Frequently Asked Questions about the History and Development of Zone 0

1. What is Zone 0 and why is it important?

Zone 0 is an area of defensible space within the first five feet of a home or other building. It is considered the most important area to keep clear of combustible items such as woody mulch and plants to reduce the risk of a structure igniting during an ember-driven wildfire.

Keeping the area closest to structure clear of combustibles helps prevent embers from igniting flammable materials on or adjacent to the structure. Why? Because data shows the majority of homes lost to wildfire are ignited by flying embers that can travel miles ahead of an active front of a wildfire.

Creating an ember-resistant Zone 0 will help *save lives and protect homes, buildings, and other vital resources*, because:

- Wildland fires are spread by a combination of a moving flame front and the distribution of embers by wind creating new spot fires. Embers are small pieces of plants, trees, or buildings that are light enough to be blown through the air and can result in the rapid spread of wildfire when blown ahead of the main fire, especially during high winds.

- Home and building loss during wildfires occur because of some part of the building igniting from one or more of the three basic wildfire exposures: 1) embers, 2) radiant heat, and 3) direct flame contact (see Figure 1).

- Embers cause wildfire structure ignitions by directly igniting the home or igniting vegetation or materials on or near a home that results in flames touching the house or creating radiant heat exposure that may directly ignite combustible siding or break glass in a window.

- Wildfires with the greatest amount of structure loss all have had a significant component of wind, including the Tunnel Fire, Tubbs Fire, Cedar Fire, Camp Fire, and most recently the Eaton Fire and Palisades Fires.

- Adding an ember-resistant Zone 0 addresses a significant missing component in California's current defensible space protection.

- By working from the structure outward there are multiple ways that residents and business owners can participate in creating their own fire resilience and directly influence the outcomes from future wildfire exposures.

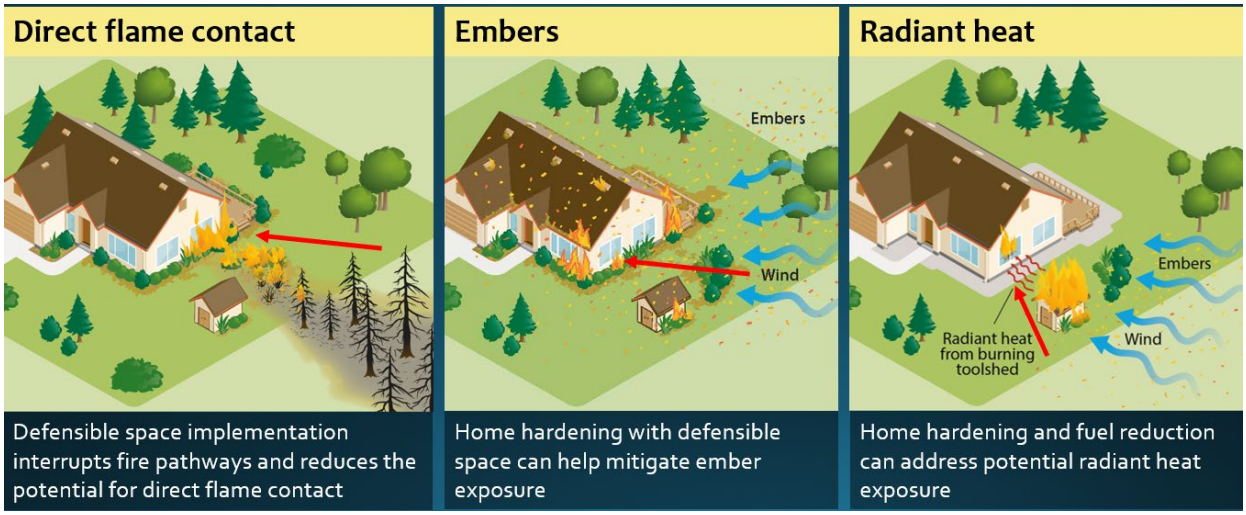

Figure 1: An illustration of the three types of fire exposures that occur during a wildfire. The caption below each panel describes how both defensible space actions, coupled with home hardening measures such as upgraded vents and windows, can help mitigate the exposures and protect buildings from wildfire.

2. What is defensible space?

Defensible space is an area around a structure where fuels are removed or reduced to provide a buffer between a structure and the surrounding area that is vital for protecting homes and communities from wildfire. Adequate defensible space acts as a barrier to slow or halt the progress of fire that would otherwise engulf a home or structure. It also helps ensure the safety of firefighters defending a structure. Defensible space is the first line of defense for homes and buildings against wildfire.

Currently California regulations provide for a two-zone defensible space system. Zone 1 is within 30 feet of the home or building and was established in 1965. Zone 2 was added in 2006 and extends outward from 30-100 feet of the home or building, or to the edge of the property if there is less than 100 feet. These traditional zones are important for reducing home ignition from direct flame contact and providing a safe place for fire crews to locate. Fire data shows, however, that these zones have been repeatedly compromised by wind-distributed embers, leaving structures and homes at risk of ignition.

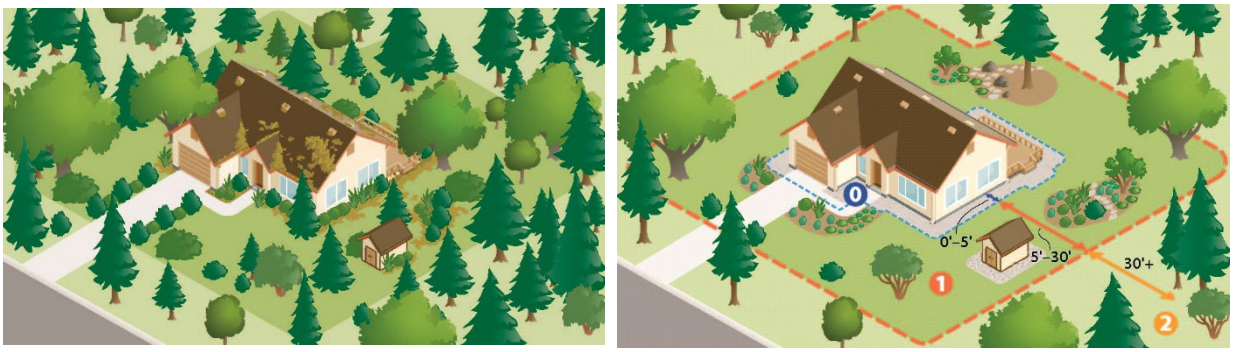

Figure: This is an illustrative example of the defensible space actions taken before and after using the three defensible space zones. Zone 0 applies to all structures. In the after instance (on the right), the pathways for fire to travel have been disconnected between planting groups or islands of landscaping. Additionally, the lower branches of trees have been removed to prevent fire from traveling through the treetops. Zone 0 actions eliminate the potential for embers to ignite combustibles adjacent to the structure.

3. This is the first time I have heard of Zone 0, where did it come from?

Following the devasting wind-driven fires in Santa Rosa (2017), Redding (2018), and Paradise (2018), the Legislature directed, through AB 3074 (2020), the California Board of Forestry and Fire Protection to create a third zone of defensible space. The zone has been termed "Zone 0" as it applies to the first five feet around the house and any attached decks or stairs in a 0-5 feet perimeter (see Figure 2).

4. Why is the Board of Forestry and Fire Protection involved?

The Board has regulatory authority over defensible space in the State Responsibility Area and has already adopted regulations governing Zones 1 and 2. The Legislature in 2020 further directed the Board, in consultation with the Office of the State Fire Marshal, to adopt regulations for Zone 0. This means that the rules for Zone 0 will be developed in an open public process where experts and affected parties could work together craft the best strategy for Zone 0.

5. What is the timeline?

The Board has already invested significant time working on Zone 0 regulations over the last several years, with the input of a diverse group of experts and stakeholders. At the direction of Governor Newsom, the Board is now moving to incorporate what it has learned so far from stakeholder input and finalize a draft for public comment, feedback, and improvement. The Board anticipates seeking informal input early this year, followed by a formal rulemaking process that includes hearings and public comment by the end of 2025. The March 4, 2025 Zone Zero Regulation Advisory Committee Workshop is only the first of multiple public meetings on this topic. The public will have the opportunity to review and comment on regulatory text both before and during the formal rulemaking process.

6. Where will Zone 0 apply to?

- Once the regulations and the statutorily-required guidance document are finalized, Zone 0 will immediately apply to all new construction in California's State Responsibility Area.
- For existing structures, home and business owners will have three years to clear the vegetation and other combustibles from the first five feet around the structure. This three-year phase-in is designed to give families and businesses the time to plan, budget, and implement the changes.
- Zone 0 applies to all areas identified as State Responsibility Area and "very high" fire hazard severity zones of Local Responsibility Areas (See Figure 3).

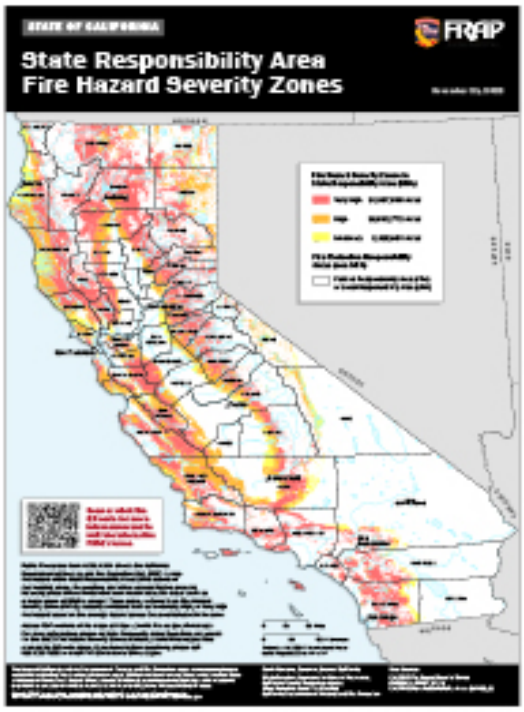

Figure 2: Example of the Fire Hazard Severity Zone Map for California. More details can be found at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones

7. Will new and existing structures have to meet the same standards for Zone 0?

Yes, the legislature has specified through SB 504 (2024) that existing and new structures shall meet the same standard for the ember-resistant zone, but as specified above, there will be a three-year period for existing structures to meet the standards.

8. What will Zone 0 address?

Zone 0 will generally apply to flammable items such as woody vegetation, wood products, or petroleum-based products located around the perimeter of buildings and attached decks or stairs.

The Board's past work on the development of Zone 0 has generally taken a pragmatic approach and suggested some items for regulation and others using an educational, non-enforcement-oriented approach. For example, moveable items such as garbage and recycling receptacles, vehicles, dog houses, HVAC and heat pumps, BBQs, and built-in outdoor kitchens may be approached with inspectors offering guidance around their maintenance and the best practice of moving these items upon evacuation.

The regulations will likely address combustibles such as wood-based mulch, woody plants, dry grass, synthetic lawns, stored lumber, storage sheds, wooden gates attached to the structure, small trees, and other landscape materials within the first five feet of the structure and any attached decks.

9. What are the purposes of the three defensible space zones?

The Board has clarified that the three defensible space zones are designed to:

- **Zone 0** (0-5 feet) reduces the likelihood of structure ignition by reducing the potential for direct ignition of the structure from flame contact, by embers that accumulate at the base of a wall, and/or indirect ignitions when embers ignite vegetation, vegetative debris ,or other combustible materials located close to the structure that result in either a radiant heat and/or a direct flame contact exposure to the structure.
    - Zone 0 is the horizontal area within the first five feet around the structure and any outbuildings, attached decks, and stairs. The zone also includes the area under attached decks and stair landings. Zone 0 should incorporate a 6-inch vertical area between the ground and the start of the building's exterior siding to be most effective.
    - Zone 0 is a critical component of structure defense and, when coupled with Zone 1 and Zone 2, is essential to providing effective defensible space.

- **Zone 1** (5-30 feet) reduces the likelihood of fire burning directly to the structure. This is accomplished by modifying fuels and creating a discontinuity between planting groups that limits the pathways for fire to burn to the structure and reduces the potential for near-to-building ember generation and radiant heat exposures. An additional and important purpose of this zone is to provide a defendable zone for fire personnel to stage and take direct action

- **Zone 2** (30-100 feet) is designed to reduce the potential behavior of an oncoming fire in such a way as to drop an approaching fire from the crown to the ground. Fuel modification

includes removing dead vegetation and reducing living vegetation to eliminate fuel ladders and create vegetation separation between individual or islands of trees or shrubs.

- These vegetation modification requirements are more significant for those properties with steeper terrain, larger and denser fuels, highly volatile fuels, and areas subject to frequent fires.
- Zone 2 also facilitates direct defense actions, improving the function of Zones 0 and 1 by reducing the flame heights and the potential for ember generation and radiant heat exposure to structures.

10. How can I become involved?

Anyone is welcome and encouraged to participate in the Board's process for developing the Zone 0 regulations. The Board is devoting a public workshop to this topic on March 4, 2025, from 1 PM to 5 PM. The public is invited to attend in person at the California Natural Resources Agency, 715 P Street, Sacramento or virtually. The Board is likely to conduct further committee meetings this spring and aims to commence the formal rulemaking process, which includes opportunities for public comment, this summer. The Board anticipates completing this process by the end of 2025. To subscribe to the Board's electronic mailing list, please sign up here: State Board of Forestry & Fire Protection

11. Will this help with my homeowner's insurance?

This is beyond the scope of the Board's authority, but reducing the vulnerability of homes and businesses to wildfire will benefit both homeowners and insurers. Insurers are aware of the importance of Zone 0, and the Department of Insurance's "Safer from Wildfire" program identifies the Zone as critical for action. The Board's understanding is that some insurance companies are taking into account whether an insured party has implemented defensible space standards. The Board recommends that you consult with your insurer.

12. What will enforcement look like?

The Board is not responsible for enforcement. However, the Board understands that Zone 0 will be enforced like other defensible space inspections. If you live in a State Responsibility Area, CAL FIRE's Defensible Space Inspectors will work with you to understand the importance of the zone and help you prioritize actions to take over three years. If you are in "very high" mapped local areas, your local fire department will also take the same approach. The goal is not to penalize property owners but to help people better understand their risks and help property owners implement critical mitigations that will reduce the impacts of future wildfire exposures. These actions also help improve the potential for fire response personnel to safely stage on the property and take defensive fire actions. Making a home "attractive" and safe for fire response is a critical action that can help protect your home, family, and community.

13. How can I prepare and prioritize my work?

The first step is what you are doing by reading this FAQ document and learning about how to protect your structure from embers, radiant heat, and direct flame contact. Helpful resources

are available on CAL FIRE's website and the Department of Insurance's Safer From Wildfire web page. The Board of Forestry and Fire Protection, CAL FIRE, the legislature, and others involved in community fire protection all recognize that implementing Zone 0 will take some time and require some changes. For those doing the work themselves, start under and around attached wood or composite decks and stairs, pulling away weeds, woody mulch, and vegetation. This will help protect the deck from ignition. Next, you can start to remove other combustibles around the house. One strategy may be to work on the side of the house that is less visible to get some experience with the work. Over time, it may become easier to develop a new aesthetic that provides property protection and meets your standards. For those with a wood fence running parallel to the house, prioritize upgrading the five feet of wood fence or gate that touches the house with a noncombustible panel or gate. This will break the wick of fire, should the fence ignite in the future.

14. How much is it going to cost me to comply with the Zone 0 requirements? Will the Board's regulations address the cost of compliance?

The actual costs of compliance will likely vary on a case-by-case basis, depending on a variety of factors, including a property owner's existing level of compliance with defensible space principles and requirements, as well as the scope of compliant renovations that they choose to implement going forward. The Board recognizes that compliance costs will be a major point of interest for the public as it proceeds with these regulations. The legislature is also sensitive to the costs of compliance. Toward those goals, 2024 legislation (SB 504) requires the Board's regulations to address the costs of compliance. An important part of the public process will be to solicit input on possible ways the regulations can address the costs of compliance.

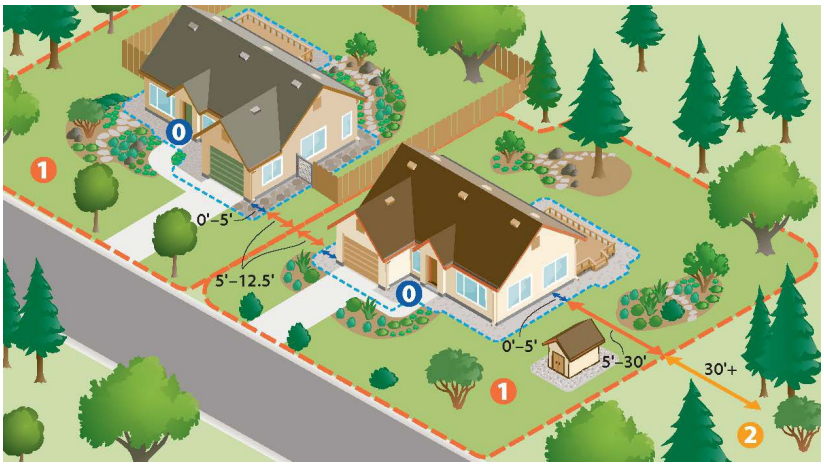

Figure 3: An illustrative example of how defensible space works between homes