2024). Lahaina Fire Incident Analysis Report. UL Research Institutes. Report. <https://doi.org/10.60752/102376.26858962.v2>.

Knapp, E.E., Valachovic, Y.S., Quarles, S.L., Johnson, N.G. (2021). Housing Arrangement and Vegetation Factors Associated with Single-Family Home Survival in the 2018 Camp Fire, California. *Fire Ecology*. 17: 25.

Lin, S., Li, C., Conkling, M., Huang, X., Quarles, S.L., and Gollner, M. J. (2024). Smoldering Ignition and Transition to Flaming in Wooden Mulch Beds Exposed to Firebrands Under Wind. *Fire Safety Journal*. 148: 104226.

Maranghides, A., Link, E.D., Nazare, S., Hawks, S., McDougald, J., Quarles, S.L., and Gorham, D.J. (2022). WUI Structure/Parcel/Community Fire Hazard Mitigation Methodology. US Department of Commerce, National Institute of Standards and Technology. Technical Note 2205.

Maranghides, A., & Mell, W. (2011). A case study of a community affected by the Witch and Guejito wildland fires. *Fire technology*, 47(2), 379-420.

Maranghides, A., Nazare, S., Butler, K.M., Johnsson, E.L., Link, E., Bundy, M., Chernovsky, A., Hawks, S., Bigelow, F., Mell, W., Bova, A., McNamara, D., Milac, T., Raymer, R., Frievaldt, F., and Walton, W. (2023). NIST Outdoor Structure Separation Experiments (NOSSE) with Wind. US Department of Commerce, National Institute of Standards and Technology. Technical Note 2253.

Noncombustible Zone 0: Minimizing Pathways to Home Ignition. (2023). Insurance Institute for Business and Home Safety. Retrieved June 13, 2025

Radeloff, V. C., Mockrin, M. H., Helmers, D., Carlson, A., Hawbaker, T. J., Martinuzzi, S., ... & Pidgeon, A. M. (2023). Rising wildfire risk to houses in the United States, especially in grasslands and shrublands. *Science*, 382(6671), 702-707.

Samora-Arvela, A., Aranha, J., Correia, F., Pinto, D.M., Magalhães, C., Tedim, F. (2023). Understanding Building Resistance to Wildfires: A Multi-Factor Approach. *Fire*. 6(1): 32.

Syphard, A.D., Brennan, T.J., and Keeley, J.E. (2017). The Importance of Building Construction Materials Relative to Other Factors Affecting Structure Survival During Wildfire. *International Journal of Disaster Risk Reduction*. 21: 140-147.

Syphard, A.D., Brennan, T.J., and Keeley, J.E. (2014). The Role of Defensible Space for Residential Structure Protection During Wildfires. *International Journal of Wildland Fire*, 23(8): 1165-1175.

Valachovic, Y., Quarles, S.L., and Swain, S.V. (2021). Reducing the Vulnerability of Buildings to Wildfire: Vegetation and Landscaping. UC ANR Publication 8695.

Pursuant to **GOV § 11346.1(b)(2)**, following is the information required by **GOV § 11346.5(a)(2)** (the reference to the authority(s) under which the regulation is proposed and a reference(s) to the particular code sections or other provisions of law that are being implemented, interpreted, or made specific).

14 CCR § 1298.01 Authority cited: Section 51182, Government Code. Reference: Sections 51178, 51179, and 51181 Government Code and Section 4291, Public Resources Code. California Code of Regulations Title 14 Section 1220.

14 CCR § 1298.02 Authority cited: Section 51182, Government Code. Reference: Sections 51178, 51179, 51181 and 51186 Government Code; Section 4291, Public Resources Code; and Sections 18908 and 18917, Health and Safety Code.

14 CCR § 1298.03 Authority cited: Section 51182, Government Code. Reference: Sections 51178, 51179, and 51181 Government Code; Sections 4290, 4291 and 4291.3, Public Resources Code.

14 CCR § 1298.04 Authority cited: Section 51182, Government Code. Reference: Sections 4290 and 4291, Public Resources Code; and Gov Code section 66313.

14 CCR § 1299.01 Authority cited: Sections 4290 and 4291, Public Resources Code. Reference: 18 Section 4291, Public Resources Code.

14 CCR § 1299.02 Authority cited: Sections 4290 and 4291, Public Resources Code. Reference: Section 4291, Public Resources Code; and Sections 18908 and 18917, Health and Safety Code

14 CCR § 1299.03 Authority cited: Sections 4290 and 4291, Public Resources Code. Reference: Section 4291, Public Resources Code; and Sections 18908 and 18917, Health and Safety Code.

Pursuant to **1 CCR § 20(c)(1)**, no new documents are incorporated by reference in these regulations.

The Board had available the entire rulemaking file, including all information considered as a basis for this proposed regulation, available for public inspection and copying throughout the rulemaking process at its office in Sacramento, California.

Pursuant to **1 CCR § 48**, the notice required by Government Code section 11346.1(a) shall contain the following or substantially similar statement:

“Government Code section 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to the Office of Administrative Law, the adopting agency provide a notice of the proposed emergency action to every person

who has filed a request for notice of regulatory action with the agency. After submission of the proposed emergency to the Office of Administrative Law, the Office of Administrative Law shall allow interested persons five calendar days to submit comments on the proposed emergency regulations as set forth in Government Code section 11349.6.”

Pursuant to **1 CCR §50(a)(5)(A)** and **GOV § 11346.1(a)(2)** the Board provided a five working-day notice. The proposed action was, at a minimum, posted on the Board’s website (pursuant to **GOV § 11346.4(a)(6)**), sent to the Board mailing list (pursuant to **GOV § 11346.4(a)**), and widely distributed via email (pursuant to **GOV § 11340.85**) at least five working days prior to being submitted to the Office of Administrative Law.

Pursuant to **GOV § 11346.1(b)(2)**, following is a description of the facts demonstrating the existence of an emergency and the need for immediate action, and demonstrating, by substantial evidence, the need for the proposed regulation to effectuate the statute being implemented, interpreted, or made specific and to address only the demonstrated emergency.

INFORMATIVE DIGEST

Pursuant to Chapter 3 of Part 2 of Division 4 of the Public Resources Code and Chapter 6.8 of Part 1 of Division 1 of the Government Code, the Board is responsible for regulatory action covering defensible space as pertains to wildfire.

This rulemaking uses the terms State Responsibility Area (“SRA”) and Local Responsibility Areas (“LRA”). The SRA is defined under PRC section 4125 and is the portion of California where the state has the primary financial responsibility for preventing and suppressing wildfires. The SRA does not include land within city limits or under federal ownership. Local Responsibility Areas are within incorporated cities and certain unincorporated county areas: they are districts where local fire agencies provide fire protection. Land that is under federal ownership is covered by federal laws and is not considered by this rulemaking.

Fire Hazard Severity Zones are defined by the State Fire Marshal pursuant to Government Code section 51178 and adopted by local agencies pursuant to Government Code section 51179. Local agencies may choose to increase the fire hazard severity of any part of their jurisdiction. The Very High Fire Hazard Severity Zone (VHFHSZ) is the highest fire hazard severity zone. The zone designations are reviewed every five years pursuant to Government Code section 51181. While the Fire Marshal designates Fire Hazard Severity Zones in both SRA and LRA, these regulations only apply to occupied structures in those parts of the LRA that are designated as Very High Fire Hazard Severity Zones. The rulemaking also applies to all buildings or structures within the SRA, regardless of fire hazard severity classification of the lands those parcels are on.

The Board promulgated defensible space regulations in 2006 and 2013, which established requirements for Zone 1 (0-30 feet around a structure) and Zone 2 (30-100 feet around a structure). These regulations focused on fuels modification to allow for safe places for firefighters to safely fight the fire, and to remove sufficient fuels that high-intensity “crown” fires would become lower-intensity, less dangerous, less damaging “ground” fires. These rules

applied only in the State Responsibility Area, as the Board did not then have rulemaking authority for defensible space standards in lands where the state did not have primary financial responsibility for fire protection services. To recognize the existing terminology, the new ember-resistant zone was named “Zone 0” to indicate that it is the area immediately adjacent to a structure.

AB 3074 (Freidman, 2020) states in the findings that “Ember ignitions are responsible for the majority of wildland fire home ignitions. Establishing a five-foot ember-resistant zone around a structure to eliminate specified materials near structures that will likely be ignited by embers provides important new protections that enhance a home’s chance of surviving a wildfire.” This is supported by research: in the National Institute of Standards and Technology (NIST) Technical Note 1635, “A Case Study of a Community Affected by the Witch and Guejito Fires” the authors analyze a wildfire moving through a community. Embers precede the wildfire itself and are the direct cause of structure ignition in some cases. However, in over 40% of the structure ignitions, vegetation fires were ignited by embers immediately adjacent to the structure, and then the structure itself was ignited due to contact with the flames started by the embers. Escobedo et al (2025) found the presence of bare ground within two meters of a building within a wildfire footprint to be one of the most important factors in building survival. The Insurance Institute for Business and Home Safety (IBHS) research center simulated ember exposure of structures during a wildfire event: burning materials that simulated ember ignition of vegetation were placed three and five feet away from the building, and the temperature of adjacent walls was measured under varying simulated wind conditions. At three feet, the temperature of the exterior wall consistently reached over 200°C, the minimum temperature for structure ignition. None of the exterior wall temperatures taken with a simulated ember fires at five feet reached this temperature threshold.

After the passage of AB 3074, the Board undertook a review of the scientific literature on combustible materials frequently found within five feet of a structure (Zone 0). The materials identified as the most common hazards in several post-fire studies and with the largest body of available research include: mulch, firewood, combustible debris on the roof and rain gutters, combustible items under decks, trees, other vegetation, fences and gates, and sheds.

NIST TN 2228 tested the ability of flammable mulches including shredded hardwood, mini pine bark nuggets, pine straw, rubber, and artificial turf to spread fire and produce embers. All but artificial turf resulted in ignition of the mulch and spread of the flame towards the structure. This study also tested firewood for potential firebrand ignitions and found that it would ignite and produce significant heat.

According to Hakes et al (2016), debris collected in a gutter can be ignited by firebrands, potentially spreading the fire to the home at the roof-gutter intersection. The risks of roof ignition from leaves, needles, and other vegetative materials is recognized in statute under Public Resources Code section 4291(a)(4) and Government Code section 51182(a)(4).

The structure ignition risks of vegetation within Zone 0 are complex; NIST TN 1635 indicated that ember ignition of adjacent vegetation is a major driver of structure loss, and Syphard et al (in “The role of defensible space for residential structure protection during wildfires”) examined

building survival within several wildfire footprints and stated “The most effective actions were reducing woody cover up to 40% immediately adjacent to structures and ensuring that vegetation does not overhang or touch the structure.” However, trees with trunks, branches, or foliage within Zone 0 provide important values outside of a wildfire event; wildlife habitat, shade and protection from extreme heat, and beauty. Public Resources Code section 4291(f)(1) directs the Board and the Office of the State Fire Marshal to consider which vegetation types to exclude or recommend based on the probability that vegetation and fuel will lead to ignition by ember of a structure. However, there are no standardized methods for determining plant flammability or ember ignition risk on a species by species basis, and studies on this topic have assessed relatively few species (Fauss et al 2025). While lists of “fire resistant” ornamental plants exist, there is no consistent testing of those claims. In addition, plants can change over time: transforming with age from soft herbaceous plants to woody plants or with leaf moisture level variation from season to season (Bethke 2015). However, White and Zipperer (2010) state “If heat yield is considered independent of species and flammability is considered largely a function of the density of the plant mass and other physical characteristics of the plant, then visual observations of the physical characteristic might be sufficient to evaluate the ‘flammability’ of a particular plant.” They go on to identify the following traits as disadvantages: not maintained or pruned, accumulators of fuel including dead twigs or leaves, and dry or dead undergrowth. They also identify the following traits as advantageous, or less likely to spread flame: maintained and pruned, free of dead branches, and low-growing plants. Woody vegetation is associated with higher risk. In “Vegetation in Zone 0: Amplifying Damage to Structures” (2025) the Insurance Institute for Business & Home Safety stated “Across 17 experiments, vegetation in Zone 0—regardless of moisture content and the inherent variability of living organisms—exhibited a consistent pattern of amplifying damage to the target structure.” They found that live fuel moisture content of vegetation and the wind influence how and when vegetation burns. They state, “Dry shrubs ignited earlier than wet shrubs, limiting preheating of the structure. However, once ignited, dry shrubs burned more intensely than wet shrubs causing a larger additional thermal insult to the structure. While ignition of the wet shrubs added a lower thermal insult, it allowed for longer preheating times, which increased the ignition potential of the building materials. This highlights the complexity between the intensity of the added thermal insult of the burning vegetation and the increased susceptibility of longer preheating times, both of which are a function of the vegetation moisture content.”

Combustible fences, specifically combustible fences that are attached to a structure, present a risk to the structure during an ember-driven wildfire event. NIST TN 2228 found that “Combustible fences with mulch at their base were found to be high hazard, transporting fire through the community and providing a steady source of firebrands.” NIST TN 1635 found that within the Witch and Guejito Fire footprints, 45% of homes within the fire footprints with an attached wood fence were destroyed; significantly higher than the baseline loss rate.

Sheds and other similar outbuildings were also found to be a risk factor. NIST TN 2253 compared combustible and noncombustible sheds. It stated that the peak heat flux of a burning shed was commensurate to the amount of combustible fuel in shed construction, and not based on shed construction characteristics or door orientation. These experiments found that noncombustible sheds significantly reduced the flame exposure of the adjacent structure. The minimum safe structure separation distance for a combustible shed with a floor area less

than 26 square feet was ten feet, while larger combustible sheds have a minimum safe structure separation distance of at least 15 feet.

This rulemaking requires additional protections near certain vulnerabilities in a structure where home ignition often occurs. These locations include: decks, balconies, exterior staircases, and pergolas constructed with flammable materials; the edges of siding materials; under eaves; weak points in exterior walls including windows, doors, and vents. Hakes et al (2016) states “During the 2007 Witch Creek and Guejito fires, decks were observed to be one of the most significant sources of ignition. Of sixteen damaged homes, the ignition location was most often a detached structure or decking. Similar observations were made during the Waldo Canyon fire, where wooded slopes with overhanging decks created a large hazard. Most of these ignitions were thought to originate from firebrands (embers) or local flame contact. One issue is that deck material is tested for flame spread properties and ignition potential from direct flame contact, but is not tested for ignition from firebrand exposure or for its potential to ignite an adjacent structure with radiant energy.” In these cases, the large boards of decks became involved in fires after smaller fires were ignited under the deck surface. Hakes also notes that “Eaves and vents have been recognized as significant sources of ignition of homes in the WUI. Vents provide an opening through which burning brands may penetrate the interior of a structure, often the attic. Eaves serve as a connection point between siding and roofing assemblies, where potential vulnerabilities can occur.” While window vulnerability varies based on single-paned versus double-paned glass and the material of the window casing, “the most rapid flame spread resulted from penetrations at windows, both from flames exiting the burning structures and from flames entering/heating broken windows on an unignited assembly.” Hakes also states that “Without proper clearance around the base of a structure, firebrand accumulation can lead to ignition of nearby vegetation or other fuels (e.g. mulch, wood piles) which can in turn lead to direct flame contact and radiant heat exposure to siding materials on the exterior walls.”

Both authorizing statutes require the Board to update a guidance document to reflect the new regulations. Under Public Resources Code section 4291(g)(1) and Government Code section 51186(b)(2)(A), the requirements for new structures shall not take effect until the Board updates and posts a defensible space guidance document. Under Government Code section 51184(a), these defensible space requirements do not apply to any land or water areas managed for habitat for threatened or endangered species, lands kept in a natural state as habitat for wildlife, plant, or animal communities, open space lands that are environmentally sensitive, and other lands having scenic values as declared by local agencies having responsibility for fire protection or by state or federal law. Under Government Code section 51183, a local agency may exempt structures with exteriors constructed entirely of nonflammable materials or conditioned upon the contents and construction of the structure, and may vary the requirement for management of defensible space around the structure as a result. These specifications are specific to lands within the LRA.

The **problems** are as follows: due to statutory changes that addressed the wildfire crisis, the Board is required to create regulations with provisions for a zero to five foot ember-resistant zone within the Very High Fire Hazard Severity Zone of Local Responsibility Areas and to update the defensible space regulations within the State Responsibility Area

to include provisions for a zero to five foot ember-resistant zone, and to update the regulations for Zones 1 and 2 within the State Responsibility to align with the new ember-resistant zone.

The **purpose** is to establish standards for a zero to five foot ember-resistant zone around structures based on findings about ember-driven structure ignition in both the Very High Fire Hazard Severity Zone of Local Responsibility Areas and in the State Responsibility Area and to update the existing defensible space standards for consistency with the new ember-resistant zone.

The **effect** of the proposed action will be enforceable, science-based standards for an ember-resistant zone within five feet of a structure in areas with elevated fire risk, thereby reducing the risk of structure loss due to wildfire in those parts of California that are most vulnerable to wildfires.

The **benefit** of the proposed action is homes, businesses, and communities that are more resilient to wildfire.

The proposed action does not differ substantially from an existing comparable federal regulation or statute.

The Board performed a search of existing regulations and concluded that the proposed regulation is not inconsistent or incompatible with existing state regulations.

Pursuant to **GOV § 11346.1(b)(2)**, following is the information required by **GOV § 11346.5(a)(4)**.

There are no other matters as are prescribed by statute applicable to the specific state agency or to any specific regulation or class of regulations.

Pursuant to **GOV § 11346.1(b)(2)**, following is the information required by **GOV § 11346.5(a)(5)**.

The Board finds that the proposed regulation does not impose a mandate on local agencies or school districts.

Pursuant to **GOV § 11346.1(b)(2)**, following is the information required by **GOV § 11346.5(a)(6)**.

No costs or savings to any state agency are expected.

The proposed regulation does not impose a reimbursable cost to any local agency or school district (under Part 7 (commencing with Section 17500 of Division 4)). No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for certain costs that may be incurred by a local agency or school district because, in that regard, this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

There are no other nondiscretionary costs or savings imposed on local agencies. There are no costs or savings in federal funding to the State.

The Board took action to authorize emergency rulemaking at the direction of the Legislature. Sections 1298.01 through 1298.04 pertain to the VHFHSZ of the LRA while sections 1299.01 through 1299.03 pertain to the SRA.

Adopt 14 CCR § 1298.01 The proposed action adopts a purpose and overview of the defensible space requirements as pertains to the ember-resistant zone surrounding occupied structures in the VHFHSZ of the LRA. The problem is that changes to the authorizing statute (Government Code section 51182) require new regulations that establish requirements for an ember-resistant zone in the space within five feet of an occupied structure. The purpose of this section is to outline the scope and purpose of those regulations. This is necessary to maintain the clarity and consistency of the defensible space regulations.

Adopt 14 CCR § 1298.02 The proposed action adopts definitions specific to defensible space requirements.

The definition for “Combustible” is adopted. This term is used elsewhere in the rule text to define mulches, debris, fences and gates, and items stored under decks, balconies, pergolas, and stairs. The defined term is used to separate out the subset of items that are likely to combust, as opposed to noncombustible items. The term is used in situations where a version of the listed item exists that is not likely to ignite or transmit flames; the purpose of this term is to distinguish between items or materials that are likely to ignite or transmit flame and those that are not. This is necessary to prevent structure ignition.

The definition for “Defensible Space” is adopted. This mirrors the use of the term for the State Responsibility Area Defensible Space rules in 14 CCR §1299.02(c), aligning the standards for the two sections. This is necessary to maintain consistent standards for the State and Local Responsibility Areas.

The definitions for “Existing Occupied Structure” and “New Occupied Structure” are adopted. The authorizing statute has separate effective dates for existing structures and new structures; this definition provides a standard to separate the two categories. This is necessary to provide a single date to clarify enforcement standards.

Definitions for “Ladder Fuels,” “Tree,” and “Non-woody Plant” are adopted. These terms are specific to the maintenance of trees and other vegetation to minimize structure ignition. Ladder fuels applies to vegetative fuels that can transmit fire to other vegetation, to structures, or to Combustible landscape features. Trees applies to woody vegetation that can be maintained to manage ladder fuels. Non-woody vegetation carries less inherent risk of high-intensity combustion, and so is regulated differently than woody vegetation. The problem is that vegetation near homes increases the likelihood of ignition of a structure during an ember-driven wildfire event. The purpose of this amendment is to balance the protection of a structure during a wildfire event and the need to minimize costs to residents while maximizing the benefits gardens and

trees can bring to a home. These defined terms are necessary to the regulatory guidelines for vegetation around homes in 14 CCR § 1298.04.

The definition for “Occupied Structure” is adopted. The term is used in the authorizing statute (Gov. Code § 51182) to specify the scope of the regulation: it is defined here to clarify which structures meet the standards of an occupied structure. The definition further specifies that “attached” includes self-supporting decks, stairs, or pergolas that are within one foot of a building or structure. The authorizing statute was updated in 2020 under AB 3072 to specify that buildings or structures included attached decks. This update is necessary to bring the definition in line with statute and to make reasonable allowances for the enforcement challenge provided by small gaps between buildings and decks.

The definition for “Noncombustible” is adopted. This term is used elsewhere in the rule text to define fences, outbuildings, and patio materials. If this term is undefined, it does not have a specific materials standard that must be met, and so the dictionary definition would allow for varying interpretations. The use of the ASTM E136 test provides a clear metric for which materials meet the standards for fully ignition-resistant materials as pertains to outbuildings, fences, gates, and patios. The requirements mirror the CWUI building code requirements under Title 24. This is necessary to provide an enforceable standard that is consistent with similar regulations.

The definition for “Outbuilding” is adopted. These include small buildings that do not meet the standards of an Occupied Structure but have specific requirements to minimize the risk of ignition of an adjacent occupied structure. The problem is that sheds and other adjacent buildings often are constructed without consideration of the building code and have an elevated risk of ignition during a wildfire event. The ignition of an adjacent building, even a small building, significantly increases the risk that any nearby structures will ignite. The purpose of this definition is to clarify the definition of a structure that does not meet the standards of an Occupied Structure so that standards for fire protection can be applied to it. It also mirrors the language in the requirements for the State Responsibility Area, aligning the regulations for the two. This is necessary to prevent structure ignition and to improve the clarity and consistency of the regulations.

Adopt 14 CCR § 1298.03 The proposed action adopts provisions for a local agency responsible for fire protection to develop alternative practices, as required in Government Code section 51182, for compliance with the defensible space requirements. It requires that alternative practices be based off of factors including location-based fire risk, lot size, structure density, composition of the structure exterior pursuant to Government Code section 51183, local fire hazards, potential response to emergency conditions, geography/topography, and/or compliance with home-hardening regulations under the California Wildland-Urban Interface Code building standards, or a combination of the preceding. The alternative factors must be approved by the city council, board of supervisors, or appropriate governing body, and be supported by a finding from the local agency responsible for fire protection that those practices provide for substantially similar practical effects to the Board’s defensible space rules. The problem is that California is a state with many variables including: urban versus rural areas, local fire hazards for ignition and evacuation, limitations in fire protection response, specific terrain features that impact wildfire spread, and construction compliance with home-hardening regulations passed in 2008. The

purpose of this adopted text is to allow local governments and fire protection agencies to adapt the state regulations to address the needs of their communities. This is necessary to address variable wildfire risks and protection measures throughout the state and to comply with Government Code section 51182.

Adopt 14 CCR § 1298.04 The proposed action adopts standards and specifies the scope of the ember-resistant Zone 0, which is the five feet immediately surrounding an occupied structure. The problem is that there are no specifications for an ember-resistant zone within five feet of a building or structure and the Legislature directed the Board to create one. The purpose of this update is to specify where the ember-resistant defensible space zone is. This is necessary to promote the clarity and consistency of the regulations.

Subsection (a) covers the area impacted by the ember-resistant Zone 0: the area within five feet around an occupied structure including the exterior wall, roof, attached deck, stairs, or pergola. This zone extends to five feet from the structure or to the property line, whichever is closer. The text also clarifies that the addition of a new structure on one property will have no impact on the requirements for Zone 0 compliance on an adjacent property. The problem is a lack of clarity as to whether additional protection measures are necessary if an adjoining landowner adds an additional building or structure to a property. The purpose of this amendment is to clarify the scope of the regulations. This is necessary to promote the clarity and consistency of the regulations.

Subsection (b) covers requirements for Zone 0 compliance. These requirements include limitations on combustible materials within Zone 0, except as set forth in these regulations. This includes: small flammable vegetative materials such as fallen leaves and tree needles, combustible mulches, and other combustible debris within five feet of an occupied structure. The prohibition on mulches may qualify for temporary exceptions during new or continuing construction, as is necessary to conform with standard Stormwater Pollution Prevention Plan requirements under the Clean Water Act. The same limitations on small flammable materials apply to the roof and rain gutters of an occupied structure. The areas under decks, balconies, pergolas, and stairs must be kept free of vegetation and combustible items. Firewood cannot be stored in Zone 0. Trees must be maintained so that there are no dead or dying branches, so that all living branches are at least ten feet away from chimneys and stovepipe outlets, so that there are no live tree branches under eaves, and so that all ladder fuels have been removed, including those fuels in the first six feet or one third of the tree's total height, whichever is smaller, and those fuels within five feet above a roof that create a high risk of flame transmission, and to ensure that all living branches are at least one foot from the wall of an occupied structure where there is no eave. To protect vulnerable parts of an occupied structure, no vegetation is permitted in those parts of Zone 0 that are under eaves, less than one foot from an occupied structure, less than five feet from an attached deck, stairs, or pergola, or within two feet of windows, doors, posts, or vents (the immediate safety zone). Those parts of Zone 0 that are not within the safety zone may have vegetation, but that vegetation must be either well-maintained non-woody plants that are less than three inches tall, well-maintained non-woody plants that are between three and eighteen inches tall with no dead or dying material in plantings under one square foot in area and are set apart by one and a half times the height of the tallest plant, or well maintained non-woody plants under eighteen inches in height in noncombustible pots under five gallon capacity and set

apart by one and a half times the height of the plant from other pots. Combustible fences and gates shall not be attached to an occupied structure, all fences and gates that are attached to an occupied structure shall have a five foot noncombustible space at the point of attachment. After the effective date of the regulations, there shall be no new combustible fences or gates within Zone 0. Repairs to a combustible fence may be made with noncombustible materials.

Outbuildings are not permitted in Zone 0 unless they are constructed entirely of Noncombustible materials. The problem is that ember-caused fires within five feet of a structure often result in structure ignition. The purpose of these requirements is to minimize the risk of ember-caused fires within five feet of a building or structure. This language is necessary to minimize the rate of ember-caused ignition of buildings or structures within the VHFHSZ within the LRA.

Subsection (c) covers the timelines for compliance with Zone 0 requirements. Per statutory requirements, new occupied structures must comply with all requirements of 14 CCR §1298.04(b) upon the effective date of the regulations. Existing occupied structures must comply with existing statutory requirements as stated within 14 CCR §1298.04(b)(4) as pertains to firewood and (5)(A), (B), and (C) as pertains to tree maintenance: existing regulations within the SRA have explicit requirements for firewood storage and Government Code section 51182 requires that trees be maintained so that there are no dead or dying branches hanging over the house, that live branches are at least ten feet away from chimneys and stovepipe outlets, and that tree limbs are not under eaves. Within three years of the effective date of these regulations, existing occupied structures must comply with requirements for small flammable vegetative materials, the areas under decks, and requirements that trees be maintained to be free of ladder fuels, and so that live branches are not under eaves (or, where there are no eaves at least one foot from walls) and five feet above the roof. Within three years of the effective date of these regulations, or within five years on a timeline set by the local agency responsible for fire protection, existing occupied structures must comply with requirements for creation of a safety zone, vegetation maintenance, fence and gate requirements, and outbuilding requirements. The problem is that these changes, while effective in preventing ember-caused structure ignition, are costly. Statute provides for a three-year compliance timeline; to address these costs, the Board has allowed local agencies responsible for fire protection to extend that timeline to create an additional timeline for compliance needs. This is necessary to address the direction within Government Code section 51182(c)(2) that the regulations allow the staging of work for existing structures to support implementation of the ember-resistant zone and address the costs of compliance.

Amend 14 CCR § 1299.01 The proposed action strikes the phrase “that exists in grass, brush, and forest covered lands” from the description of the purpose of defensible space law. This text was previously present in the authorizing statute but was removed under AB 3072 in 2020. The purpose of the change is to better reflect that wildfire threat is no longer confined to wildlands. The change is necessary to reflect the scope of the authorizing statute.

Amend 14 CCR § 1299.02

The proposed action adopts several additional definitions, makes updates to some definitions, and alphabetizes existing definitions.

The definition for “Building or Structure” is expanded to include an attached deck or other similar raised platform, as required by changes in statute. The definition further specifies that “attached”

includes self-supporting decks, stairs, or pergolas that are within one foot of a building or structure. The authorizing statute was updated in 2020 under AB 3072 to specify that buildings or structures included attached decks. This update is necessary to bring the definition in line with statute and to make reasonable allowances for the enforcement challenge provided by small gaps between buildings and decks.

The definitions for “Existing Building or Structure” and “New Building or Structure” are adopted. The authorizing statute has separate effective dates for existing structures and new structures; this definition provides a standard to separate the two categories. This is necessary to provide a specific date to clarify enforcement standards.

Definitions for “Ladder Fuels,” “Tree,” and “Non-woody Plant” are adopted. These terms are specific to the maintenance of trees and other vegetation to minimize structure ignition. Ladder fuels applies to vegetative fuels that can transmit fire to other vegetation, to structures, or to Combustible landscape features. Trees applies to woody vegetation that can be maintained to manage ladder fuels. Non-woody vegetation carries less inherent risk of high-intensity combustion, and so is regulated differently than woody vegetation. The problem is that vegetation near homes increases the likelihood of ignition of a structure during an ember-driven wildfire event. The purpose of this amendment is to balance the protection of a structure during a wildfire event and the need to minimize costs to residents while maximizing the benefits gardens and trees can bring to a home. These defined terms are necessary to the regulatory guidelines for vegetation around homes in 14 CCR § 1299.03.

The definition for “Noncombustible” is adopted. This term is used elsewhere in the rule text to define fences, outbuildings, and patio materials. If this term is undefined, it does not have a specific materials standard that must be met, and so the dictionary definition would allow for varying interpretations. The use of the ASTM E136 test provides a clear metric for which materials meet the standards for fully ignition-resistant materials as pertains to outbuildings, fences, gates, and patios. The requirements mirror the CWUI building code requirements under Title 24. This is necessary to provide an enforceable standard that is consistent with similar regulations.

Amend 14 CCR § 1299.03

This section provides definitions of the different zones of defensible space and specifications for maintaining structure protections in each zone.

The introductory phrase is modified to remove “whenever flammable vegetative conditions exist,” and include “per these regulations.” These changes are necessary to reflect changes in the authorizing statute.

14 CCR § 1299.03(a) is amended to include specifications for the ember-resistant zone, an area within five feet of a structure. These specifications include the name “Zone 0”. The definition for Zone 1 is modified; instead of applying between zero and thirty feet from a structure, it applies between five and thirty feet from a structure; Zone 0 occupies the innermost layer of protections around a structure. The problem is a lack of clarity as to the requirements of the defensible space zones. The purpose of this amendment is to clarify the scope of the regulations. This is necessary

to promote the clarity and consistency of the regulations and implement the new Zone 0 within the current Zones 1 and 2, per the Legislature's direction to the Board.

14 CCR § 1299.03(b) is amended to include Zone 0. The problem is that the existing description of Zones 1 and 2 does not include specifications for an ember-resistant zone within five feet of a building or structure. The purpose of this update is to specify where each defensible space zone is. This is necessary to promote the clarity and consistency of the regulations.

14 CCR § 1299.03(c) is adopted to clarify that the addition of a structure on a neighboring property does not require any additional defensible space actions from a landowner. The problem is a lack of clarity as to whether additional protection measures are necessary if an adjoining landowner adds an additional building or structure to a property. The purpose of this amendment is to clarify the scope of the regulations. This is necessary to promote the clarity and consistency of the regulations.

14 CCR § 1299.03(d) is adopted to clarify the requirements for defensible space within Zone 0. These requirements include limitations on combustible materials within Zone 0, except as set forth in these regulations. This includes: small flammable vegetative materials such as fallen leaves and tree needles, combustible mulches, and other combustible debris within five feet of a building or structure. The prohibition on mulches may qualify for temporary exceptions during new or continuing construction. The same limitations on small flammable materials apply to the roof and rain gutters of a building or structure. The areas under decks, balconies, pergolas, and stairs must be kept free of vegetation and combustible items. Firewood cannot be stored in Zone 0. Trees must be maintained so that there are no dead or dying branches, so that all living branches are at least ten feet away from chimneys and stovepipe outlets, so that there are no live tree branches under eaves, and so that all ladder fuels have been removed, including those fuels in the first six feet or one third of the tree's total height, whichever is smaller, and those fuels within five feet above a roof that create a high risk of flame transmission, and to ensure that all living branches are not under eaves (or at least one foot from the wall of a building or structure where there is no eave). To protect vulnerable parts of a building or structure, no vegetation is permitted in those parts of Zone 0 that are under eaves, less than one foot from a building or structure, less than five feet from an attached deck, stairs, or pergola, or within two feet of windows, doors, posts, or vents. Those parts of Zone 0 that are not within the safety zone may have vegetation, but that vegetation must be either well-maintained non-woody plants that are less than three inches tall, well-maintained non-woody plants that are between three and eighteen inches tall with no dead or dying material in plantings under one square foot in area and are set apart by one and a half times the height of the tallest plant, or well maintained non-woody plants under eighteen inches in height in noncombustible pots under five gallon capacity and set apart by one and a half times the height of the plant from other pots. Combustible fences and gates shall not be attached to a building or structure, all fences and gates that are attached to a building or structure shall have a five foot noncombustible space at the point of attachment. After the effective date of the regulations, there shall be no new combustible fences or gates within Zone 0. Repairs to a combustible fence may be made with noncombustible materials. Outbuildings are not permitted in Zone 0 unless they are constructed entirely of Noncombustible materials. The problem is that ember-caused fires within five feet of a structure often result in structure ignition. The purpose of these requirements is to minimize the risk of ember-caused fires within five feet of a building or

structure. This language is necessary to minimize the rate of ember-caused ignition of buildings or structures within California's SRA.

Subsection (e) is adopted to clarify the timelines for Compliance with Zone 0 requirements. Per statutory requirements, a new building or structure must comply with all requirements of 14 CCR §1299.04(b) upon the effective date of the regulations. This is stated within Public Resources Code section 4291(g)(1).

Existing buildings and structures must comply with existing statutory requirements as stated within 14 CCR §1299.03(d)(4) as pertains to firewood and (5)(A), (B), and (C) as it pertains to tree maintenance: existing regulation places limitations on firewood storage and Public Resources Code section 4291(a)(2)-(4) require that trees be maintained so that there are no dead or dying branches hanging over the house, that live branches are at least ten feet away from chimneys and stovepipe outlets, and that tree limbs are not under eaves. This language is necessary to reflect the existing statutory requirements.

Within three years of the effective date of these regulations, existing buildings or structures must comply with requirements for small flammable vegetative materials, the areas under decks, and requirements that trees be maintained to be free of ladder fuels, and so that live branches are at least one foot from walls and five feet above the roof. This language is necessary to reflect the existing statutory requirements and to implement the Zone 0 regulations, per the Legislature's direction, within the current SRA Zones 1 and 2 requirements.

Within three years of the effective date of these regulations, or within five years on a timeline set by the local agency responsible for fire protection, existing buildings or structures must comply with requirements for creation of a safety zone, vegetation maintenance, fence and gate requirements, and outbuilding requirements. The problem is that these changes, while effective in preventing ember-caused structure ignition, are costly. Statute provides for a three-year compliance timeline; to address these costs, the Board has allowed local agencies responsible for fire protection to extend that timeline to create an additional timeline for compliance needs. This is necessary to address the direction within PRC §4291(e)(2) that the regulations allow the staging of work for existing structures to support implementation of the ember-resistant zone and address the costs of compliance.

Subsection (f) (formerly subsection (a)) applies to current Zone 1 requirements. Specifications for the roof and rain gutters of a building or structure and for dead tree or shrub branches that overhang roofs, are below or adjacent to windows, or which are adjacent to wall surfaces are removed, as those items are now covered within the purview of Zone 0. Specifics about the requirement that all branches be kept at least ten feet from a chimney or stovepipe are included. The problem is that these requirements apply to the area immediately adjacent to a building or structure, and Zone 1 now includes those areas that are at least five feet away from the edge of a building or structure and out to thirty feet. The purpose of this is to update the statutory changes that add the new ember-resistant zone immediately adjacent to a structure. This is necessary for the clarity and consistency of the regulations and to implement the Legislature's direction to the Board. A requirement that all firewood be completely enclosed in a fire-resistant material is added: the problem is that the use of "covered" did not provide clarity on the needs of

sequestering firewood from embers or other ignition surfaces. The purpose of this amendment is to clarify that firewood should be completely enclosed. This is necessary to minimize ignition risk.

Non substantiative amendments

Made minor grammar corrections and numbering updates throughout.