

WUI VEGETATION CODE WORKGROUP

REGULAR MEETING

DECEMBER 24, 2025

9:00 AM

Redwood Room – 2180 Milvia St. 6th Floor

Fire Chief's Representative – Asst. Chief Colin Arnold

Assistant Chief David Winnacker
Richard Illgen
George Perez-Velez

Eric Weaver
Margit Roos-Collins

AGENDA

Preliminary Matters

Call to Order

Approval of December 16 Minutes

Public Comment on Non-Agenda Matters

AGENDA MATTERS *All Regular agenda matters are for discussion and possible action.*

- 1. Action:** **Discussion and possible action on suggestions for the Resident Guide**

Written Materials: Proposed Ideas with Context for the Resident Guide
- 2. Action:** **Discussion on Building Setbacks**

Written Materials: Email from member Margit Roos-Collins regarding prohibition on any new combustible structure at or within five feet of a property line shared with a neighboring lot.

WORK GROUP REPORTS

Adjournment

This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to the Wildland Urban Interface Division of the Berkeley Fire Department, wildfire@berkeleyca.gov 510-981-5620. Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. Please note: E-mail addresses, names, addresses, and other contact information are not required but, if included in any communication to a City board, commission, or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission, or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission, or committee for further information. Any writings or documents provided to a majority of the commission regarding any item on this agenda will be made available for public inspection at Berkeley Fire Department located at 2100 Martin Luther King Jr. Way Berkeley, CA.

COMMUNICATION ACCESS INFORMATION:

This meeting is being held in a wheelchair-accessible location. To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services specialist at 981-6418 (V) or 981-6347 (TDD) at least three business days before the meeting date. Please refrain from wearing scented products to this meeting.

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I hereby certify that the agenda for this regular/special meeting of the WUI Vegetation Code Workgroup was posted at the front of the Old City of Berkeley City Hall Bulletin Board, as well as on the City's website, three days prior to the scheduled Commission meeting.

SECRETARY SIGNATURE

Colin Arnold

Berkeley's FireSafe Guide for the landscaping around your home

Our Shared Goal

The **Berkeley Fire Department** is your best partner and resource in understanding wildfire risk and building a plan that feels right for your home.

This guide is designed to help you move toward compliance -and safety- **without unnecessary stress**; balancing wildfire safety with the beauty, comfort, and sense of community that make Berkeley such a special place to live.

Resident Guide for implementing defensible space for homes at risk of wildfire

This guide helps residents and property owners develop best practices for their homes when it comes to vegetation management, and is designed to cater to individual preferences, such as pollinator friendly choices, erosion concerns, or native species to our region. While this guide is a good reference for anyone, there are specific rules for vegetation management based on where you live, and some properties are REQUIRED to follow parts of this guide when it comes to what they plant around their home. Visit [BerkeleyFireSafe.org](https://www.berkeleyfiresafe.org) to learn more. Type in your address, and see what the rules and recommendations are for where you live.

The work you do immediately around your home is the single most effective thing you can do to stop your home from igniting from wildfire. And if your home doesn't ignite, your neighbors home is also much better protected. Furthermore, defensible space helps the fire department do their jobs after the fire starts. While doing this work on one property helps stop embers and wildfire from igniting that home, because our homes are so close together, we need to rely on our neighbors to be proactive as well in order to effectively protect ourselves.

This is about re-evaluating our relationship with the environment we are in, and evolving with it. We have a Mediterranean climate: One goal of this document is to look honestly at the environment around us where we can, and ask ourselves how we can live harmoniously with it, along with other species that depend on it. It also means preparing for, and EXPECTING the natural presence of fire that this landscape has been dependent on since long before we built homes in it [Berkeleyside had a thoughtful article that looked back on how landscaping choices have evolved in Berkeley.](#)

Mediterranean climates like Berkeley's are found in only 2% of the earth's land mass. Our mild summers and inexpensive water pumped from Sierran rivers have made it possible to grow plants from a much broader range of climates and to successfully imitate garden styles developed for rainy summer locales. Part of learning to live sustainably in Berkeley is learning to cherish gardens that need less water, AND are appropriate for very high fire risk areas. It can also be challenging, because "native" often means "fire adaptive," or even "fire dependent;" some native vegetation can burn hot, and fast, and should not be near structures. This means we need to:

- To design gardens that are *beautiful and resilient*: drought-tolerant, low-fuel, and still alive with pollinators and birds.
- To embrace hardscaping (using non-flammable features like stone, pavers, sand, etc.) and appropriate native plant palettes that reduce fire risk while maintaining character.
- To balance *ecological health* with *human safety*.

Why are the rules for that different in Berkeley than at the state level?

Berkeley includes hillside areas bordering open space and regional parkland, which have a high wildfire risk (wind-driven embers, steep slopes, older forest/vegetation, and invasive grasses). The local fire department has identified those risks, and the ordinance is tailored accordingly. Local conditions justify more stringent measures under local authority: the city code amendment states findings of “local conditions ... requiring more stringent standards than those provided by the 2022 California Fire Code.”

While taking steps on a single property helps reduce the risk of ember ignition, our homes are often **closely spaced**, and fire does not respect property lines. When homes and accessory structures like sheds and garages are close to one another, the ignition of one structure becomes the biggest threat to the adjacent home. To effectively protect our community, we need to rely on one another to act.

Berkeley’s hillsides have steep slopes, heavy vegetation, and seasonal winds — conditions that create some of the highest wildfire ember/firebrand risk in the Bay Area. When combined with dense housing and minimal structure separation distance, the chances of a wildfire transitioning into an urban conflagration is high; as it was in 1923 and 1991. Rather than wait for statewide rules, Berkeley chose to act.

- **Local focus:** The fire code targets the areas where science and history show the highest risk.
- **Emphasis on vegetation:** Managing plants and landscaping gives immediate risk reduction while residents pursue home hardening measures as they can, without requiring expensive reconstruction.
- **Balanced enforcement:** The city’s goal is education and support — not punishment — so homeowners can plan and adapt at their own pace.
 - **Half the Battle:** When combined with home hardening, defensible space may reduce the risk of ignition from wildfire by as much as 80%. Tackling vegetation challenges now allows homeowners to get started while they take advantage of the free home hardening programs available now, and they come up with a game plan for the future.
 - When it comes to home hardening, ember resistant features -primarily screened vents and gutters- are the most important and cheapest first steps. For residents

who are subject to vegetation management rules, the material for these steps can be provided free of charge by the city at BerkeleyFireSafe.org.

In 2025, the Berkeley City Council determined that, based on the risk of wildfire loss faced by residents, especially those along the eastern edge of the city, that there was enough information to act and require strict vegetation rules in certain areas. These rules are designed to reduce the number of structures that ignite when a wildfire encroaches on the border of our city. These rules are designed to prevent embers, often cast well ahead of a fire, from igniting vegetation and debris in yards that may in turn ignite the home. This legislation was termed the EMBER ordinance, and became law on June 17, 2025.

Why is it important to do this?

When residents follow the Wildland Urban Interface (WUI) code fire protection standards — especially creating that first **five-foot “Zone 0” buffer** — they’re not just protecting their own homes; they’re helping firefighters protect the entire neighborhood.

1. Helping the Fire Department Fight the Fire

- **Reduces ignition points:** Most homes lost in urban-interface fires don’t burn from direct flames — they ignite from *wind-blown embers*. By clearing combustible materials near walls, decks, or fences, you drastically cut the chance that your home will ignite in the first place.
- **Creates defensible space:** When one home resists ignition, it becomes a *firebreak* that slows the spread to others. This gives firefighters critical time to deploy resources where they’re most needed.
- **Improves firefighter and resident safety:** Crews working in dense, overgrown areas face extreme heat, unpredictable flare-ups, and blocked access routes. Ember-resistant zones and thinned vegetation make it safer to operate equipment, move hose lines, and defend structures.
In short: every compliant property becomes a safer, more defensible position for the fire crews protecting it. When fewer homes are igniting, responders can focus on the homes that are threatened. Slowing the spread also helps give people more time to get out.

Protecting Those in the Highest-Risk Areas

Berkeley’s hillsides are at the intersection of steep topography, heavy vegetation, and seasonal wind patterns — the *perfect mix for ember storms*.

When residents in these highest-risk zones follow the WUI code:

- They **reduce radiant heat and ember load** that can threaten adjacent homes downhill.

- They **protect evacuation routes** by minimizing roadside vegetation ignition.
- And they **allow firefighters to concentrate on containment**, rather than defending every individual structure under impossible conditions. This also slows the spread of fire, and limits destruction and life-threatening conditions.

The Berkeley Fire Department is your partner in this. They want to help you:

- Understand what to do,
- Make a plan that fits your property and budget,
- And feel *good* about how your home looks and how safe you feel living there.

Use the resident guide as a personal roadmap — one that balances beauty, ecology, and safety — and helps ensure that when the next fire comes, your home, your neighborhood, and your firefighters all stand a better chance.

What Is Zone 0?

Zone 0 is the **first 0–5 feet around your home or any structure** — including decks, fences, sheds, and garages.

This small area is the **most critical zone** in wildfire defense because **most homes ignite from embers**, not direct flames.

Wind-driven embers can travel **miles ahead of a wildfire**, landing in this space and igniting anything that burns — mulch, leaves, wooden fences, or furniture. Once the fire starts this close, it can easily spread to the structure itself.

How Does It Affect Me?

Zone 0 is where **your home's safety begins**. If this area is clear of combustible materials, your home is far less likely to ignite during a wildfire.

Because Berkeley's neighborhoods are dense, your Zone 0 directly affects your neighbors, too. When one home ignites, radiant heat and flying embers can quickly spread fire from house to house.

By maintaining Zone 0:

- You dramatically reduce your personal fire risk.
- You protect your neighborhood and first responders.
- You help buy time for safe evacuation and coordinated firefighting.

Here's How You Get to Compliance

Reaching compliance with the EMBER standards isn't about passing or failing — it's about *progress*. The City of Berkeley Fire Department is here to help you every step of the way.

1. Start with a Self-Inspection

Begin by using the **Self-Inspection Checklist**.

Walk around your property and note specifically the items on the checklist. Pay special attention to:

- Combustible materials within 5 feet of your home. Suggestions for alternatives for common items are listed in this guide later under **Find and Replace**
 - Items stored under eaves or decks
 - This helps you see where you stand before scheduling an inspection. For any items that you have questions or concerns about, save them for the inspection with the Inspector.
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2. Schedule an assessment with a FireWise leader, if desired.

Some people would like to hear directly from the Fire Department, in which case, skip to the next step and reach out! Others might want to hear from their neighbors who may have additional creative solutions to the challenge that can meet the goal of reducing risk while also maintaining the unique character of the home. Your local FireWise leader can connect you with an Ambassador to meet with you. Note that while the ambassador may have creative ideas, it's the Fire Department in the end that has the responsibility, and authority, to tell you what needs to be removed.

3. Schedule an Inspection

Next, request an Inspection from a Fire Department inspector.

Inspectors will:

- Walk your property with you (or on their own, with your permission)
 - Identify the highest-risk areas and prioritize actions
 - Note the highest priority items as violations to be addressed within 2 months
 - Help create a **personalized plan** with benchmarks to meet each cycle
- This plan focuses on what matters most first, so you can make steady progress without feeling

overwhelmed. Items on the personalized plan will not be flagged as violations if managed within the established timeline.

This form documents:

- What you've already done
- What remains to be addressed
- Your target timeline for full compliance

It serves as your roadmap — and your record of effort and progress.

Some owners may have practical difficulties with meeting the code. This may be due to a number of reasons, and property owners with these concerns can address them with an inspector to determine if a modification of the code is required. One of the most common modifications is for time; inspectors and responsible parties agree on a timeline for compliance that spans multiple inspection cycles.

5. Work Toward Full Compliance

The **Compliance and Enforcement process** varies depending on your area's risk level. Generally:

- The first action items identified in your plan should be completed **within 60 days** of your inspection.
- Inspectors will re-check progress and help you stay on track. Its important to take action after the inspection so that you don't lose momentum, or worse, become subject to fines.
- Visit [BerkeleyFireSafe.org](https://www.BerkeleyFireSafe.org) to learn about services, grants, and other programs that can help you make progress, often for free. From there, you can also learn what people are doing around you, who they are using to help them, and more!
 - Continued communication and visible progress keep the process supportive, not punitive.

Remember:

Fire inspectors aren't just enforcing rules — they're partners in protection. Their goal is to make your property safer and help you feel confident about your next steps.

Each improvement you make strengthens your neighborhood's resilience and gives firefighters a safer, more defensible environment to work in when it matters most.

Wildfire Alternate Means and Measures Requests (WAMMR):

Some residents may prefer to seek alternate ways to achieve the same practical effect for fire reduction around their home as the defensible space regulations do. This can be either because they have certain vegetation that they really like, or because they have sensitive areas or concerns that are specific to their property. For this purpose, these regulations permit a resident to submit what is termed an Alternate Means and Measures Request ("AMMR"). This allows the Fire Department to assess an alternate vegetation or other plan that may be able to achieve the same practical effect of fire protection as the current regulations envision. The AMMR is reviewed by Fire Department staff. The AMMR may require testing of the proposed plants or other materials, plans for maintaining the plants, and locations for placing plants around the home, or other conditions for the use of the plants or other materials. This process is designed to allow residents to allow for unique conditions around their home, and desired outcomes that allow residents to maintain a desired item by reducing the risk of fire exposure or by demonstrating that the proposal achieves the same reduction in risk as the regulations otherwise provide.

Each AMMR needs to be independently applied for in each specific case. Although one AMMR cannot be directly applied to another case, an applicant may be able to use existing AMMRs, available on the WUI website, to guide their application to reduce the research needed for their AMMR application.

Below are general examples of AMMRs. The actual plants, materials, local conditions of the structure, topography, and other local conditions may require additional steps, including testing. Note that if testing is required, the homeowner bears the cost of the testing. Reach out to an inspector to help you determine how to proceed.

Example One

Homeowner goal: You want to keep grass or another low groundcover in Zone 0.

Public safety goal: We want to ensure that there's no dead grass next to the house, since dead grass is easily lit by embers and firebrands. We also want to ensure that the grass stays low enough that it does not become a significant source of fuel if lit by a fire in Zone 1 and that it does not trap a significant amount of dead plant debris that could become fuel.

The AMMR would spell out the groundcover chosen, the maximum height at which it would be mowed or otherwise maintained and self-reporting requirements for both maintenance and irrigation, typically met by voluntary verification on a monthly basis during fire season to BFD.

Example Two

Homeowner goal: You want to keep a favorite shrub or dwarf tree next to your house.

Public safety goal: We want to ensure that the five feet next to your house is free of significant accumulations of dead plant material, including material trapped inside a shrub or dwarf tree or at the base of the shrub or dwarf tree, since embers will catch that material on fire, transmitting fire to the shrub or dwarf tree. All vegetation may burn when exposed to flames and will ignite at a lower temperature than houses, so burning shrubs or dwarf trees adjacent to a house can catch it on fire when the same house could have been spared by a non-combustible Zone 0.

An AMMR could be issued for shrubs or dwarf trees that have a minimum height of 6' at maturity, and at least 1/3 the height of the plant is maintained as an air gap. Further, the shrub or dwarf tree must have an open architecture that will not generate or trap dead material in their interior, that generate minimal leaf litter below, that do not have peeling bark that would allow a ground fire to climb into the canopy, and that are pruned or grow naturally with an open, limbed-up structure such that leaf litter generated by the shrub or dwarf tree or blown from elsewhere is readily accessible and easily cleared from beneath and around the shrub or dwarf tree. The plant in question should also not touch the affected structure. The AMMR will specify maintenance requirements for the shrub and for clearing litter below and around the shrub.

That AMMR will also require a separation between the shrub and the beginning of your Zone 1 plants. This is because there is less regulation of the plants you keep in Zone 1; this zone is designed to burn and not threaten the home. They may more readily accumulate the leaf litter that would catch fire in an ember storm. It's imperative to keep any fires in your yard adequately separated from a shrub adjacent to your house. You would need to demonstrate that you have addressed additional mitigation by creating a non-combustible area in the adjacent portions of zone 1 so that it will not transmit fire from zone 1, to the vegetation in question, to the home. This would also likely require demonstrating that there are not additional vulnerabilities near plant on that side of the home, such as a single pane window.

Example Three:

Homeowner goal: You want to keep succulents in Zone 0. You believe they cannot burn during a wildfire.

Public safety goal: We want to keep fire away from your house. Even naturally moist plants will eventually burn when exposed to fire, and Zone 0 is designed in part to keep your house separated from ember-driven spot fires that may start in the duff or trapped dead plant material of your yard or your neighbor's yard. There is currently no approved list of plants that are fire-suppressant, such that if they are exposed to flames or the duff trapped in them is lit by embers, the resulting fire would naturally extinguish because the plant is not flammable.

However, there is a process to prove that a plant is not flammable. This is a more complex process than the other two examples.

To get an AMMR allowing a succulent to remain within Zone 0, you would need to submit a suitable sample to a lab for testing to determine if that species, maintained in a manner to meet the conditions present at the time of testing meets the relevant test standards as outlined in Section [703A.7](#) Standards of Quality in the California Building Code

If the plant met the relevant test standard, that would serve as the foundation for an AMMR permitting it to remain. Once a species passes the relevant test standard, that result becomes available for others to use for their own AMMRs for the same species and configuration (size, maintenance, etc.).

The relevant test standard (temperature and duration) will be matched to conditions at the site. In general, three scenarios apply to most homes in the Berkeley Fire Zones.

1. [Firebrand ignition](#). For this standard, the temperature and time of the ignition test match the burning characteristics of a hollow Eucalyptus [bark cylinder](#) or
2. Zone 1 vegetation ignition. For this standard, the temperature and time of the ignition test match the burning characteristics of [chaparral shrubs](#).
3. Adjacent structure ignition. For this standard, the temperature and time of the ignition test match the burning characteristics of a [burning structure](#)

RICHARDS LANGUAGE FOR VERSION 3:

Example Three:

Homeowner goal: *You want to keep succulents in Zone 0. You believe they would not adversely affect the home's vulnerability to fire during a wildfire.*

Firefighter goal: *We want to keep fire away from your house. Zone 0 is designed in part to keep your house separated from ember-driven spot fires that may start in a plant or in the duff or trapped dead plant material of your yard or your neighbor's yard. Berkeley currently does not have an approved list of plants that are fire-suppressant, such that if they are exposed to flames or the duff trapped in them is lit by embers, the resulting fire would naturally extinguish because the plant is not flammable. In addition to the flammability of a plant, placement of the plant around the home and the proximity to vegetation outside Zone 0, may be factors considered.*

The AMMR process can be used to consider the plant flammability. If, in reviewing the AMMR, the Fire Department believes testing is needed to consider the plant flammability, the testing would be conducted under Section [703A.7](#) Standards of Quality in the California Building Code

If the plant meets the relevant test standard, that might serve as the foundation for an AMMR permitting it to remain, subject to any other requirements such as placement and maintenance that may be required. Once a species passes the relevant test standard, that result may be available for others to use for their own AMMRs for the same species.

For these examples, the placement of the plant is key to the amount of work the applicant would need to do to get the AMMR approved. For instance, on the side of the home where there is not an adjacent structure within 45 feet, and the vegetation adjacent to the plant is question is a far enough distance, based on it's height, that it doesn't pose a threat of radiant heat, the applicant could likely rely on the firebrand standard alone. However, if there is an adjacent plant or structure, the established heat flux standard for that threat would need to be presented as well, OR the threat would need to be removed, if possible (such as a plant or outbuilding).

What Happens If I Don't Do Anything?

Ignoring Zone 0 requirements increases your risk — and everyone else's.

If your home still has combustible materials right up against it:

- **Embers can ignite your property**, even if the main fire is blocks away.
- **Firefighters may not be able to defend your home safely** if vegetation or materials make it too dangerous to approach.
- **You may receive a notice of violation** and be required to make corrections within a set time frame under the city's fire code. The Fire Department can require an inspection of your property, and delaying or denying access will likely make the eventual compliance process much more difficult. This can also result in notices of violations and citations that will eventually incur fines. This process is more completely outlined in the Berkeley municipal code section 1.20.

But more importantly — doing nothing puts your home, your neighbors, and your community in greater danger during wildfire events.

What CAN I do with vegetation in a given zone?

When working from the structure out, consider a hardscape area that modulates between 5 feet from the home and further, rather than a hard line at exactly 5 feet. In zone 1, make free use of low growing groundcover between shrubs, and strike a balance between single, larger species of shrubs and small trees, and groupings of smaller plants. Use paths through the landscape to reduce the ability of fire to travel quickly towards the home. For larger groupings of shrubs, create visual space and reduce fire risk by building in additional, low growing ground cover between the shrub group and the structure.

Get creative with your new space:

- Use **noncombustible materials** like gravel, pavers, or stone instead of mulch.
- Consider **low-growing, low-volume plants** like succulents or native species outside of the 5 foot perimeter. For larger plants, keep them thinned out and free of dead material.
- Maintain a clean and clutter-free area within that 5-foot perimeter.
 - Consider unique hardscape patterns that work with your landscape, and not just a hard, 5 foot perimeter around your home.
 - Consider non-combustible art, water features, or small plants in 5 gallon, non-combustible containers
 - Create social sitting spaces that look out at your yard using metal furniture and bright pillows.
 - Recirculating, solar-powered fountains.
 - Pebble and stone slab walkways (with a few marbles mixed in for delight?) – or brick paths or decomposed granite or concrete.
 - Tiled outdoor spaces with plants in terracotta or ceramic pots.

Maintain:

- Regularly clear debris buildup, especially before fire season peaks (June–October).
- Keep fences, decks, and siding in good repair to prevent ember intrusion.

Compost is a great solution to retaining moisture in the soil while also adding soil nutrients. The free compost that is given away by the city is a great choice, and is a good alternative to mulch, especially in zone zero.

Special Considerations

Erosion

How can I handle erosion, what do I do if the erosion issue is large enough that following the fire code will result in soil instability. Also, stormwater issues and how to handle.

Is there a reputable landscape architect or soils engineer that could provide a framework for how to explore whether you have erosion concerns. What is the best practice to reduce risk without increasing erosion concern. How to address stormwater management while also addressing fire concern.

How would someone pursue a MODIFICATION to address extreme cases.

Local pollinators and species:

Use our east-bay specific native plant guide, put together by local expert Kathy Kramer, to attract native fauna and reduce your impact.

Lead in the soil:

Painted homes constructed pre-1950s, likely have elevated levels of lead in the soil around the home. This creates potential of exposure of young children to lead-contaminated soils, which concentrate in the dripline of houses. These property owners should take this risk into account when managing the soil around their home, and should consider NOT leaving bare, natural soil around their home. In this case, a layer of compost or gravel would be appropriate, or the resident could consider a WAMMR. For more information, please see the Alameda County Lead Poisoning Prevention Program website at <https://www.achhd.org/leadpoisoning/soil.htm>

Find and Replace

Hedges to Fences: Privacy hedges may be a difficult challenge for many residents. Some may be able to manage the hedge to either be in compliance, or may be able to achieve a WAMMR. Some residents may need to rely on permitted, taller fencing, or on interior curtains for privacy.

Fence - replace with metal fencing

Low end: metal posts and wire, hog wire, chain link,

Medium: HardieBoard and steel supports – can use for privacy fencing

Higher: Corten steel panels, wrought iron, aluminum and steel designs. Rock, stucco, or brick walls (kept low in Berkeley for earthquakes)

When it comes to gates: can leave the wooden piece attached to the house. Substitute a metal panel on either side of a metal gate for first five feet.

Shed: consider construction methods that would meet home hardening standards, or exceed them (like hardiboard siding).

Compost Bins: Models that are rotating bins up on metal legs are a great solution.

Hose: Replace with metal garden hoses, or keep the hose full of water

Trash Cans: These are a common cause of ignitions during ember storms. They should be kept outside of zone zero, or stored in a well designed container that can withstand ember and direct flame; if building one, look to building materials that would be used for home construction in the same zone that would qualify as home hardened.

Emergency Supply Shed: a metal job box works well for this – air and water-tight.

Doormats: Replace with non-combustible mats (metal, wire, etc), or move inside.

Yard equipment: We often lean tools against the least visible side of the house or put under the deck or in a shed [plastic playsets and pools, wheelbarrows, seed spreaders, lawnmower]. When these tools have combustible parts like wood or plastic, consider replacing them or moving them to somewhere else outside of zone zero.

FAQs

ADD TO CHECKLIST A LINK TO AMMR PROCESS for residents that want to seek out AMMRs.

ADD TO CHECKLIST and asterisk that you should consult a BFD inspector if you have questions before doing work.

Areas for further discussion:

NEED the wind chart and description to explain why the eucs aren't the backstop to the problem (Need DW)

If you have concerns, bring them up with an inspector to develop a path forward

Links to FireSafe Berkeley

BFD Site

BFSC Site

FireWise Comtes

DFSC

From: [Margit Roos-Collins](#)
To: [Wild Fire; Arnold, Colin](#)
Subject: FW: item request for WUI Veg agenda
Date: Friday, December 19, 2025 6:35:56 AM

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Please include the email below in the packet for next week, as opposed to just adding the item to the agenda. I'd like members to have time to think about this before the meeting. Thank you!
Margit

From: Margit Roos-Collins <margit@rooscollins.net>
Date: Friday, December 12, 2025 at 3:28 PM
To: "Arnold, Colin" <CArnold@berkeleyca.gov>, Wild Fire <wildfire@berkeleyca.gov>
Subject: item request for WUI Veg agenda

I request that we devote some time to a topic I think we missed, namely, that Berkeley's WUI Fire Code should contain a prohibition on any new combustible structure at or within five feet of a property line shared with a neighboring lot (as opposed to a property line bordered by the street), at least in the HFHSZ and VHFHSZ. Given that the Fire Department (and fire science) supports maximizing the observance of Zone 0's around each combustible structure and given the principle that neighbors should not be allowed to make choices that negatively impact each other's properties, this seems obvious but isn't in the code. What is the process for the Fire Department to propose that addition, given that the Council has just adopted the new code revisions?

Also, the guidance document will eventually need to address how you plan to manage impacts from existing structures across property lines, unless that plan is mooted by the state's language.

The state's current rule plead says:

For the purposes of compliance with defensible space requirements, the **addition of any building**, including an Accessory Dwelling Unit as defined in Gov Code section 66313, **on a neighboring property shall not require a landowner to create additional defensible space on their property** and shall not result in that landowner being found to be out of compliance with defensible space regulation. [p. 3 of October Rule Plead <https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/bof-website/projects-and-programs/defensible-space-zones-0-1-2/october-zone-0-summary-and-rule-plead.pdf?rev=927f9551dc7b4f15b8263671cca15ef2&hash=F80F2C5451370BB3C855E38CCCC516D4>]

While Berkeley can make stricter rules than the state's, I'd be surprised if that includes ignoring a direct "shall not." Either the state Zone 0 rules bind Local Responsibility Areas or they don't. I'd like to get clear on what Berkeley's stance is on this, given a couple of comments in our meetings indicating that the state's jurisdiction over LRAs isn't as clear as our conversations have assumed.

Cheers,
Margit

WUI VEGETATION CODE WORKGROUP

REGULAR MEETING

DECEMBER 16, 2025

1:00 PM

BFD Division of Training – 997 Cedar Street

Fire Chief's Representative – Asst. Chief Colin Arnold

Assistant Chief David Winnacker
Richard Illgen
George Perez-Velez

Eric Weaver
Margit Roos-Collins

DRAFT MINUTES

Preliminary Matters

Call to Order: 1:00 PM

Present:

- Assistant Fire Chief, Colin Arnold
- Assistant Fire Chief, David Winnacker
- Eric Weaver
- Margit Roos-Collins (via teleconference)
- Richard Illgen
- George Perez-Velez

Approval of December 10 Minutes

Motion by Richard Illgen with a reservation to amend the minutes to reflect one public comment made on Agenda Item 1 and seconded by Eric Weaver.

Public Comment on Non-Agenda Matters

Public Members: 3 comments

Member George Perez-Velez moved to allow a brief, informal community discussion on non-agenda items for up to five minutes. The motion was seconded by Richard Illgen. Following the initial five-minute period, Member Margit Roos-Collins moved to allow an additional five minutes for continued informal community discussion on non-agenda items. The motion was seconded by George Perez-Velez.

AGENDA MATTERS *All Regular agenda matters are for discussion and possible action.*

1. Action: Discussion and possible action on suggestions for the Resident Guide

Written Materials: Proposed Ideas with Context for the Resident Guide

Discussion: The group continued discussion of the Resident Guide. A member proposed omitting citation information from the guide and instead making that information available on the website. Members also discussed removing code language related to citations from the guide unless the status quo changes. Member Richard Illgen proposed revised language for the WAMMR section of the Resident Guide. Chief Arnold merged the proposed language with language provided by Margit Roos-Collins. Members will review the merged language and provide suggestions as needed.

Two public comments were received regarding this agenda item.

WORK GROUP REPORTS

Adjournment

The meeting was adjourned at 3:00 PM on a motion by Richard Illgen, seconded by Eric Weaver, and approved by consensus.

A regular meeting is scheduled for Wednesday, December 24, 2025, at 9:00 AM.

This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to the Wildland Urban Interface Division of the Berkeley Fire Department, wildfire@berkeleyca.gov 510-981-5620. Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. Please note: E-mail addresses, names, addresses, and other contact information are not required but, if included in any communication to a City board, commission, or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission, or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission, or committee for further information. Any writings or documents provided to a majority of the commission regarding any item on this agenda will be made available for public inspection at Berkeley Fire Department located at 2100 Martin Luther King Jr. Way Berkeley, CA.

COMMUNICATION ACCESS INFORMATION:

This meeting is being held in a wheelchair-accessible location. To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services specialist at 981-6418 (V) or 981-6347 (TDD) at least three business days before the meeting date. Please refrain from wearing scented products to this meeting.

I hereby certify that the agenda for this regular/special meeting of the WUI Vegetation Code Workgroup was posted at the front of the Old City of Berkeley City Hall Bulletin Board, as well as on the City's website, three days prior to the scheduled Commission meeting.

SECRETARY SIGNATURE

Colin Arnold

DRAFT

ATTACHMENT 1

**ORDINANCE NO. ##,###–N.S.
REPEALING AND RE-ENACTING BERKELEY MUNICIPAL CODE CHAPTER 19.48
(BERKELEY FIRE CODE)**

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Berkeley Municipal Code Chapter 19.48 is hereby repealed and reenacted as to read as follows:

**Chapter 19.48
BERKELEY FIRE CODE***

Sections:

19.48.010 Adoption of the California Fire Code including Appendix B – Fire-Flow Requirements for Buildings and Appendix L – Requirements for Fire Fighter Air Replenishment Systems

19.48.020 Amendments to the California Fire Code

19.48.030 Validity

Section 19.48.010 Adoption of the California Fire Code

- A. The California Fire Code, 2022 edition, as adopted in Title 24, Part 9 of the California Code of Regulations, including Chapter 1 (excluding Section 103), Chapter 3, Section 503 of Chapter 5, Sections 1103.5.6 through 1103.5.6.3 (new sections as created by BMC 19.48.020, Amendments to the California Fire Code), Appendix Chapters D, E, F, L (as amended by BMC 19.48.020, Amendments to the California Fire Code) and O published by the International Code Council not included in the California Building Standards Code, are adopted by this reference into this Chapter, and are hereby adopted and made a part of this Chapter as though fully set forth herein, subject to the modifications thereto which are set forth this ordinance. One copy of this Code is on file in the office of the City Clerk of the City of Berkeley.
- B. This chapter shall be known as the "Berkeley Fire Code" and shall be referred to in this chapter as "this code".
- C. This Chapter will become effective on June 1, 2025.

Section 19.48.020 Amendments to the California Fire Code

The following additions, changes and deletions to the 2022 California Fire Code, as detailed below, are adopted as part of the Berkeley Fire Code.

ATTACHMENT 1

Chapter 1 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 1 – SCOPE AND ADMINISTRATION

SECTION 101 SCOPE AND GENERAL REQUIREMENTS

[A] Section 101.1 Title. These regulations shall be known as the Berkeley Fire Code ~~shall be known as the Fire Code of~~, shall be known as the Berkeley Fire Code, hereinafter referred to as "this code."

SECTION 102 APPLICABILITY

[A] 102.6 Historic buildings. The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings where such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings shall be provided with an approved fire protection plan as required in Section 1103.1.1 in accordance with the 2022 California Historical Code.

SECTION 104 DUTIES AND POWERS OF THE FIRE CODE OFFICIAL

Section 104.13. Authority to arrest and issue citations. The Fire Chief, or their designee shall have authority to arrest or to cite any person who violates any provision of this Chapter involving the International Fire Code or the California Building Standards Code regulations relating to fire and panic safety as adopted by the State Fire Marshal, in the manner provided for the arrest or release on citation and notice to appear with respect to misdemeanors or infractions, as prescribed by Chapters 5, 5c and 5d of Title 3, Part 2 of the California Penal Code, including Section 853.6, or as the same hereafter may be amended. It is the intent of the City Council that the immunities provided in Penal Code Section 836.5 are applicable to aforementioned officers and employees exercising their arrest or citation authority within the course and scope of their employment pursuant to this Chapter.

Section 104.14 Authority to abate fire nuisance [Additional subsection]. The Fire Chief or the Fire Chief's designee shall have the authority to order the abatement of fire nuisances.

SECTION 105 PERMITS

105.5.18 Flammable and combustible liquids. An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the offsite transportation in pipelines regulated by the Department of Transportation (DOT) nor does it apply to piping systems.

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2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1 The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the fire code official, would cause an unsafe condition.
 - 2.2 The storage or use of paints, oils, varnishes or similar flammable mixtures where such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
4. To store, handle or use Class IIIB liquids in excess of 110 gallons in containers, or in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

Exception: Fuel oil and used motor oil used for space heating or water heating.

5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
8. To change the type of contents stored in a flammable or combustible liquid tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
9. To manufacture, process, blend or refine flammable or combustible liquids.
10. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or to engage in on-demand mobile fueling operations in accordance with Section 5707.
11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or, where required by the fire code official, to utilize a site for on-demand mobile fueling operations in accordance with Section 5707.

Section 105.5.55 Christmas tree sales lot. An operational permit is required to operate a Christmas tree sales lot.

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Section 105.5.56 Escort convoy service. Police and/or Fire Department convoy service is required for vehicle transportation of extremely hazardous materials.

Section 105.5.57 Fire Fighter Air Replenishment System (FARS). An annual operational permit is required to maintain a FARS system in accordance with Appendix L.

Section 105.5.58 General use permit. For any activity or operation not specifically described in this code, which the fire code official reasonably determines, may produce conditions hazardous to life or property.

Section 105.5.59 Parking facility, special events] An operational permit is required to use buildings or structures for vehicle parking, including parking for special events (i.e. football games, etc.).

Section 105.6.25 Fire fighter air replenishment system (FARS). A building permit is required for installation of or modification to a FARS system in accordance with Appendix L.

Section 105.6.26 Window bars, operational constraints and opening control devices. A building permit is required to install window bars or other equipment which imposes operational constraints and opening controls on emergency escape and rescue openings on exterior doors or windows of any sleeping rooms in accordance with fire code Section 1031.2.1 of this code.

SECTION 107 FEES

Section 107.2 Schedule of permit fees. Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule ~~as established by the applicable governing body.~~ of fees for permits and inspections as set forth by the City Council by resolution.

Section 107.4 Work commencing before permit issuance. A person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to a fee ~~established by the applicable governing authority, which shall be in addition to the required permit fees.~~ equivalent to three times the amount of the required fees to obtain a permit for that work, activity or operation regulated by this code.

Section 107.7. Expense of securing emergencies. The expense of securing any emergency that is within the responsibility for enforcement of the fire code official as given in Sections 104.1 or 104.11 is a charge against the person who caused the emergency. Damages and expenses incurred by any public agency having jurisdiction or any public agency assisting the agency having jurisdiction shall constitute a debt of such person and shall be collectible by the fire code official for proper distribution in the same manner as in the case of an obligation under contract expressed or implied. Expenses as stated above shall include, but not be limited to, equipment and personnel committed and any payments required by the public agency to outside business firms requested by the public agency to secure the emergency, monitor remediation, and clean up.

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SECTION 111 MEANS OF APPEALS

Section 111.1 Board of appeals established. Appeals Procedure In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, ~~there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.~~ an appeal therefore may be taken to the City Council by the applicant or permit holder. Notice of the appeal must be filed with the City Clerk of the City of Berkeley within ten days from the date of mailing of the fire code official's decision to the applicant or permit holder. The notice of appeal shall contain a statement of the reasons for the appeal. The City Clerk shall forward one copy thereof to the fire code official. Within thirty days after the filing of the notice of appeal, the fire code official shall transmit to the City Council all their records pertaining to the decision appealed from.

Section 111.1.1 Stay of Proceedings The filing of the notice of appeal shall stay all proceedings by all parties in connection with the matter upon which the appeal is taken until determination of the appeal as hereinafter provided, unless the fire code official determines that such a stay could result in an imminent threat to public safety.

Section 111.3 Qualifications. ~~The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or fire protection systems, and are not employees of the jurisdiction.~~ **Decisions:** The City Council shall review the action of the fire code official and shall do any one of the following:

- a. Refer the matter back to the fire code official.
- b. If the facts stated in or ascertainable from the application, the Notice of Appeal, the written statement of the fire code official setting forth the reason for their decision, and the other papers, if any, constituting the record do not, in the opinion of the City Council, warrant further hearing, the City Council may affirm the decision of the fire code official. Such decision shall be final.
- c. If, in the opinion of the City Council, said facts warrant further hearing, the City Council shall set the matter for hearing and shall give notice of the time and place of said hearing by mailing a copy of such notice by certified mail to the address of the applicant as stated in the Notice of Appeal, at least ten (10) days before the time fixed for the hearing. The City Council may continue the hearing from time to time.
- d. Following such hearing, the City Council shall reverse, affirm wholly or partly modify any decision of the fire code official, or make any other decisions or determinations or impose such conditions as the facts warrant. Such decision or determination shall be final.
- e. If none of the above actions have been taken by the City Council within thirty (30) days from the date the appeal first appears on the City Council agenda, then the decision of the fire code official shall be deemed affirmed and the appeal shall be deemed dismissed.

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- f. If the appeal is set for hearing but the disposition of the appeal has not been determined within ninety (90) days from the date the appeal first appears on the City Council agenda, then the decision of the fire code official shall be deemed affirmed and the appeal deemed dismissed.

111.4 Administration. The fire code official shall take immediate action in accordance with the decision of the ~~Board~~ City Council .

SECTION 112 VIOLATIONS

Section 112.1 Unlawful acts [Amended subsection]. It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize a building, occupancy, premises or system regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code, or to create, maintain or allow to continue any fire hazard.

Section 112.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a ~~[SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment misdemeanor, but may be cited or charged, at the election of the enforcing officer or City Attorney, as infractions, subject to an election by the defendant under Penal Code Subsection 17 (d).~~ Each day that a violation continues after due notice has been served shall be deemed a separate offense. In addition to all other legal remedies, civil or criminal (as set forth above), any violation of this code constitutes a public nuisance in accordance with B.M.C Chapter 1.26, and is subject to all provisions of B.M.C. Chapter 1.26, as well as abatement under B.M.C. Chapter 1.24, "Abatement of Nuisances". All such violations are also subject to the issuance of an administrative citation in accordance with B.M.C Chapter 1.28 at the discretion of the enforcing officer or the City Attorney.

SECTION 114 UNSAFE STRUCTURES OR EQUIPMENT

Section 114.7 Summary abatement. Where conditions exist that are deemed hazardous to life and property, the fire code official or fire department official in charge of the incident is authorized to abate summarily such hazardous conditions that are in violation of this code. Where the owner does not comply with an abatement order under Section 114.4 within the period specified, the City of Berkeley may perform or cause to be performed the necessary work. The costs incurred shall be recoverable under the procedures in Section 114.7.1

Section 114.7.1 Abatement process [Additional subsection] The abatement process shall be conducted in accordance with the notice and hearing requirements of the nuisance abatement provisions of Berkeley Municipal code chapter 1.24, including summary abatements of structures or premises determined by the City of Berkeley to constitute an imminent hazard or emergency condition.

ATTACHMENT 1

Chapter 2 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 2 – DEFINITIONS

SECTION 202 GENERAL DEFINITIONS

Section 202 Definitions – BBERKELEY MARINA. The area shall mean all those, parts of the City of Berkeley west of the Interstate 80 Freeway

Section 202 (Definitions — F). FIRE HAZARD. Anything or act which increases or could cause an increase of the hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fire or anything or act which could obstruct, delay, hinder or interfere with the operations of the fire department or the egress of occupants in the event of fire. Fire hazards as defined herein are hereby declared to be public nuisances subject to abatement by the City of Berkeley.

Section 202 (Definitions — F). FIRE NUISANCE. Anything or act, which is annoying, unpleasant, offensive or obnoxious because of fire.

Section 202 (Definitions – J). JURISDICTION. The City of Berkeley. The governmental unit that has adopted this code.

Section 202 (Definitions — W). WASTE OIL is a Class III-B waste liquid resulting from the use of Class III-B combustible liquids such as waste motor oil, hydraulic oil, lubricating oil, brake fluids and transmission fluids.

Chapter 5 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 5 – FIRE SERVICE FEATURES

SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS

Section 504.1.1 Marking of Exterior Building Openings. Where exterior doorways are not otherwise marked with identification such as building addresses, room/suite numbers or business names which identify the area(s) they provide access to, or a functional description for the space, such opening shall be provided with signs or labels indicating the areas they serve. Doorways to be marked shall include but are not limited to doors serving building circulation (such as stairwells/exit passageways), potential hazards (such as trash rooms), and building service and utility spaces (such as electrical, gas, HVAC and elevator machine rooms). Signs/labels shall be permanent, weather and sunlight resistant with lettering not less than 3/4" high with a 1/16" width stroke on a contrasting background. Such signs or labels shall be affixed to the door frame or wall above the door. Such signs and labels shall be maintained.

Exception: Doors associated with private dwellings, the main entrance to normally occupied spaces or when determined to be unnecessary by the fire code official.

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Chapter 7 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 7 – FIRE AND SMOKE PROTECTION FEATURES

SECTION 705 DOOR AND WINDOW OPENINGS

Section 705.2.5 Smoke - and heat-activated doors. Smoke-activated doors shall be maintained to self-close or automatically close upon detection of smoke. Existing fusible-link-type automatic-door closing devices are permitted if the fusible-link rating does not exceed 135°F (57°C). Doors required for fire and smoke separation for interior exit stairways and floor separation in R-1 or R-2 occupancies shall not be maintained in an open position with fusible links.

Chapter 9 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

**CHAPTER 9 – FIRE PROTECTION AND LIFE SAFETY SYSTEMS SECTION 903
AUTOMATIC SPRINKLER SYSTEMS**

Section 903.2.10.1 Commercial parking garages. An automatic sprinkler system shall be provided throughout buildings used for storage of commercial motor vehicles ~~where the fire area exceeds 5,000 square feet (464 m²).~~

Section 903.2.11.1 Stories without openings. An automatic sprinkler system shall be installed throughout all buildings having stories, including basements, ~~of all buildings where the floor area exceeds 1,500 square feet (139.4 m²)~~ and where the story does not comply with the following types of exterior wall openings:

1. Openings below grade that lead directly to ground level by an exterior stairway complying with Section 1011 or an outside ramp complying with Section 1012. Openings shall be located in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).
2. Openings entirely above the adjoining ground level totaling not less than 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm) The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.

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Section 903.2.11.2. Rubbish, Recycling and linen chutes. An automatic sprinkler system shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes shall have additional sprinkler heads installed at alternate floors and at the lowest intake. Where a rubbish chute extends through a building more than one floor below the lowest intake, the extension shall have sprinklers installed that are recessed from the drop area of the chute and protected from freezing in accordance with Section 903.3.1.1. Such sprinklers shall be installed at alternate floors, beginning with the second level below the last intake and ending with the floor above the discharge. Access to sprinklers in chutes shall be provided for servicing. Activation of any fire sprinkler in a chute shall activate a separate water flow switch to indicate waterflow in the chute. All fire sprinklers in the chute shall be controlled by a separate, electrically supervised control valve with tamper switch.

Section 903.2.22 Structures in the Berkeley Marina Area. An automatic sprinkler system shall be installed in all structures located in the Berkeley Marina Area in accordance with NFPA 13 standards.

Exceptions: Gear lockers not designed to permit human entry, municipal restrooms unattached to other structures, the existing City of Berkeley Harbor Master's office, and any temporary construction site structures.

Section 903.2.23 Public Self-Storage Buildings. An automatic sprinkler system shall be installed in any building erected or existing building that was converted and/or subdivided for public self-storage use on or after August 19, 1982, in accordance with NFPA 13 standards.

Section 903.2.24 Environmental Safety - Residential District. Reserved

Section 903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R *as amended in Chapter 80*.

1. Four stories or less above grade plane.
2. The floor level of the highest story is 30 feet (9144mm) or less above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is 30 feet (9144mm) or less below the lowest level of fire department access.

The number or stores of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the *California Building Code* shall be measured from grade plane.

Exception: Sprinkler systems in residential / commercial mix-use buildings are to be in accordance with NFPA 13.

Section 903.3.9 Floor control valves. Floor control valves and waterflow detection assemblies shall be installed at each floor where any of the following occur:

1. Buildings where the floor level of the highest story is located ~~more than~~ 30 feet or more above the lowest level of fire department vehicle access.
2. Buildings that are ~~four~~ three or more stories in height.
3. Buildings that are two or more stories below the highest level of fire department vehicle access.

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Exception: In Group R-3 and R-3.1 occupancies, floor control valves and waterflow detection assemblies shall not be required.

Section 907.2 Where required—new buildings and structures. An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.29 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.

Not fewer than one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where an automatic and manual, or a manual fire alarm system is required by this code or Berkeley local ordinance, other sections of this code allow elimination of fire alarm boxes is prohibited. due to sprinklers or automatic fire alarm systems, a single fire alarm box shall be installed at a location approved by the enforcing agency.

Exceptions:

1. The manual fire alarm box is not required for fire alarm control units dedicated to elevator recall control, supervisory service and fire sprinkler monitoring.

2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the fire code official to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is open to the public.

3. The manual fire alarm box is not required to be installed when approved by the fire code official.

Section 907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more, or where the Group A occupant load is more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the *California Building Code* shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes *with an occupant load of less than 1000* shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

Every Group A building used for educational purposes shall be provided with a manual or automatic fire alarm system. This provision shall apply to, but shall not necessarily be limited to, every community college and university.

Exception: *Privately owned trade or vocational schools or any firm or company which provides educational facilities and instruction for its employees.*

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Section 907.2.2 Group B. A manual fire alarm system, which activates the occupant notification system in accordance with Section 907.5, shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B occupant load of all floors is 500 or more.
2. The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.
3. The fire area contains an ambulatory care facility.
4. *For Group B occupancies containing educational facilities, see Section 907.2.2.2.*

~~**Exception:** Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.~~

Section 907.2.4 Group F. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group F occupancies where both of the following conditions exist:

1. The Group F occupancy is two or more stories in height.
2. The Group F occupancy has a combined occupant load of 500 or more above or below the lowest level of exit discharge.

~~**Exception:** Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.~~

Section 907.2.7 Group M. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group M occupancies where one of the following conditions exists:

1. The combined Group M occupant load of all floors is 500 or more persons.
2. The Group M occupant load is more than 100 persons above or below the lowest level of exit discharge.

Exceptions:

1. A manual fire alarm system is not required in covered or open mall buildings complying with Section 402 of the *California Building Code*.
2. ~~Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will automatically activate throughout the notification zones upon sprinkler water flow.~~

Section 907.2.8.1 Manual fire alarm system. A manual and automatic fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-1 occupancies.

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Exceptions:

1. ~~A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by not less than 1-hour fire partitions and each individual sleeping unit has an exit directly to a public way, egress court or yard.~~
2. ~~Manual fire alarm boxes are not required throughout the building where all the following conditions are met:~~
 - 2.1. ~~The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~
 - 2.2. ~~The notification appliances will activate upon sprinkler water flow.~~
 - 2.3. ~~Not fewer than one manual fire alarm box is installed at an approved location.~~

Section 907.2.8.2 Manual and Automatic fire alarm systems ~~smoke detection~~ system.

~~An A manual and automatic smoke detection~~ fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior corridors and common areas of Group R-1 occupancies. The detection device for this purpose shall be a smoke detector (or heat detector as approved), which is system connected and electronically supervised ~~serving sleeping units.~~

Exception: ~~An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.~~

Section 907.2.9.1 Automatic and Mmanual fire alarm system. ~~An automatic and manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where any of the following conditions apply:~~

1. The building is three or more stories in height and ~~Any any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge.~~
2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit.
3. The building contains more than 16 dwelling units or sleeping units.
4. *Congregate residences with more than 16 occupants.*

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by not less than 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, egress court or yard.

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- ~~2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.~~
3. 2. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception 3.

Section 914.3.9 Fire Fighter Air Replenishment Systems. New high-rise buildings shall install an approved Fire Fighter Air Replenishment System (FARS) or equivalent equipment or systems as determined by the fire code official to provide a breathing air supply for firefighting self-contained breathing air tanks. Such system or equipment shall provide adequate pressurized breathing air supply through a permanent piping system or other means acceptable to the fire code official for the replenishment of portable life sustaining air equipment carried by fire department, rescue and other personnel in the performance of their duties. Design, installation, testing and maintenance of such air replenishment systems shall be made in accordance with Appendix Chapter F of the California Plumbing Code. Each property owner shall be responsible for maintaining such equipment or systems including annual air sampling and testing.

Exceptions:

1. Buildings equipped with Firefighter Access Elevators as required by Berkeley Building Code section 403.6.1
2. Where an alternate method of supplying breathing air replenishment is approved by the fire code official.

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Chapter 11 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 11 – CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

SECTION 1103 FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDINGS

Section 1103.5 Sprinkler systems. An automatic sprinkler system shall be provided in existing buildings in accordance with Section 1103.5.1 through 1103.5.5-6.3

SECTION 1103.5.6 AUTOMATIC SPRINKLER REQUIREMENTS FOR EXISTING HOTELS

Section 1103.5.6.1 Definitions. For the purposes of this Section, the following terms shall be defined as follows:

1. "Hotel" shall mean any building, including motels, dormitories, rooming houses, fraternity houses and sorority houses, which contain six or more rooms which were intended or designed to be used, or which are used, for the purposes of renting, hiring or letting to residential occupants for sleeping purposes but shall not include apartment buildings as defined in this code.
2. "Story" is as defined in the Berkeley Building Code.
3. "First Story" is as defined in the Berkeley Building Code.
4. "Basement" is as defined in the Berkeley Building Code.
5. "Balcony, Exterior Exit" shall mean a landing or porch projecting from the wall of a building which serves as a required exit. The long side shall be at least 50 percent directly open to the exterior, and the open area above the guardrail shall be so configured as to prevent the accumulation of smoke or toxic gases.

Application: This section shall apply to every hotel in which the rooms used for sleeping are rented or let above the ground floor, if the hotel was built prior to 1992, and also meets one of the following two conditions:

The height of the hotel is three or more stories or two stories plus an inhabited basement, which is used for purposes other than exclusively servicing the maintenance and other needs of the building; or the hotel contains 20 or more rooms, or regularly accommodates 20 or more residential occupants.

Exception: No hotel in which the exits from sleeping rooms lead either to the outside of the building either directly or via approved exit balconies with approved exterior stairways(s) in accordance with the requirements of the Berkeley Building Code is required to comply with this section.

Section 1103.5.6.2 Types of Fire Sprinklers. In the sleeping units of the building, only residential or quick response sprinkler heads shall be used.

Section 1103.5.6.3 Supervision of fire sprinkler systems. All automatic sprinkler systems installed under this subsection shall be monitored for supervision and alarms in accordance with Section 903.4.

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Section 1103.7 Fire Alarm Systems. An approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.6 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code. Existing high-rise buildings shall comply with Section 1103.7.9. Where an automatic and manual or a manual fire alarm system is required by this code or Berkeley local ordinance, elimination of fire alarm boxes in buildings equipped with an approved sprinkler system is prohibited.

Exception: Occupancies with an existing, previously approved fire alarm system.

Section 1103.7.5.1 Group R-1 hotels, and motels, and congregate residences manual and automatic fire alarm system. A manual and automatic fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-1 hotels, and motels, and congregate residences ~~more than with three or more stories or with more than 20 or more~~ sleeping units.

Exceptions:

- ~~1. A manual fire alarm system is not required in buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.~~
- ~~2. A manual fire alarm system is not required in buildings not more than three stories in height with not more than 20 sleeping units and equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.3.1.1 or 903.3.1.2.~~
- ~~3. Manual fire alarm boxes are not required throughout the building where the following conditions are met:~~
 - ~~3.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~
 - ~~3.2. The notification appliances will activate upon sprinkler water flow.~~
 - ~~3.3. Not less than one manual fire alarm box is installed at an approved location.~~

Section 1103.7.6 Group R-2. A manual and automatic fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-2 occupancies three or more stories in height or with 16 or more dwelling or sleeping units. Congregate residences shall retrofit existing manual-only fire alarm systems with manual and automatic fire detection. Other types of R-2 occupancies (such as apartment buildings) shall retrofit existing manual-only fire alarm systems with manual and automatic fire detection when the existing fire alarm control unit is replaced for any reason. Automatic detection shall be accomplished by use of a smoke detector (or heat detector as approved), which is system connected and electronically supervised. Detectors shall be installed in all interior corridors and common areas.

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Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than 3/4 hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. ~~A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and having a local alarm to notify all occupants.~~
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open ended corridors designed in accordance with Section 1027.6, Exception 3.
4. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, do not exceed three stories in height and comply with both of the following:
 - 4.1. Each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire-resistance rating of not less than ¾ hour.
 - 4.2. Each dwelling unit is provided with smoke alarms complying with the requirements of Section 907.2.11.

Section 1103.7.10 Monitoring of Group R Occupancies. All existing R occupancies that are required to provide both a fire alarm and fire suppression system shall have the system monitored by a central station, remote supervising station, or proprietary supervising station.

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Chapter 49 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 49 – REQUIREMENTS FOR WILDLAND-URBAN INTERFACE FIRE AREAS

SECTION 4902 DEFINITIONS

Section 4902.1 General. *For the purpose of this chapter, certain terms are defined as follows:*

DIRECTOR. Director of the California Department of Forestry and Fire Protection (CAL FIRE).

FIRE PROTECTION PLAN. A document prepared for a specific premises, project or development, either existing or proposed for a Wildland-Urban Interface (WUI) area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

FIRE HAZARD SEVERITY ZONES. Geographical areas designated pursuant to California Public Resources Codes, Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Area or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

The California Code of Regulations, Title 14, Section 1280 entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

FLATLANDS MITIGATION AREA (ZONE 1) encompasses the entire City of Berkeley except for areas in the Hills Mitigation Area, Panoramic Mitigation Area and Grizzly Peak Mitigation Area.

FUEL BREAK. A natural or human caused change in fuel characteristics which affects fire behavior so that fires burning into them can be more readily controlled (NWCG PMS 205).

FIRE-RESISTANT VEGETATION. Plants, shrubs, trees and other vegetation that exhibit properties, such as high moisture content, little accumulation of dead vegetation, and low sap or resin content, that make them less likely to ignite or contribute heat or spread flame in a fire than native vegetation typically found in the region.

[Note: The following sources contain examples of types of vegetation that can be considered fire-resistant vegetation (Fire-resistant Plants for Home Landscapes, A Pacific Northwest Extension publication; Home Landscaping for Fire, University of California Division of Agriculture and Natural Resources; Sunset Western Garden Book)].

GRIZZLY PEAK MITIGATION AREA (ZONE 4) encompasses those areas of the city east of Grizzly Peak Boulevard to the city boundary.

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Homes addressed on, or with a structural frontage on either side of Grizzly Peak Boulevard are included in the area.

The Grizzly Peak Mitigation Area is designated as a Very-High Fire Hazard Severity Zone.

HILLS MITIGATION AREA (ZONE 2) encompasses those areas designated as Very High or High Fire Hazard Severity Zones that are not included in the Grizzly Peak Mitigation Area or Panoramic Mitigation Area.

This area includes areas of the City east / north east of the line formed by these roads. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:

- a. The Arlington Avenue from the Kensington Border to Marin Avenue
- b. Sutter Street from the Southern portal of the Northbrae Tunnel to Eunice Street
- c. Eunice Street from Sutter Street to Spruce Street
- d. Spruce Street from Eunice Street to Hearst Avenue
- e. Gayley Road from Hearst Avenue to Stadium Rim Way
- f. Piedmont Avenue from Stadium Rim Way to Dwight Way
- g. Warring Street from Dwight Way to Derby Street
- h. Belrose Avenue from Derby Street to Garber Street
- i. Claremont Boulevard from Garber Street to Claremont Avenue
- j. Claremont Avenue from Claremont Boulevard to the Oakland Border
- k. Tunnel Road from Ashby Avenue to the Oakland Border

IGNITION-RESISTANT MATERIAL. A type of building material that complies with the requirements in Section 704A.2 in the California-Berkeley Building Code.

LOCAL RESPONSIBILITY AREAS (LRA). Areas of the state in which the financial responsibility of preventing and suppressing fires is the primary responsibility of a city, county, city and county, or district.

PANORAMIC MITIGATION AREA (ZONE 3) encompasses those areas of the city bounded by the line formed by these roads and by the City Limit to the east.

The entirety of the Panoramic Mitigation Area is designated as a Very High Fire Hazard Severity Zone. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:

- a. Canyon Road from the Oakland border to Stadium Rim Way
- b. Stadium Rim Way from Canyon Road to Bancroft Way
- c. Bancroft Way from Stadium Rim Way to Prospect Street
- d. Prospect Street from Bancroft Way to Bancroft Steps
- e. Bancroft Steps from Prospect Street to Warring Street

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- f. Bancroft Way from Warring Street to Piedmont Avenue
- g. Piedmont Avenue from Bancroft Way to Dwight Way
- h. Dwight Way from Piedmont Avenue to the Oakland border

STATE RESPONSIBILITY AREA (SRA). Lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing wildfires is primarily the responsibility of the state.

WILDFIRE. Any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources as defined in Public Resources Code, Sections 4103 and 4104.

WILDFIRE EXPOSURE. One or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.

WILDLAND-URBAN INTERFACE (WUI). A geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

SECTION 4903 PLANS

Section 4903.3 Submittal, approval and fees. When required to submit a Fire Protection Plan or Vegetation Management Plan for any reason the responsible party shall prepare or cause to be prepared a Fire Protection Plan in accordance with the latest standards of the Berkeley Fire Department. The Fire Protection Plan shall be submitted to, reviewed and approved by the Berkeley Fire Department and shall be enforced and maintained by the responsible party or their designated agent. The Berkeley Fire Department may charge an appropriate fee for the review, approval and processing of the Fire Protection Plan in accordance with the hourly rate established by City Council resolution.

SECTION 4905 WILDFIRE PROTECTION BUILDING CONSTRUCTION

Section 4905.2 Construction methods and requirements within established limits. Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements contained in the ~~California Building Standards Code~~ Berkeley Building Code and Berkeley Residential Code, including the following:

1. California Building Code, Chapter 7A. Chapter 7A of the Berkeley Building Code (B.B.C), Berkeley Municipal Code Section 19.28.030.
2. California Residential Code Section R337 of the Berkeley Residential Code (B.R.C.), Berkeley Municipal Code Section 19.29.050.
3. California Referenced Standards Code, Chapter 12-7A.

SECTION 4907 DEFENSIBLE SPACE

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Property owners are not required or authorized by this code to enter the properties of another person to implement the requirements of this Section.

Section 4907.3 Requirements.

5. The Fire Code Official may require a property owner to perform hazardous vegetation and fuel management on their land to maintain defensible space up to 100 feet from structures located on adjacent properties.

Section 4907.4 Mitigations Required.

A person who owns, leases, controls, operates, or maintains lands shall at all times maintain:

3. Zone 1: 5 to 30 feet from any structure:
 - a. Remove any privacy hedges or contiguous vegetation that will create a pathway for fire to reach a Structure.
 - b. Maintain 6 feet of vertical clearance between branches and all other parts of trees overhanging the roof or other portion of any Structure or attached deck.
 - c. Maintain any tree, shrub, or other plant adjacent to or overhanging any Structure or attached deck free of dead branches, dead limbs, or other Combustible Material.
 - d. Maintain the roof and roof gutters of any structure, and the surface of any attached deck free of leaves, needles, or other vegetative materials.
 - e. Maintain trees to remove Ladder Fuels so that foliage, twigs, or branches are greater than 8 feet above the ground or surface fuels.
 - f. Remove all branches within 10 feet of any chimney or stovepipe outlet.
 - g. Storage of firewood, lumber, or other Combustible Material is not permitted.
 - h. Keep low-growing shrubs, no higher than 6 feet in height, spaced apart or in small groupings of no more than 3 shrubs with a maximum aggregate diameter of 10 feet. Shrub groupings must be separated from other shrubs or shrub groupings by 15 feet such that no continuous path of vegetation is created. Where shrubs are located below or within a tree's drip line, the lowest tree branch shall be a minimum of three times the height of the understory shrubs or 10 feet, whichever is greater.
 - i. If there are multiple structures, such as a shed, hot tub, and playset, ensure these structures are spaced at least 10 feet apart. Have at most three (3) of these structures within 30 feet of a building or structure .

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- j. Relocate exposed firewood piles outside of Zone 1 unless they are completely covered in a fire-resistant material.
- 4. Zone 2: 30 to 100 feet from any structure:
 - a. All exposed wood piles must have a minimum of ten feet (10 ft.) of clearance, down to bare mineral soil, in all directions.
 - b. Create horizontal and vertical spacing among shrubs and trees using the “Fuel Separation” method, the “Continuous Tree Canopy” method or a combination of both to achieve defensible space clearance requirements. Further guidance regarding these methods is contained in the State Board of Forestry and Fire Protection's, “General Guidelines for Creating Defensible Space, February 8, 2006,” incorporated herein by reference.
- 5. For both Zones 1 and 2:
 - a. Remove vegetative and combustible material capable of transmitting fire to a structure as determined by the Fire Code Official.
 - b. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.).
 - c. Cut annual grasses and forbs down to a maximum height of four inches (4 in.).
 - d. Non-irrigated brush is not permitted.
 - e. Vertical Spacing: Limb trees by removing hanging bark, debris and branches that are within six feet (6 ft.) of the ground, or three times the height of the understory vegetation, whichever is greater. Where a tree is not adaptable to limbing to the height described above, use a combination of limbing and/or modify and remove fuels adjacent to and underneath the tree to provide clearance above grade that is equivalent to three times the height of the tallest understory fuel.
 - f. Maintain horizontal spacing between shrubs:
 - i. Flat or mild slope (less than 20%): Two times the height of the shrub.
 - ii. Mild to moderate slope (20-40%): Four times the height of the shrub
 - iii. Moderate to steep slope (greater than 40%): Six times the height of the shrub
 - g. Maintain space between tree canopies:
 - i. Flat or mild slope (less than 20%): 10 feet.
 - ii. Mild to moderate slope (20-40%): 20 feet.
 - iii. Moderate to steep slope (greater than 40%): 30 feet.
 - h. New trees shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 feet from any structure or the canopy of other trees.

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Section 4907.6 Specific requirements. Effective January 1, 2026 the Grizzly Peak Mitigation Area and Panoramic Mitigation Area shall be subject to 4907.6 instead of 4907.4.

A person who owns, leases, controls, operates, or maintains lands shall at all times maintain:

1. Zone 0: 0 to 5 feet from any structure:
 - a. Maintain all areas within five (5) horizontal feet of any structure, outbuildings, attached deck or stairs, and the area under attached decks and stairs free of vegetative and non-vegetative combustible material.
 - i. This includes but is not limited to shrubs, vegetative ground cover, climbing vines, combustible boards, timbers, firewood, debris, synthetic lawn, wood mulch products, playsets, plastic trash and recycle cans, trellises, pergolas, shade coverings, planters, attached window boxes, privacy walls, boats, RVs, and other material that could be ignited by embers, radiant heat, or direct flame.
 - ii. Hardscape materials, such as gravel, pavers, concrete, and other noncombustible mulch materials are permitted.
 - iii. Exception: Plants in pots are allowable if they are in areas that are not directly beneath, above, or adjacent to a window or eave; are kept in an unaffixed, non-combustible pot or container that is no larger than 5-gallon capacity; and set apart by 1.5 times the height of the plant or 12 inches, whichever is greater, from the structure and each other. These plants shall be no greater than 18 inches in height. Dead or dying material on, around and under the plants shall be removed.
 - iv. Exception: Hot tubs may be installed within five (5) horizontal feet of a structure, provided they comply with all Zone 0 clearance requirements applicable to structures.
 - b. No trees are permitted in Zone 0.
 - c. Exception: If the bole of a tree is present within Zone 0, that tree is permitted if it is taller than the adjacent Building or Structure's roof ridgeline, does not have any dead and dying branches;
 - i. All live tree branches shall be kept:
 1. Ten feet (10') above the adjacent building or structure's roof ridgeline;
 2. Ten feet (10') away from chimneys and stovepipe outlets; and
 3. Five feet (5') away from the sides of any Building, Structure, attached deck or stairs, and hot tubs within five (5) feet of a structure.

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- d. The roof and rain gutters of a Building or Structure shall be kept clear of leaves, needles, and vegetative material.
 - e. Existing fences that are directly attached to a Building or Structure shall have a five foot (5 ft) non-combustible span at the point of attachment. After the effective date of this regulation, no new sections of combustible fence (parallel or perpendicular) are permitted within 5 feet of a building or structure including an attached deck.
 - f. Outbuildings are not permitted in Zone 0, unless constructed according to the standards in Chapter 7A (commencing with Section 701A.1) of Part 2 of Title 24 of the California Code of Regulations. Outbuildings that meet these standards shall be considered part of the Building or Structure.
2. Zone 1: 5 to 30 Feet from any structure:
- a. Remove any privacy hedges or contiguous vegetation that will create a pathway for fire to reach a Structure.
 - b. Keep low-growing shrubs, no higher than 6 feet in height, spaced apart or in small groupings of no more than 3 shrubs with a maximum aggregate diameter of 10 feet. Shrub groupings must be separated from other shrubs or shrub groupings by 15 feet such that no continuous path of vegetation is created. Where shrubs are located below or within a tree's drip line, the lowest tree branch shall be a minimum of three times the height of the understory shrubs or 10 feet, whichever is greater.
 - c. If there are multiple structures, such as a shed, hot tub, and playset, ensure these structures are spaced at least 10 feet apart. Have at most three (3) of these structures within 30 feet of a building or structure.
 - d. Relocate exposed firewood piles outside of Zone 1 unless they are completely covered in a fire-resistant material.
3. Zone 2: 30 to 100 feet from any structure:
- a. All exposed wood piles must have a minimum of ten feet (10 ft.) of clearance, down to bare mineral soil, in all directions.
 - b. Create horizontal and vertical spacing among shrubs and trees using the "Fuel Separation" method, the "Continuous Tree Canopy" method or a combination of both to achieve defensible space clearance requirements. Further guidance regarding these methods is contained in the State Board of Forestry and Fire Protection's, "General Guidelines for Creating Defensible Space, February 8, 2006," incorporated herein by reference.
4. For both Zones 1 and 2:
- a. Remove vegetative and combustible material capable of transmitting fire to a structure as determined by the Fire Code Official.

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- b. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.).
- c. Cut annual grasses and forbs down to a maximum height of four inches (4 in.).
- d. Non-irrigated brush is not permitted.
- e. Vertical Spacing: Limb trees by removing hanging bark, debris and branches that are within six feet (6 ft.) of the ground, or three times the height of the understory vegetation, whichever is greater. Where a tree is not adaptable to limbing to the height described above, use a combination of limbing and/or modify and remove fuels adjacent to and underneath the tree to provide clearance above grade that is equivalent to three times the height of the tallest understory fuel.
- f. Maintain horizontal spacing between shrubs:
 - i. Flat or mild slope (less than 20%): Two times the height of the shrub.
 - ii. Mild to moderate slope (20-40%): Four times the height of the shrub
 - iii. Moderate to steep slope (greater than 40%): Six times the height of the shrub
- g. Maintain space between tree canopies:
 - i. Flat or mild slope (less than 20%): 10 feet.
 - ii. Mild to moderate slope (20-40%): 20 feet.
 - iii. Moderate to steep slope (greater than 40%): 30 feet.
- h. New trees shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 feet from any structure or the canopy of other trees.

Section 4907.5 Corrective Actions. The fire department is authorized to take enforcement actions as necessary to achieve compliance with Chapter 49 of this code, including but not limited those actions specified in Sections 104.13 ("Authority to arrest and issue citations"), 112.4 ("Violation penalties") and 114.7 ("Summary abatement") of this code, and as authorized by Berkeley Municipal Code, Chapter 1.24, "Abatement of Nuisances", and in accordance with all other applicable portions of the Berkeley Municipal Code. Corrective actions may also include the use of abatement warrants and the imposition of property liens as appropriate and in accordance with law.

Section 4912 SUPPRESSION AND CONTROL OF HAZARDS IN WILDLAND-URBAN INTERFACE AREAS

Section 4912.1 Permit. The fire code official is authorized to stipulate conditions for permits. Permits shall not be issued when public safety would be at risk, as determined by the fire code official.

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Section 4912.2 Restricted Entry. The fire code official shall determine and publicly announce when Wildland-Urban Interface areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of Wildland-Urban Interface areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the Wildland-Urban Interface areas are closed to entry, is prohibited.

Exceptions:

1. Residents and owners of private property within Wildland-Urban Interface areas and their invitees and guests going to or being upon their lands;
2. Entry, in the course of duty, by peace officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service

Section 4912.3 Trespassing on Posted Property

Section 4912.3.1 General. When the fire code official determines that a specific area within a Wildland-Urban Interface Areas presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.

Section 4912.3.2 Signs. Approved signs prohibiting entry by unauthorized persons and referring to this section shall be placed on every closed area.

Section 4912.3.3 Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

Section 4912.4 Smoking. Lighting, igniting or otherwise setting fire to or smoking tobacco, cigarettes, pipes or cigars in Wildland-Urban Interface areas are prohibited.

Exception: Places of habitation or within the boundaries of established smoking areas or campsites as designated by the fire code official.

Section 4912.5 Spark Arresters. Chimneys used in conjunction with fireplaces, barbecues, incinerators or heating appliances in which solid or liquid fuel is used, upon buildings, structures or premises located within Wildland-Urban Interface areas shall be provided with a spark arrester. See Berkeley Building Code Section 705A.5 for specifications.

Section 4912.6 Tracer Bullets, Tracer Charges, Rockets and Model Aircraft. Tracer bullets and tracer charges shall not be possessed, fired or caused to be fired into or across Wildland-Urban Interface areas. Rockets, model planes, gliders and balloons powered with an engine, propellant or other feature liable to start or cause fire shall not be fired or projected into or across Wildland-Urban Interface Areas.

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Section 4912.7 Explosives and Blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within Wildland-Urban Interface areas except by permit from the fire code official.

Section 4912.8 Fireworks. Fireworks shall not be used or possessed in Wildland-Urban Interface areas. The fire code official is authorized to seize, take, remove or cause to be removed fireworks in violation of this section.

Exception: Fireworks allowed by the fire code official under permit when not prohibited by applicable local or state laws, ordinances and regulations.

Section 4912.9 Apiaries. Lighted and smoldering material shall not be used in connection with smoking bees in or upon Wildland-Urban Interface areas except by permit from the fire code official.

Section 4912.10 Open-Flame Devices. See Berkeley Fire Code Sections 308.1.6 Open Flame Devices and 308.1.6.1 Signals and Markers.

Section 4912.11 Outdoor Fires. Outdoor fires shall not be built, ignited or maintained in or upon Wildland-Urban Interface areas, except by permit from the fire code official.

Exception: Outdoor fires within habited premises or designated campsites, where such fires are built in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator or grill and are a minimum of 30 feet (9144 mm) from a grass-, grain-, brush or forest-covered area.

Permits shall incorporate such terms and conditions, which will reasonably safeguard public safety and property.

Outdoor fires shall be prohibited in or upon Wildland-Urban Interface areas under the following conditions:

1. When red flag conditions exist as defined by the National Oceanic and Atmospheric Administration,
2. When a person age 17 or over is not present at all times to watch and tend such fire, or
3. When public announcement is made that open burning is prohibited. Permanent barbecues, portable barbecues, outdoor fireplaces, fire pits or grills shall not be used if solid or liquid fueled.

Section 4912.12 Incinerators and Fireplaces. Incinerators, outdoor fireplaces, fire pits, permanent barbecues and grills shall not be built, installed or maintained in Wildland-Urban Interface areas without prior approval of the fire code official. Existing incinerators, outdoor fireplaces, fire pits, permanent barbecues and grills shall be maintained in good repair and in a safe condition at all times. Openings in such appliances shall be provided with an approved spark arrester, screen or door.

Exception: When approved, unprotected openings in barbecues and grills necessary for proper functioning shall be allowed.

Section 4912.13 Dumping. Garbage, cans, bottles, papers, ashes, refuse, trash, rubbish or combustible waste material shall **not** be placed, deposited or dumped in or upon Wildland-Urban Interface areas or in, upon or along trails, roadways or highways in Wildland-Urban Interface areas.

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Exception: Approved public and private dumping areas.

Section 4912.14 Disposal of Ashes. Ashes and coals shall not be placed, deposited or dumped in or upon Wildland-Urban Interface areas.

Exceptions:

1. In the hearth of an established fire pit, camp stove or fireplace;
2. In a noncombustible container with a tight-fitting lid, which is kept or maintained in a safe location not less than 10 feet (3048mm) from combustible vegetation or structures;
3. Where such ashes or coals are buried and covered with 1 foot (304.8mm) of mineral earth not less than 25 feet (7620 mm) from combustible vegetation or structures.

Section 4912.15 Use of Fire Roads and Firebreaks. Motorcycles, motor scooters and motor vehicles shall not be driven or parked upon, and trespassing is prohibited upon, fire roads or firebreaks beyond the point where travel is restricted by a cable, gate or sign, without the permission of the property owner(s). Vehicles shall not be parked in a manner, which obstructs the entrance to a fire road or firebreak.

Exception: Public officers acting within their scope of duty. Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads or fire breaks unless located 16 feet (4877 mm) or more above such fire road or firebreak.

Section 4912.16 Use of Motorcycles, Motor Scooters and Motor Vehicles. Motorcycles, motor scooters and motor vehicles shall not be operated within Wildland-Urban Interface areas, without a permit by the fire code official, except upon clearly established public or private roads. Permission from the property owner(s) shall be presented when requesting a permit.

Section 4912.17 Tampering with Fire Department Locks, Barricades and Signs. Locks, barricades, seals, cables, signs and markers installed within Wildland-Urban Interface areas, by or under the control of the fire code official, shall not be tampered with, mutilated, destroyed or removed. Gates, doors, barriers and locks installed by or under the control of the fire code official shall not be unlocked.

Section 4912.18 Liability for Damage. The expenses of fighting fires and securing emergencies, which result from a violation of this code, Chapter 6.15.030 of the Berkeley Municipal Code ("Unauthorized barbecues and fire on public property"), Sections 13000-13011 of the California Health and Safety Code, Sections 4421-4446 of the California Public Resources Code, or Sections 451, 451.5, 452 or 455 of the California Penal Code is a charge against the person(s) whose violation of the code section(s) caused the fire. Damages caused by such fires shall constitute a debt of such person(s) and shall be collectable by the fire code official in accordance with Section 107.7 of the BMC.

Chapter 50 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 50 – HAZARDOUS MATERIALS – GENERAL PROVISIONS

ATTACHMENT 1

SECTION 5001 GENERAL

Section 5001.7 Hazardous materials transportation restrictions. No vehicle containing hazardous materials, including a hazardous materials transportation tank truck, trailer, semi-trailer or tank wagon containing flammable or combustible liquids, hazardous chemicals, liquefied petroleum gases, poisonous gases, or cryogenic fluids, shall be operated on any city street without a permit from the fire code official. A map showing the proposed route of the vehicle shall accompany applications for such permits. If a permit is granted, the map shall be carried at all times in the vehicle and the vehicle shall not deviate from the approved route as shown on the map. Such a permit may contain conditions, including restrictions on the hours within which certain routes may be used and limitations on the size of the vehicle allowed to travel the approved route. No route shall be approved that includes passage over or adjacent to subway entry or vent structures, through the Northbrae Tunnel, in any area designated an environmental safety residential district by the City of Berkeley's Zoning Ordinance, or in an area which may be designated as a hazardous fire area. Departure from the approved route, travel outside the permitted hours, and violation of any vehicle size limitation imposed, or failure to carry a map showing route approval shall constitute a violation of this Code. The transportation of extremely hazardous materials may, in the discretion of the fire code official, require both a permit and accompaniment by a Fire Department or Police Department convoy. The following streets contain purge chamber openings which lead directly into the subway section of the Bay Area Rapid Transit (BART) System in Berkeley and their use by tank vehicles or trailers for transportation or delivery of flammable or combustible liquids, hazardous chemicals, liquefied petroleum gases, poisonous gases, or cryogenic fluids is prohibited and a violation of this Code:

- a. On Addison Street between Martin Luther King Jr. Way and Oxford Street;
- b. On Shattuck Avenue between University Avenue and Dwight Way;
- c. On Virginia Street between Franklin and Sacramento Streets;
- d. On Sacramento Street between Virginia Street and Hearst Avenue;
- e. On Hearst Avenue between McGee Avenue and Milvia Street;
- f. On Adeline Street between Ward and Stuart Streets; and
- g. On Adeline Street between Ashby Avenue and Woolsey Street

CHAPTER 56 – EXPLOSIVES AND FIREWORKS

SECTION 5601 GENERAL

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks, including fireworks which are classified as Safe and Sane fireworks by the California State Fire Marshal's Office, are prohibited within the City of Berkeley.

Exceptions:

- ~~1. Storage and handling of fireworks as allowed in Section 5604.~~
- ~~2. Manufacture, assembly and testing of fireworks as allowed in Section 5605 and Health and Safety Code Division 11.~~

ATTACHMENT 1

31. The use of fireworks for fireworks displays, *pyrotechnics before a proximate audience and pyrotechnic special effects in motion pictures, television, theatrical or group entertainment productions as allowed in Title 19, Division 1, Chapter 6 Fireworks reprinted in Section 5608 and Health and Safety Code Division 11* when stored, transported, handled and used under the required fire department permit(s) and in accordance will all applicable requirements of Chapter 56.
42. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100– 185, as applicable for consumer fireworks *and Health and Safety Code Division 11.*

Section 5604.1 General. The storage and handling of explosives within City of Berkeley limits is prohibited. Storage of explosives and explosive materials, small arms ammunition, small arms primers, propellant- actuated cartridges and smokeless propellants in magazines shall comply with the provisions of this section

Exception: Where expressly permitted by applicable laws, ordinances or regulations provided such storage and handling of explosives and explosive materials, small arms ammunition, small arms primers, propellant-actuated cartridges and smokeless propellants in magazines is conducted in accordance with Section 5604 and all applicable provisions of Chapter 56.

CHAPTER 57 – FLAMMABLE AND COMBUSTABLE LIQUIDS

SECTION 5701 GENERAL

Section 5701.4.1 Transfer of flammable and combustible liquids. Transfer to or from containers or mobile tanks, above ground or underground tanks of flammable and combustible liquids shall not be made from or on the street or public way except by written approval by the fire code official.

Exceptions:

1. Transfer of not more than 5 gallons flammable or combustible liquids using a listed or approved portable fuel container of not more than 5 gallons capacity.
2. The transfer of combustible liquids to or from approved, fixed mechanical or electrical system equipment such as a Standby or Emergency electric power generator when the transfer is completed by a commercial fuel vendor using approved dispensing equipment via a previously approved, fixed tank filling port which met code requirements at the time of installation.

SECTION 5704 STORAGE

Section 5704.2.11.1.1 Restrictions on underground storage tanks. The storage of flammable and combustible liquids in underground tanks is prohibited in all areas zoned solely for residential occupancies, closely built commercial properties, and any other area deemed unsafe by the fire code official.

ATTACHMENT 1

Section 5704.2.13.1.4 Tanks abandoned in place. Tanks may be abandoned only under permit and following City of Berkeley Fire Department procedures. The owner shall demonstrate to the satisfaction of the City of Berkeley Toxics Management Division (TMD) that no unauthorized release has occurred. If the soil is contaminated, mitigation must be completed to the satisfaction of the Toxics Management Division (TMD). A notice shall be placed in the deed to the property. This notice shall describe the precise location of the closed underground storage tank, the hazardous substances that it contained, and the closure method. Tanks abandoned in place shall be as follows:

1. Flammable and combustible liquids shall be removed from the tank and connected piping.
2. The suction, inlet, gauge, vapor return and vapor lines shall be disconnected.
3. The tank shall be filled completely with an approved inert solid material.
4. Remaining underground piping shall be capped or plugged.
5. A record of tank size, location and date of abandonment shall be retained.
6. All exterior above-grade fill piping shall be permanently removed when tanks are abandoned or removed.

Section 5704.2.14 Removal and disposal of tanks. Removal and disposal of tanks shall comply with Sections 5704.2.14.1 and 5704.2.14.2. Removal of all tanks shall be authorized under a fire permit, abiding by City of Berkeley Fire Department procedures. The applicant shall submit the following:

1. A site plan showing the location of the tanks.
2. A detailed description of the scope of work.
3. A site safety plan.
4. A vicinity map to the closest hospital, in an event of an emergency.
5. Proof of workers compensation insurance.

The owner shall demonstrate to the satisfaction of the City of Berkeley Toxics Division that no unauthorized release has occurred. If the soil is contaminated, mitigation must be completed to the satisfaction of the Toxics Division or the California Water Board.

CHAPTER 61 – LIQUIFIED PETROLEUM GASES

SECTION 6104 LOCATION OF LP-GAS CONTAINERS

Section 6104.1.1 Restrictions on storage of LP-gas containers. It shall be unlawful to store any liquefied petroleum gas cylinder with a capacity greater than 2-1/2 lbs. water capacity or a portable tank within any structure or building with an occupancy classification of A, R-1, R-2 or R-4, unless specifically authorized by this Code.

APPENDIX B – FIRE FLOW REQUIREMENTS FOR BUILDINGS

ATTACHMENT 1

Section B105.2 (Appendix B), Table B105.2, “Required Fire-Flow for Buildings Other Than One- And Two-Family Dwellings, Group R-3 And R-4 Buildings And Townhouses” [Amended Table]

**TABLE B105.2
REQUIRED FIRE-FLOW FOR BUILDINGS
OTHER THAN ONE- AND
TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4
BUILDINGS AND TOWNHOUSES**

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the <i>California Fire Code</i>	2550% of the value in Table B105.1(2) ^a	Duration in Table BI 05.1(2) at the reduced flow rate
Section 903.3.1.2 of the <i>California Fire Code</i>	2550% of the value in Table B105.1(2) ^b	Duration in Table BI05.1(2) at the reduced flow rate

For SI: 1 gallon per minute= 3.785 Liters.

a. The reduced fire-flow shall be not less than 1,000 gallons per minute.

b. The reduced fire-flow shall be not less than 1,500 gallons per minute.

**APPENDIX L – REQUIREMENTS FOR FIRE FIGHTER AIR REPLENISHMENT
SYSTEMS**

SECTION L104 DESIGN AND INSTALLATION

Section L104.5.1 Stored pressure air supply. A stored pressure air supply shall be designed based on Appendix Chapter F of the California Plumbing Code Chapter 24 of NFPA 1901 except that the provisions applicable only to mobile apparatus or not applicable to system design shall not apply. A stored pressure air supply shall store not less than 5,000 Standard Cubic Feet (SCF) of air or be capable of refilling not less than 50 empty breathing air cylinders of a size and pressure used by the fire department, whichever is greater.

Section 19.48.030 Validity. Should any section, paragraph, sentence or word of this Chapter or of the Code or Standards be declared invalid, all other portions of this Chapter shall remain in effect.

Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

ORDINANCE NO. –N.S.

ADOPTION OF THE 2025 CALIFORNIA WILDLAND-URBAN INTERFACE CODE AND CONSOLIDATING BERKELEY'S WILDLAND URBAN INTERFACE (WUI) FIRE CODES INTO A NEW BERKELEY MUNICIPAL CODE CHAPTER 19.49, AND REMOVING PREVIOUS WUI CODE REFERENCES FROM BERKELEY BUILDING CODE (BMC CHAPTER 19.28), BERKELEY RESIDENTIAL CODE (BMC CHAPTER 19.29) AND THE BERKELEY FIRE CODE (BMC CHAPTER 19.48)

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That Berkeley Municipal Code Chapter 19.49 is hereby introduced:

Chapter 19.49

BERKELEY WILDLAND-URBAN INTERFACE CODE

Sections:

- 19.49.010 Adoption of the California Wildland-Urban Interface Code**
- Article 1. Scope and Administrative Provisions**
 - 19.49.020 Adoption of Chapter 1 Scope and Administration**
- Article 2. Definitions**
 - 19.49.030 Amendments to Chapter 2 Definitions**
- Article 3. Wildland-Urban Interface Areas**
 - 19.49.040 Amendments to Chapter 3 Wildland-Urban Interface Areas**
- Article 4. Wildland-Urban Interface Area Requirements**
 - 19.49.050 Amendments to Chapter 4 Wildland-Urban Interface Area Requirements**
- Article 5. Special Building Construction Regulations**
 - 19.49.060 Technical Amendments to Chapter 5 Special Building Construction Regulations**
- Article 6. Fire Protection Requirements**
 - 19.49.070 Amendments to Chapter 6 Fire Protection Requirements Including Defensible Space regulations**
- Article 7. Referenced Standards**
 - 19.49.080 Amendments to Chapter 7 Referenced Standards**
- Article 8. General Requirements**
 - 19.49.090 Adoption of Appendix A with amendments**

19.49.010 Adoption of the California Wildland-Urban Interface Code.

The California Wildland-Urban Interface Code, 2025 edition, as adopted in Title 24 Part 7 of the California Code of Regulations, including Appendix A is hereby adopted and made a part of this Chapter as though fully set forth herein, subject to the modifications thereto which are set forth in this Chapter. One copy of this Code is on file in the office of the City Clerk of the City of Berkeley (“City”).

Article 1. Scope and Administrative Provisions

19.28.020 Adoption of Chapter 1 Scope and Administration

Chapter 1 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

CHAPTER 1 SCOPE AND ADMINISTRATION

SECTION 101 – SCOPE AND GENERAL REQUIREMENTS

101.1 Title. These regulations shall be known as the ~~California Berkeley~~ Wildland-Urban Interface Code of ~~[NAME OF JURISDICTION]~~, hereinafter referred to as “this code”.

101.3.1 Application. *New buildings and structures, additions, alterations, repairs and re-roofs located in any Fire Hazard Severity Zone or Wildland-Urban Interface (WUI) Fire Area designated by the enforcing agency constructed after the application date shall comply with the provisions of this code. This shall include all new buildings and structures, additions, alterations, repairs and re-roofs with residential, commercial, educational, institutional or similar occupancy type uses, which shall be referred to in this code as “applicable buildings,” as well as new buildings and structures, additions, alterations, repairs and re-roofs accessory to those applicable buildings.*

Exceptions:

1. *Group U occupancy accessory buildings or structures of any size located at least 50 feet (15 240 mm) from an applicable building on the same lot.*
2. *Group U occupancy agricultural buildings or structures, as defined in Section 202 of the California Building Code of any size located at least 50 feet (15 240 mm) from an applicable building.*
3. ~~*Group C occupancy special buildings or structures conforming to the limitations specified in Section 450.4.1 of the California Building Code.*~~
4. *New accessory buildings and miscellaneous structures specified in Section 504.11 shall comply only with the requirements of that section.*
5. ~~*Additions to and remodels of buildings originally constructed prior to July 1, 2008.*~~

101.3.1.1 Application date and where required. ~~New buildings or structures for which an application for a building permit is submitted on or after July 1, 2008; or buildings and structures, additions, alterations, repairs and re-roofs for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone or Wildland-Urban Interface Area shall comply with this code, including all land designated as a wildland-urban interface area by the City of Berkeley. of the following areas:~~

~~All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:~~

~~Moderate Fire Hazard Severity Zones.~~

~~High Fire Hazard Severity Zones.~~

~~Very High Fire Hazard Severity Zones.~~

~~Land designated as a Very High Fire Hazard Severity Zone by cities and other local agencies.~~

~~Land designated as a wildland-urban interface area by cities and other local agencies.~~

Exceptions:

~~1. New buildings located in any Fire Hazard Severity Zone within a State Responsibility Area, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with this code.~~

~~2. New buildings located in any Fire Hazard Severity Zone within a State Responsibility Area or any wildland-urban interface area designated by cities and other local agencies for which an application for a building permit is submitted on or after December 1, 2005, but prior to July 1, 2008, shall only comply with the following sections of this chapter:~~

~~2.1. Section 507 — Replacement or Repair of Roof Coverings.~~

~~2.2. Section 504.10 — Vents.~~

101.5 Additions, ~~or alterations~~ or re-roofs. Additions, ~~or alterations~~ or re-roofs shall be permitted to be made to any building or structure without requiring the existing building or structure to comply with all of the requirements of this code, provided that the additions, ~~or alterations~~ or re-roofs conforms to that required for a new building or structure.

Exception: Provisions of this code that specifically apply to existing conditions are retroactive.

Additions, ~~or alterations~~ or re-roofs shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code nor shall such additions or alterations cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an addition, ~~or alteration~~ or re-roof will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate access in compliance with the provisions of this code or will obstruct existing exits or access; will create a fire hazard;

will reduce required fire resistance or will otherwise create conditions dangerous to human life.

102.4.1 Conflicts. Where conflicts occur between provisions of this code and the referenced standards, the provisions of the most restrictive referenced standards ~~this code~~ shall govern.

102.4.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of the referenced code or standard ~~this code~~, as applicable, shall take precedence over the provisions in this code ~~the referenced standard~~.

SECTION 103 – CODE COMPLIANCE AGENCY

103.1 Creation of enforcement agency. The Berkeley Fire Department ~~[INSERT NAME OF DEPARTMENT]~~ is hereby created and the official in charge thereof shall be known as the Fire Chief. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

103.2 Appointment. The Fire Chief shall be appointed by the ~~chief appointing authority of the jurisdiction~~ City Manager.

103.3 Deputies. In accordance with the prescribed procedures of ~~this jurisdiction~~ the City of Berkeley, and ~~with the concurrence of the appointing authority~~ the Fire Chief, hereinafter referred to as the code official, shall have the authority to appoint a ~~d~~Deputy Fire Chief, Fire Marshal, Fire Plans Examiners and other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official. For purposes of this code, the term “code official” shall also include their designees.

SECTION 104 – DUTIES AND POWERS OF CODE OFFICIAL

104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building, structure or activity to which such records relate remains in existence, unless otherwise ~~provided by other regulations~~ required for a longer period by the retention of public record policy of the city.

104.7.2 Inspections. The code official shall keep a record of each inspection made, including notices of violations issued, notices and orders issued, administrative citation warning letters issued, citations issued and appeals received showing the findings and disposition of each.

104.7.5 Fees. The code official shall keep a record of invoices issued, fees collected and fees refunded in accordance with Section 108.

104.9.1 Materials and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working order with proper reports and

tests justifying the condition, labeled and graded as required and expressly approved by the code official.

104.14 Liability for Damage. The expenses of fighting fires and securing emergencies, which result from a violation of this code, Chapter 6.15.030 of the Berkeley Municipal Code (“Unauthorized barbecues and fire on public property”), Sections 13000-13011 of the California Health and Safety Code, Sections 4421-4446 of the California Public Resources Code, or Sections 451, 451.5, 452 or 455 of the California Penal Code is a charge against the person(s) whose violation of the code section(s) caused the fire. Damages caused by such fires shall constitute a debt of such person(s) and shall be collectable by the code official in accordance with Section 104.14.1 (“Expense of securing emergencies”) of this code.

Section 104.14.1 Expense of securing emergencies. The expense of securing any emergency that is within the responsibility for enforcement of the code official as given in Sections 104.1 is a charge against the person who caused the emergency. Damages and expenses incurred by any public agency having jurisdiction or any public agency assisting the agency having jurisdiction shall constitute a debt of such person and shall be collectible by the code official for proper distribution in the same manner as in the case of an obligation under contract expressed or implied. Expenses as stated above shall include, but not be limited to, equipment and personnel committed and any payments required by the public agency to outside business firms requested by the public agency to secure the emergency, monitor remediation, and clean up.

SECTION 105 – PERMITS

105.3 Work exempt from permit. Exemption from the permit requirements of this code or in other Parts of Title 24 shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

The code official is authorized to stipulate conditions for permits. Permits shall not be issued where public safety would be at risk, as determined by the code official.

105.4 Permit Application. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the ~~code enforcement agency~~ City for that purpose. Such application shall not become valid until accepted by the City as complete and appropriate fees paid. Every such application shall:

1. Identify and describe the work, activity, operation, practice or function to be covered by the permit for which application is made.
2. Describe the land on which the proposed work, activity, operation, practice or function is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building, work, activity, operation, practice or function.
3. Indicate the use or occupancy for which the proposed work, activity, operation, practice or function is intended.

4. Be accompanied by plans, diagrams, computation and specifications and other data as required in Section 106 of this code or in other Parts of Title 24.
5. State the valuation of any new building or structure or any addition, remodeling, or alteration or re-roof to an existing building.
- ~~6. Be signed by the applicant or the applicant's authorized agent.~~
- ~~7.~~ 6. Give such other data and information as required by the code official.

105.4.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned ~~480-365~~ days after the date of filing, unless it can be demonstrated by the applicant that such application has been pursued in good faith or a permit has been issued; except that the code official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each per extension. The extension shall be requested in writing and justifiable cause demonstrated on a form furnished by the Building and Safety Division for that purpose. Requests for time extensions shall be accompanied by the payment of a fee set by resolution of the City Council. An application, once abandoned, shall be deemed expired and a new application will be required to be submitted.

Exception. If an application is associated with a code enforcement case, the dates specified in the code enforcement notices take precedence over the timelines specified in this section.

105.6.1 Refusal to issue a permit. Where the application or construction documents do not conform to the requirements of pertinent laws or when public safety would be at risk, the code official shall reject such application in writing, stating the reasons therefor.

105.8 Expiration of Permit. *On or after January 1, 2019, every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance or if the work authorized on the site by such permit is suspended or abandoned for a period of 12 months after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. (See Health and Safety Code Section 18938.5 and 18938.6.)*

The extension shall be requested in writing and justifiable cause demonstrated on a form furnished by the Building and Safety Division for that purpose. Requests for time extensions shall be accompanied by the payment of a fee set by resolution of the City Council.

The issuance of a building permit shall not excuse the permittee or any other person from compliance with deadlines imposed in any notice and/or order to correct a code violation issued by the City. If a permit is for a project associated with a code enforcement case, the dates specified in the code enforcement notices take precedence over the timelines specified in this section.

When a permit is deemed expired and a new permit is required to complete the work, a new permit application and plans shall be filed describing the remaining work to be done.

Fees shall be assessed based on the valuation of the work remaining to be completed or itemized as allowed by adopted fee schedule. If a site visit or other review is required to determine the extent of the remaining work, a fee may be charged to make such determination.

For the purposes of this section “suspended or abandoned for a period of 12 months after the time the work is commenced” shall mean that no activity or progress has been made on site for the work approved under the issued permit in the time period the permit is active and a completed and approved city inspection, per Section 109.1 of this code and/or California Building Code Section 110.3, has not been acquired.

106.2 Information on plans and specifications. Plans and specifications shall be drawn to scale ~~on substantial paper or cloth~~ and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations.

106.4 Vegetation management compliance. *Prior to the building permit final approval, the property shall be in compliance with the vegetation management requirements prescribed in Section 603, including California Public Resources Code 4291 or California Government Code Section 51182, and Section 302.3. Acceptable methods of compliance inspection and documentation shall be determined by the enforcing agency and shall be permitted to include any of the following:*

- 1. Local, state or federal fire authority or designee authorized to enforce vegetation management requirements.*
- 2. ~~Enforcing agency~~ Berkeley Fire Department inspection and/or vegetation management plan submittal, review, and approval.*
- 3. Third-party inspection and certification authorized to enforce vegetation management requirements.*
- 4. Property owner certification authorized by the ~~enforcing agency~~ Berkeley Fire Department.*
- 5. Compliance with hazardous vegetation and fuel mitigation and home hardening requirements in Section 604.3.1 and Section 604.3.2.*

106.5 Fire protection plan. Where required by the code official pursuant to Section 602, a fire protection plan shall be prepared and shall be submitted to the code official for review and approved as a part of the plans required for a permit. The Fire Protection Plan shall be enforced and maintained by the responsible party or their designated agent. The Berkeley Fire Department may charge an appropriate fee for the review, approval and processing of the Fire Protection Plan as established by City Council resolution.

106.8 Retention of plans. One set of approved plans, specifications and computations shall be retained by the code official for a period of not less than ~~180 days~~ 5 years from date of completion of the permitted work or as required by state or local laws or per the public records retention policy of the city, whichever is longer; and one set of approved plans and specifications shall be returned to the applicant, and said set shall be kept on

the site of the building, use or work at all times during which the work authorized thereby is in progress. *Refer to Building Standards Law, Health and Safety Code Sections 19850 and 19851 for permanent retention of plans.*

106.11 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within ~~480~~ 365 days after the effective date of this code and has not been abandoned.

SECTION 108 – FEES

108.1 Payment of fees. Except when fees are deferred, a permit application shall not be deemed valid until the fees set forth by resolution of City Council have been paid. A permit shall not be valid until the fees prescribed by law as set forth by resolution of City Council have been paid. An amendment to a permit shall not be released until the additional fee, if any, has been paid.

108.2 Schedule of permit fees. On buildings, structures, electrical, gas, mechanical, and plumbing systems, or alterations ~~Where~~ a permit is required, a fee for each permit shall be paid as required, in accordance with the fee schedule as established by the applicable governing authority set forth by resolution of the City Council. Fees for permits and inspections and other related services under this code shall be assessed and paid as set forth by resolution of the City Council. Unless waived or deferred, as provided by local regulations, a plan review fee and other fees as specified in the resolution shall be paid at the time of submitting any documents for review and additional fees as specified in the resolution shall be paid at issuance of the permit.

108.4 Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the applicable governing authority, which shall be in addition to the required permit fees as set forth by resolution of the City Council to be twice the amount of the required fees to obtain a permit for that work, activity or operation regulated by this code. This is in addition to the permit fees for the portion of the scope of work performed without the permit.

SECTION 109—INSPECTION AND ENFORCEMENT

109.1.3.1 Re-inspection fees. A re-inspection fee, as set forth by resolution of the City Council, may be assessed for each re-inspection when such portion of work for which an inspection is scheduled is not complete, is required to be reinspected after receiving a previously approved inspection for the same work or when corrections previously called for are not made.

Re-inspection fees shall not be required each time a job is disapproved for failure to comply with the requirements of this Code. This section applies for the following reasons:

1. When the work is not ready for inspection when the inspector arrives at the site.
2. When excessive scheduling of inspections for work not yet completed at the site.
3. When the approved plans, permit and inspection card are not readily available to the inspector at the work site.
4. For failure to provide access on the date for which the inspection is requested.
5. When work deviates from the approved plans and no approved revision to approved plans has been obtained by the permittee.
6. When other reasons, as determined by the code official, requires a re-inspection fee to be assessed.

The applicant shall pay the re-inspection fee as set forth by resolution of the City Council. In instances where re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

109.2.3 Corrective Actions. The code official is authorized to take enforcement actions as necessary to achieve compliance with this code, including but not limited those actions specified in Sections 109.3.7 (“Violation penalties”) and 109.3.5.5 (“Summary abatement”) of this code, and as authorized by Berkeley Municipal Code, Chapter 1.24, “Abatement of Nuisances”, and in accordance with all other applicable portions of the Berkeley Municipal Code. Corrective actions may also include the use of abatement warrants and the imposition of property liens as appropriate and in accordance with law.

109.3.2 Compliance with tags. A building or premises shall not be used when in violation of this code as noted on a tag affixed in accordance with Section ~~409.3.1~~ 109.3.5.3.

109.3.5 Unsafe conditions. Structures or existing equipment that are or hereafter become structurally or otherwise unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a structural or fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against unauthorized entry shall be deemed unsafe.

All such unsafe buildings, equipment, structures or appendages are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures set forth in Chapters 1.24, 19.28, 19.40 and/or 19.44 of the BMC as applicable. As an alternative, the building official, or other employee or official of this jurisdiction as designated by the City Council, may institute any other appropriate action to prevent, restrain, correct or abate the violation.

109.3.5.3 Safety Assessment Placards. Placarding. Upon failure of the owner, the owner’s authorized agent or the person responsible to comply with the notice provisions within the time given, the code official shall post on the premises or on defective equipment a placard bearing the word “UNSAFE” and a statement of the penalties provided for occupying the premises, operating the equipment or removing the placard.

109.3.5.3.1 Posting. The code official or designee shall post the appropriate placard at each entry point to a building or structure upon completion of a safety assessment.

109.3.5.3.2 Application of provisions. The provisions of this section are applicable to all buildings and structures of all occupancies regulated by the City of Berkeley. The City Council may extend the provisions as necessary.

109.3.5.3.3 Safety Assessment. Safety Assessment is a visual, non-destructive examination of a building or structure for the purpose of determining the condition for continued occupancy.

109.3.5.3.4 Placards. This section establishes standard placards to be used to indicate the condition of a building or structure for occupancy after a natural or human-caused disaster and a rapid evaluation by authorized personnel.

Following are titles and descriptions of the official jurisdiction placards to be used to designate the condition of a building or structure for continued occupancy, partial or conditional occupancy, or unsafe to enter. Copies of placards are on file in the Building and Safety Division of the Planning and Development Department.

INSPECTED – Lawful Occupancy Permitted is to be posted on any building or structure wherein no apparent hazard has been found. This placard is not intended to mean there is no damage to the building or structure, but that any damage that occurred does not present a hazard to occupants.

RESTRICTED USE is to be posted on each building or structure that has been damaged wherein the damage has resulted in some form of restriction to the continued occupancy. The individual who posts this placard will note in general terms the type of damage encountered and will clearly and concisely note the restrictions on continued occupancy.

UNSAFE – “Do Not Enter or Occupy” is to be posted on each building or structure that has been damaged such that continued occupancy poses a threat to life safety. Building or structures posted with this placard shall not be entered under any circumstances except as authorized in writing by the building official, or the building official’s authorized representative. Safety assessment teams shall be authorized to enter these building at any time. This placard is not to be used or considered as a demolition order. The individual who posts this placard will note in general terms the type of damage encountered.

109.3.5.3.5 Content of placard. The BMC Section number and the words "City of Berkeley" shall be permanently affixed to each placard.

109.3.5.3.6 Unlawful to remove. Once a placard has been attached to a building or structure, it is not to be removed, altered or covered until done so by an authorized representative of the code official. It shall be unlawful for any person, firm or corporation to alter, remove, cover or deface a placard unless authorized pursuant to this section.

109.3.5.3.17 Placard removal. The code official shall remove the unsafe condition placard whenever the defect or defects on which the unsafe condition and placarding action were based have been eliminated. Any person who defaces or removes a safety

assessment ~~an unsafe condition~~ placard without the approval of the code official shall be subject to the penalties provided by this code.

109.3.5.5 Summary abatement. Where conditions exist that are deemed hazardous to life and property, the code official is authorized to abate or correct summarily such hazardous conditions that are in violation of this code, including fire nuisances. Where the owner does not comply with an abatement order under Section 109.3.5.2 within the period specified, the City of Berkeley may perform or cause to be performed the necessary work. The costs incurred shall be recoverable under the procedures in Section 109.3.5.4.1.

109.3.5.4.1 Abatement process. The abatement process shall be conducted in accordance with the notice and hearing requirements of the nuisance abatement provisions of Berkeley Municipal Code Chapter 1.24, including summary abatements of structures or premises determined by the City of Berkeley to constitute an imminent hazard or emergency condition.

109.3.7 Violation penalties. Persons who shall violate a provision of this code or fail to comply with any of the requirements thereof or who shall erect, install, construct, alter, repair or do work for a building or structure in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a ~~[SPECIFY OFFENSE]~~, ~~punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment.~~ subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense. In addition to all other legal remedies, civil or criminal (as set forth above), any violation of this code constitutes a public nuisance in accordance with B.M.C Chapter 1.26, and is subject to all provisions of B.M.C. Chapter 1.26, as well as abatement under B.M.C. Chapter 1.24, "Abatement of Nuisances," with the exception of section 112 (Means of Appeal) which supersedes these provisions. All such violations are also subject to the issuance of an administrative citation in accordance with B.M.C Chapter 1.28 at the discretion of the enforcing officer or the City Attorney.

109.3.7.1 Unlawful acts. *It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, ~~or occupy, or utilize~~ any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code or create, maintain or allow to continue any fire hazard.*

109.4 Restricted Entry of Wildland-Urban Interface Areas. The code official shall determine and publicly announce when Wildland-Urban Interface areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of Wildland-Urban Interface areas, except public roadways, inhabited areas or established trails and camp sites which have not been closed during such time when the Wildland-Urban Interface areas are closed to entry, is prohibited.

Exceptions:

1. Residents and owners of private property within Wildland-Urban Interface areas and their invitees and guests going to or being upon their lands;

2. Entry, in the course of duty, by peace officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.

109.5 Trespassing on Posted Property

109.5.1 General. When the code official determines that a specific area within a Wildland-Urban Interface Areas, as listed in Section 302.3, presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such areas shall be posted as hereinafter provided.

109.5.2 Signs. Approved signs prohibiting entry by unauthorized persons and referring to this section shall be placed on every closed area.

109.5.3 Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

SECTION 110—CERTIFICATE OF COMPLETION OCCUPANCY

110.1 General. A building, structure or premises shall not be used or occupied, and a change in the existing use or occupancy classification of a building, structure, premise or portion thereof shall not be made until the code official has issued a certificate of ~~completion~~ occupancy therefor as provided herein. The certificate of occupancy shall not be issued until the code official has determined that the project is in compliance with this code. *The code official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this code. Issuance of a certificate of occupancy by the local building official for the proposed building shall be considered to indicate compliance with this code.*

110.2 Certificate of occupancy. Issuance of a certificate of occupancy is the responsibility of the local building official. The issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other pertinent laws and ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other laws or ordinances of the jurisdiction shall not be valid.

Exceptions:

~~1. Certificates of occupancy are not required for work exempt from permits under Section 105.3.~~

~~2. Accessory structures.~~

110.3 Temporary occupancy. The code official, in agreement with the local building official, is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The code official shall set a time period during which the temporary certificate of occupancy is valid.

110.4 Revocation. The code official, in agreement with the local building official, is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, on the basis of incorrect information supplied, or where it is determined that the building or structure, premise or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

SECTION 111 – SERVICE UTILITIES

111.1 Authority for ~~c~~Connection of service utilities. A person shall not make connections from a utility, a source of energy, fuel, power, water system or sewer system to any building, structure or system that is regulated by this code for which a permit is required until ~~authorized~~ authorization to connect by the code official has been obtained.

111.1.2 Authority to connect utilities. Clearance for connection of one utility, either gas or electrical, will be withheld until final building, electrical, plumbing, and/or mechanical inspections are made and approval has been given for any new building or change in occupancy classification to an existing building for which connection to such utilities is sought, unless approval has been first obtained from the code official, as provided by a Temporary Certificate of Occupancy or Final Certificate of Occupancy.

111.3 Authority to disconnect service utilities in emergencies. The code official shall have the authority to authorize ~~disconnection of utility service to~~ disconnect electrical power or other energy service supplied to the a building, structure, ~~or system or building service equipment therein~~ regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 111.1 or 111.2. The code official shall notify the serving utility and, where possible, the owner or the owner's authorized agent and the occupant of the building, structure, ~~or service system or equipment~~ of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner, the owner's authorized agent or the occupant of the building, structure, ~~or service system or equipment~~ shall be notified in writing as soon as practical thereafter.

111.4 Unsafe service utilities. Unsafe service utilities are hereby declared to be public nuisances and shall be abated, repaired, rehabilitated, demolished or removed in accordance with the procedures set forth in this code and/or per Chapter 19.40 of the Berkeley Municipal Code (BMC) for residential buildings and Berkeley Building Code for all other buildings, or any alternate procedure that may be adopted by the City of Berkeley. In addition, the City Attorney may pursue other appropriate action to prevent, restrain, correct or abate the violation as provided for in the BMC. Remedies under this section are cumulative. When service utilities are maintained in violation of this Code and in

violation of a notice issued pursuant to the provisions of this section, the code official shall institute appropriate action to prevent, restrain, correct or abate the violation.

111.5 Authority to condemn electrical, plumbing and/or mechanical systems and equipment. Whenever the code official determines that an electrical, plumbing, or mechanical system or equipment regulated by this code is hazardous to life, health or property, the building official may order in writing that such systems or equipment either be removed or restored to a safe working condition. The written notice shall fix a reasonable time limit for compliance with such order. Persons shall not use or maintain defective systems or equipment after receiving such notice except as may be provided therein.

When equipment or an installation is to be disconnected, a written notice of such disconnection and the reasons therefore shall be given within 24-hours of the order to disconnect to the serving utility, the owner and occupants of the building, structure or premises.

When equipment or an installation is maintained in violation of this Code and in violation of a notice issued pursuant to the provisions of this section, the building official shall institute appropriate action to prevent, restrain, correct or abate the violation.

Unsafe electrical, plumbing, and/or mechanical systems or equipment are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures set forth in Chapter 19.40 of the BMC for residential buildings and Berkeley Building Code for all other buildings, or any alternate procedure adopted by the City of Berkeley. In addition, the City Attorney may pursue other appropriate action to prevent, restrain, correct or abate the violation as provided for in the BMC. Remedies under this section are cumulative.

111.6 Connection after order to disconnect. Persons shall not make connections to a service utility, a source of energy, fuel, or power, or a water system or sewer system or equipment that has been disconnected or ordered to be disconnected by the building official, or the use of which has been ordered to be discontinued by the code official, until the building official authorizes the reconnection and use of the disconnected service systems or equipment.

SECTION 112 – MEANS OF APPEALS

112.1 ~~General Appeals Procedure.~~ ~~In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.~~ The City Council shall hear and decide on appeals of orders, decisions, or determinations made by the Fire Code Official relative to the application and interpretation of this code. A property owner may appeal an order, decision, or determination of the Fire Code Official within 10 calendar days of the date of mailing of the appealable action. The notice of appeal shall contain a statement of the reasons for the appeal and be filed with the City Clerk of the City of Berkeley. The City Clerk shall forward one copy thereof to the Fire Code Official, who shall transmit to the City Council all their records pertaining to the decision being appealed.

Section 112.1.1 Payment of Fees and Fines. Prior to the deadline to appeal, the property owner must pay the appeal fee, per the adopted fee schedule, in addition to an advance deposit of the fine or file an application for an advanced deposit hardship waiver. If the hardship waiver is not granted, the fine must be deposited to the City within 14 days of mailed notice of that decision. No hearing shall be scheduled prior to receipt of payment or approval of the hardship waiver.

112.1.2 Stay of Proceedings. The filing of the notice of appeal shall stay all proceedings by all parties in connection with the matter upon which the appeal is taken until determination of the appeal as hereinafter provided, unless the fire code official determines that such a stay could result in an imminent threat to public safety.

112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The ~~board~~ City Council shall not have authority to waive requirements of this code.

112.3 Qualifications. ~~The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.~~ **Decisions.** The City Council shall review the action of the fire code official and shall do any one of the following:

Refer the matter back to the fire code official.

If the facts stated in, or ascertainable from the, Notice of Appeal, the written statement of the fire code official setting forth the reason for their decision, and the other papers, if any, constituting the record do not, in the opinion of the City Council, warrant further hearing, the City Council may affirm the decision of the fire code official. Such decision shall be final.

If, in the opinion of the City Council, said facts warrant further hearing, the City Council shall set the matter for hearing and shall give notice of the time and place of said hearing by mailing a copy of such notice by certified mail to the address of the appellant as stated in the Notice of Appeal, at least ten (10) days before the time fixed for the hearing. The City Council may continue the hearing from time to time.

Following such hearing, the City Council shall reverse, affirm wholly or partly modify any decision of the fire code official, or make any other decisions or determinations or impose such conditions as the facts warrant. Such decision or determination shall be final.

If none of the above actions have been taken by the City Council within thirty (30) days from the date the appeal first appears on the City Council agenda, then the decision of the fire code official shall be deemed affirmed and the appeal shall be deemed dismissed.

If the appeal is set for hearing but the disposition of the appeal has not been determined within ninety (90) days from the date the appeal first appears on the City Council agenda, then the decision of the fire code official shall be deemed affirmed and the appeal deemed dismissed.

112.4 Administration. The fire code official shall take action without delay in accordance with the decision of the ~~board~~ City Council.

Article 2. Definitions

19.49.030 Adoption of Chapter 2 Definitions

Chapter 2 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

ACCESSORY STRUCTURE. A structure that is accessory to and incidental to that of the primary structure and that is located on the same lot. A building or structure used to shelter or support any material, equipment, chattel or occupancy other than a habitable building.

APPLICABLE BUILDING. *A building or structure that has residential, commercial, educational, institutional or similar occupancy type use.*

BERKELEY BUILDING STANDARDS CODE. The Berkeley Building Standards Code includes the most recently adopted Berkeley Building Code, Berkeley Residential Code, Berkeley Existing Building Code, Berkeley Historical Building Code, Berkeley Electrical Code, Berkeley Mechanical Code, Berkeley Plumbing Code, Berkeley Green Code, and Berkeley Energy Code.

BOLE OF A TREE. A bole of a tree is its main trunk, specifically the part extending from the roots up to the first branches and canopy.

FIRE HAZARD. Anything or act which increases or could cause an increase of the hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fire or anything or act which could obstruct, delay, hinder or interfere with the operations of the fire department or the egress of occupants in the event of fire. Fire hazards as defined herein are hereby declared to be public nuisances subject to abatement by the City of Berkeley.

FIRE HAZARD SEVERITY ZONES. *Geographical areas designated pursuant to California Public Resources Codes, Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Area or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189, and locally amended and adopted under ordinance 7958 N.S.*

The California Code of Regulations, Title 14, Section 1280 entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California." The map, approved by the Office of the State Fire Marshal, is hereby incorporated by reference and entitled "State Responsibility Area Fire Hazard Severity Zones," dated September 29, 2023 April 1, 2024. The map is available at <https://osfm.fire.ca.gov/fire-hazard-severity-zones>.

In the City of Berkeley, the wildland-urban interface areas that include high and very high fire hazard severity zones are described in Section 302.3 of this code.

FIRE NUISANCE. Anything or act, which is annoying, unpleasant, offensive or obnoxious because of fire.

FIRE PROTECTION PLAN. A document prepared for a specific premises, project or development, either existing or proposed for the wildland-urban interface area. It describes ways to minimize and mitigate *potential for loss from wildfire exposure*.

FORBS. Forbs are herbaceous (non-woody) flowering plants that are not grasses, sedges, or rushes.

FUEL BREAK. *(applicable to CCR, Title 14 provisions only). A strategically located area where the volume and arrangement of vegetation has been managed to limit fire intensity, fire severity, rate of spread, crown fire potential and/or ember production. [CCR Title 14§1270.01(n)].*

IGNITION-RESISTANT BUILDING MATERIAL. A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildfire exposure of burning embers and small flames, and complies with the requirements of this code.

JURISDICTION. The City of Berkeley.

OUTBUILDING(S). *(applicable to CCR, Title 14 provisions only). ~~Any B~~buildings or structures that are less than 120 square feet (11.15 m2) in size and not used for human habitation. An "Outbuilding" is not a "Building" or "Structure" as defined herein. [CCR Title 14 §1299.02(c)]*

WILDLAND-URBAN INTERFACE AREA (WUI). *A geographical area identified by the state as a “Fire Hazard Severity Zone” in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, and other areas designated by the City enforcing agency to be at a significant risk from wildfires. For the City of Berkeley’s WUI areas see section 302.3.*

Article 3. Wildland-Urban Interface Areas

19.49.040 Chapter 3 Wildland-Urban Interface Areas

Chapter 3 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

302.3 WUI Areas in Berkeley. The High Fire Hazard Severity Zone, Very High Fire Hazard Severity Zone, Panoramic Mitigation Area, and Grizzly Peak Mitigation Area are designated as Wildland-Urban Interface Area (WUI) and are described as follows:

302.3.1 FLATLANDS AREA. The Flatlands Area encompasses the entire City of Berkeley except for areas in the High and Very High Fire Hazard Severity Zones, which includes the Panoramic Mitigation Area and Grizzly Peak Mitigation Area.

302.3.2 HIGH FIRE HAZARD SEVERITY ZONE. Encompasses those areas identified as High Fire Hazard Severity Zones, locally amended and designated by ordinance pursuant to California Government Code Sections 51176 through 51189. These areas are available on the City of Berkeley publicly accessible GIS map.

This area includes areas of the City east / northeast of the line formed by these roads. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:

- a. The Arlington Avenue from the Kensington Border to Marin Avenue
- b. Fountain Walk from Marin Avenue to Sutter Street
- c. Sutter Street from the southern portal of the Northbrae Tunnel to Eunice Street
- d. Eunice Street from Sutter Street to Spruce Street
- e. Spruce Street from Eunice Street to Hearst Avenue
- f. Hearst Avenue from Spruce Street to Gayley Road
- g. Gayley Road from Hearst Avenue to Piedmont Avenue
- h. Piedmont Avenue from Gayley Road to Bancroft Way
- i. Piedmont Crescent from Piedmont Avenue to Warring Street
- j. Warring Street from Dwight Way to Derby Street
- k. Derby Street from Warring Street to Belrose Avenue
- l. Belrose Avenue from Derby Street to Garber Street

- m. Claremont Boulevard from Garber Street to Claremont Avenue
- n. Claremont Avenue from Claremont Boulevard to the Oakland Border

302.3.5 VERY HIGH FIRE HAZARD SEVERITY ZONE. The Very High Fire Hazard Severity Zone encompasses those areas identified by CalFIRE as Very High Fire Hazard Severity Zones pursuant to California Government Code 51175-51189, locally amended and designated by ordinance. These areas are available on the City of Berkeley publicly accessible GIS map.

PANORAMIC MITIGATION AREA. The Panoramic Mitigation Area encompasses those areas of the city bounded by the line formed by these roads and by the City Limit to the east. The entirety of the Panoramic Mitigation Area is designated, by ordinance, as a Very High Fire Hazard Severity Zone. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:

- a. Centennial Drive from the Oakland border to Stadium Rim Way
- b. Stadium Rim Way from Centennial Drive to Canyon Road
- c. Canyon Road from Stadium Rim Way to Bancroft Way
- d. Bancroft Way from Canyon Road to Bancroft Steps
- e. Bancroft Steps from Bancroft Way to Bancroft Way
- f. Bancroft Way from Bancroft Steps to Piedmont Avenue
- g. Piedmont Avenue from Bancroft Way to Dwight Way
- h. Dwight Way East from Piedmont Avenue to the eastern terminus of Dwight Way.
- i. A straight line extending East from the terminus of Dwight Way to the Oakland border.

GRIZZLY PEAK MITIGATION AREA. The Grizzly Peak Mitigation Area encompasses those areas of the city east of Grizzly Peak Boulevard to the city boundary. Homes addressed on, or with a structural frontage on either side of Grizzly Peak Boulevard are included in the area. The Grizzly Peak Mitigation Area is designated, by ordinance, as a Very-High Fire Hazard Severity Zone.

302.4 Restrictions in Wildland-Urban Interface Areas. Code requirements in this code apply to the High Fire Hazard Severity Zone, Very High Fire Hazard Severity Zone, Panoramic Mitigation Area, and Grizzly Peak Mitigation Area.

Article 4. Wildland-Urban Interface Area Requirements

19.49.050 Chapter 4 Wildland-Urban Interface Area Requirements

Chapter 4 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

402.3 Existing conditions. *Existing buildings shall be provided with address markers in accordance with Sections 403.2.4 and 403.2.5. Existing roads and fire protection equipment shall be provided with markings in accordance with Sections ~~403.4~~ 403.2.2 and ~~403.2.3-404.8~~, respectively.*

SECTION 403—ACCESS

USER NOTE: The standards in Section 403 applicable to roads shall not apply to roads used solely for agriculture; mining; or the management of timberland or harvesting of forest products. [CCR, Title 14 §1270.03(d)]

403.1 General. Roads and driveways, whether public or private, unless exempted under 14 CCR § 1270.03(d), shall provide for safe access for emergency wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency consistent 403.1.1 to 403.1.9. [CCR, Title 14 §1273.00]

Where conflicts occur between Section 403 – Access and the Berkeley Fire Code Appendix D – Fire Apparatus Access Roads, the provisions of the most restrictive code shall govern.

403.2.4 Addresses for Buildings.

(a) All Buildings shall be issued an address by the ~~Local Jurisdiction~~ City of Berkeley which conforms to ~~that jurisdiction's~~ the City's overall address system. Utility and miscellaneous Group U Buildings are not required to have a separate address; however, each Residential Unit within a Building shall be separately identified.

(b) The size of letters, numbers and symbols for addresses shall conform to the standards in the California Fire Building Code Section 502.1, ~~California Code of Regulations Title 24, Part 9.~~

(c) Addresses for residential Buildings shall be reflectorized.

404.5 Adequate water supply. *Fire-flow requirements shall be determined in accordance with Appendix B or BB of the California Berkeley Fire Code, as applicable.*

Article 5. Special Building Construction Regulations

19.49.060 Chapter 5 Special Building Construction Regulations

Chapter 5 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

501.1 Scope. New Buildings and structures, additions, alterations, repairs and re-roofs constructed in a wildland-urban interface area shall be constructed in accordance with the California Building Code, California Fire Code and this code.

Exceptions:

1. Group U accessory buildings or structures not exceeding 120 square feet (11 m²) in floor area where located not less than 50 feet (15240 mm) from applicable buildings on the same lot.
2. Group U agricultural buildings or structures not less than 50 feet (15 240 mm) from applicable buildings.

501.1.1 Purpose. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within a State Responsibility Area (SRA) or Local Responsibility Areas (LRA) or any building or structure in the wildland-urban interface (WUI) areas as specified in Section 302.3 to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.

501.1.2 Application. Construction of new buildings and structures, additions, alterations, repairs, and re-roofs located in any Fire Hazard Severity Zone or new buildings and structures, additions, alterations, repairs and re-roofs located in any wildland-urban interface (WUI) area designated by the enforcing agency constructed after the application date shall comply with the provisions of this chapter. This shall include all new buildings and structures, additions, alterations, repairs and re-roofs with residential, commercial, educational, institutional or similar occupancy type uses, which shall be referred to in this chapter as “applicable building(s)” (see definition in Chapter 2), as well as new buildings and structures, additions, alterations, repairs and re-roofs accessory to those applicable buildings.

501.2.1 Construction methods and requirements within established limits.

Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements contained in this code, the Berkeley Fire Code, and the Berkeley Building Standards whichever is most restrictive.

503.1 General. Buildings and structures hereafter constructed, added to, modified, repaired, re-roofed or relocated into or within wildland-urban interface areas shall meet the construction requirements in accordance with *Chapter 5*. Materials required to be ignition-resistant *building* materials shall comply with the requirements of Section 503.2.

Exceptions:

1. *New accessory buildings and miscellaneous structures complying with Section 504.11.*
- ~~2. *Additions to and remodels of buildings originally constructed prior to July 1, 2008.*~~
2. *Group C occupancy special buildings conforming to the limitations specified in Section 450.4.1 of the California Building Code.*

504.2 Roof assembly. Roofs shall have a roof assembly that complies with a Class A fire classification when tested in accordance with ASTM E108 or UL 790. For additional compliance see California Building Code Chapter 15, Section 1505.2 for Class A roof assemblies. The roof assembly shall be installed in accordance with its listing and the manufacturer's installation instructions.

Wooden shakes and shingles are prohibited roof coverings regardless of the assembly rating of the roof system

Exceptions: *The following assemblies are exempt from testing and shall be considered as equivalent to the Class A fire classification:*

1. *Roof assemblies with coverings of brick, masonry or an exposed concrete roof deck.*
2. *Roof assemblies with ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.*
3. *Roof assemblies with minimum 16 oz/sq ft (0.0416 kg/m²) copper sheets installed over combustible roof decks.*
4. *Roof assemblies of slate roof covering installed over ASTM D226, Type II underlayment over combustible decks.*

505 – ~~RESERVED~~ REPLACEMENT OF EXTERIOR WALL COVERING

505.1 Replacement of Exterior Wall Covering. Materials for replacement of existing exterior wall covering shall meet or exceed the standards set forth in Section 504.5 of this code.

Exception: Where less than 50% of any wall surface is being replaced or repaired, and the matching of the new plane to the existing plane on that wall is not possible.

506 – ~~RESERVED~~ UNDERGROUND UTILITY CONNECTIONS

506.1 Underground utility connections. For new construction, provisions shall be made for the undergrounding of all utilities serving the property, including but not limited to

electrical, telephone and cable television, by the installation of appropriately sized underground conduits extending from the parcel.

SECTION 507—REPLACEMENT OR REPAIR OF ROOF COVERINGS

507.1 General. The roof covering on buildings or structures in existence prior to the adoption of this code that are entirely replaced or have 50 percent or more replaced in a 12-month period shall be replaced with a roof covering as required for new construction in accordance with Sections 504.2 and 504.2.1. All portions of a roof covering applied during an addition, alteration or repair to an existing structure shall meet at least a Class A fire classification in accordance with Sections 504.2 and 504.2.1.

The entire roof covering of every existing building or structure where more than 50 percent of the total roof area is replaced within any 5-year period shall be replaced with a fire-retardant roof covering in accordance with Sections 504.2 and 504.2.1.

SECTION 508—ADDITIONAL REQUIREMENTS IN THE PANORAMIC MITIGATION AREA.

508.1 General. In addition to meeting the other requirements of this code, buildings or structures hereinafter erected, constructed, moved, altered, added, or repaired within the Panoramic Mitigation Area shall comply with the following requirements for buildings and structures.

508.1.2 Fire warning system. All residential units shall be equipped with a Fire Warning System as specified by the residential smoke alarm requirements in the most recently adopted California Building Code and/or California Residential Code and with an audible exterior alarm. The exterior alarm must meet the requirements of NFPA 72 or equivalent and generate 45 decibels ten feet from the alarm, or more.

508.1.3 Automatic fire sprinkler systems. Automatic fire sprinkler system requirements shall be as set forth in Berkeley Fire Code Section 903.2.24.

508.1.4 Utilities. Utilities, pipes, furnaces, water heaters or other mechanical devices located in an exposed underfloor area of a building or structure shall be enclosed with material as required for exterior one hour fire resistive construction. Adequate covered access openings for servicing and ventilation of such facilities shall be provided as required by the applicable code.

508.1.5 Water Service. The water service to the site shall be installed with a 3/4" hose bib connection prior to beginning any construction involving any wood forming or framing. The person responsible for the construction shall have at the site a 75 ft 3/4" hose available at all times.

Article 6. Fire Protection Requirements

19.49.070 Chapter 6 Fire Protection Requirements

Chapter 6 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

SECTION 604—MAINTENANCE OF DEFENSIBLE SPACE

604.3 Requirements. *Hazardous vegetation and fuels around all buildings and structures shall be maintained in accordance with the following laws and regulations:*

1. *Public Resources Code, Section 4291.*
2. *California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, Section 1299.03.*
3. *California Government Code, Section 51182.*
4. *California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.*
5. *H106azardous vegetation and fuel mitigation and home hardening requirements in Section 604.3.1 and Section 604.3.2.*

604.3 Defensible Space Requirements.

604.3 Requirements. The code official may require a property owner to perform hazardous vegetation and fuel management on their land to maintain defensible space up to 100 feet from structures located on adjacent properties.

Property owners are not required or authorized by this code to enter the properties of another person to implement the requirements of this Section.

604.3.1 Mitigations Required. Within the locally designated Very High Fire Hazard Severity Zone a person who owns, leases, controls, operates, or maintains lands shall at all times:

1. Remove all branches within 10 feet of any chimney or stovepipe outlet.
2. Maintain the roof and roof gutters of any structure, and the surface of any attached deck, porch, landing, or stairs free of leaves, needles, or other deposited vegetative materials.
3. Maintain 6 feet of vertical clearance between branches and all other parts of trees or other vegetation overhanging the roof or other portion of any Structure or attached deck.
4. Zone 0: 0-5 feet from any structure: The requirements of 604.3.1.5 (Zone 1) below apply to this zone.
5. Zone 1: 5 to 30 feet from any structure:
 - a. Remove contiguous vegetation without adequate fuel separation to prevent spread to the structure.
 - b. Maintain any tree, shrub, or other plant adjacent to or overhanging any Structure or attached deck free of dead or dying wood.
 - c. Maintain trees to remove Ladder Fuels so that foliage, twigs, or branches are greater than 6' feet above the ground or surface fuels.
 - d. Where shrubs or small trees are located below or within a tree's drip line, the lowest tree branch shall be a minimum of three times the height of the understory shrubs or 6 feet, whichever is greater.
 - e. For structures on the same property, such as a shed, hot tub, and playset, ensure these structures are spaced at least 10 feet apart. Have at most three (3) of these structures within 30 feet of a building or structure.
 - i. Existing moveable structures shall comply with the above.
 - f. Relocate exposed firewood piles or lumber further than zone 1, unless they are completely covered in a fire-resistant covering approved by the State Fire Marshal's Building Material Listing Service.
6. Zone 2: 30 to 100 feet from any structure:
 - a. All exposed wood piles or lumber must have a perimeter of a minimum of ten feet (10 ft.) of non-combustible material, such as bare mineral soil, in all directions.
7. For both Zones 1 and 2:
 - a. Remove vegetative and combustible material capable of transmitting fire to a structure as determined by the Fire Code Official.
 - b. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.).

- c. Cut annual grasses and annual forbs to a maximum height of four inches (4 in.) prior to, or upon reaching the senescent or ripening phase when the preponderance of vegetative material is cured or dead.
- d. Vertical Spacing: Limb trees by removing hanging bark, debris and branches that are within six feet (6 ft.) of the ground.
- e. Create horizontal and vertical spacing among shrubs and trees using the “Fuel Separation” method, the “Continuous Tree Canopy” method or a combination of both to achieve defensible space clearance requirements. Further guidance regarding these methods is contained in the State Board of Forestry and Fire Protection's, “General Guidelines for Creating Defensible Space, February 8, 2006,” incorporated herein by reference.
- f. Maintain horizontal spacing between shrubs.
 - i. Flat or mild slope (less than 20%): Two times the height of the shrub.
 - ii. Mild to moderate slope (20-40%): Four times the height of the shrub
 - iii. Moderate to steep slope (greater than 40%): Six times the height of the shrub
 - iv. Shrubs maintained as trees, such as limited stems and limbed up 6 feet or one third the height, whichever is greater, shall comply with requirements for trees, and not this section.
 - v. Consistent with fuel management objectives, steps should be taken to minimize erosion, soil disturbance, and the spread of flammable, non-native grasses and weeds.
- g. New trees shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 feet from any structure or the canopy of other trees.

604.3.2 Specific requirements for Panoramic Mitigation Area and Grizzly Peak Mitigation Area. Effective January 1, 2026 the Grizzly Peak Mitigation Area and Panoramic Mitigation Area shall be subject to 604.3.2 in addition to 604.3.1

A person who owns, leases, controls, operates, or maintains lands shall at all times:

1. Zone 0: 0 to 5 feet from any structure:

- a. Maintain all areas within five (5) horizontal feet of any structure, outbuildings, attached deck or stairs, and the area under attached decks and stairs free of vegetative and non-vegetative combustible material.
 - i. This includes but is not limited to shrubs, vegetative ground cover, climbing vines, combustible boards, timbers, firewood, debris, synthetic lawn, wood mulch products, playsets, plastic trash and recycle cans, trellises, pergolas, shade coverings, planters, attached window boxes, privacy walls, boats, RVs, and other material that could be ignited by embers, radiant heat, or direct flame.
 - ii. Hardscape materials, such as gravel, pavers, concrete, and other noncombustible materials, including bare mineral soil, are permitted.
 - iii. Exception: Plants in pots are allowable if they are in areas that are not directly beneath, above, or adjacent to a window or eave; are kept in an unaffixed, non-combustible pot or container that is no larger than 5-gallon capacity; and set apart by 1.5 times the height of the plant or 12 inches, whichever is greater, from the structure and each other. These plants shall be no greater than 18 inches in height. Dead or dying material on, around and under the plants shall be removed.
 - iv. Exception: Hot tubs may be installed within five (5) horizontal feet of a structure, provided they comply with all Zone 0 clearance requirements applicable to structures.
- b. Trees: Existing trees and shrubs are permitted in Zone Zero if:
 - i. Maintained free of dead material.
 - ii. The crown (canopy) is maintained to create:
 - 1. Six feet (6') above the adjacent building or structure's roof
 - 2. Ten feet (10') away from chimneys and stovepipe outlets; and
 - 3. Five feet (5') of horizontal clearance from the sides of any Building, Structure, attached deck, porch, landing or stairs, and hot tubs within five (5) feet of a structure.
 - a. Exception: trees integrated into a deck must maintain 5 feet horizontal separation from the adjacent structure and branches must be 6 feet above the deck.
 - 4. 6' of vertical clearance above attached decks, attached, landing or stairs, and hot tubs within 5' of a structure.

- c. The roof and rain gutters of a Building or Structure shall be kept clear of leaves, needles, and vegetative material.
- d. Existing fences that are directly attached to a Building or Structure shall have a five foot (5 ft) non-combustible span at the point of attachment.
 - i. Existing fences that are not parallel to the adjacent structure wall, and are within 5 feet of that wall, shall have a non-combustible span within the first 5 feet of the structure perpendicular to the exterior structure wall.
 - ii. Existing parallel fences that do not touch the structure are allowed.
- e. After the effective date of this regulation, no new or replacement sections of combustible fence are permitted within 5 feet of a building or structure including an attached deck.
- f. Outbuildings are not permitted in Zone 0, unless constructed according to the standards in Chapter 7A (commencing with Section 701A.1) of Part 2 of Title 24 of the California Code of Regulations. Outbuildings that meet these standards shall be considered part of the Building or Structure for the purpose of measuring Zone 0.

SECTION 605—SPARK ARRESTORS

605.1 General. Chimneys serving fireplaces, barbecues, incinerators or ~~decorative~~ heating appliances in which solid or liquid fuel is used shall be provided with a spark arrestor. Spark arrestors shall be constructed of woven or welded wire screening of 12 USA standard gage wire (0.1046 inch) (2.66 mm) having openings not exceeding 1/2 inch (12.7 mm). The arrestor shall be securely attached to the chimney or stovepipe and shall be adequately supported. The use of bands, mollies, masonry anchors or mortar ties are recommended depending upon the individual need. See California Building Code Section 2113A.9.2 ("Spark arrestors") for specifications.

SECTION 606—LIQUEFIED PETROLEUM GAS INSTALLATIONS

606.1 General. The storage of liquefied petroleum gas (LP-gas) and the installation and maintenance of pertinent equipment shall be in accordance with the ~~California~~ Berkeley Fire Code.

606.2 Location of containers or tanks. LP-gas containers or tanks shall be located within the defensible space in accordance with the ~~California~~ Berkeley Fire Code.

Article 7. Referenced Standards

19.49.080 Chapter 7 Referenced Standards

Chapter 7 of the 2025 California Wildland-Urban Interface Code is partially adopted with adopted sections below. (Sections adopted by the State Fire Marshal remain unless modified below.)

BOF State Board of Forestry and Fire Protection

RPC 2 (c) - General Guidelines for Creating Defensible Space, February 8, 2006

CEC

CEnC – 2025: California Energy Code

1.1.8.2,

IAPMO

CPC – 2025: California Plumbing Code

201.3

CMC – 2025: California Mechanical Code

201.3

NEC

CEC – 2025: California Electrical Code

201.3

Article 8. General Requirements

19.49.090 APPENDIX A – GENERAL REQUIREMENTS

Appendix A of the 2025 Wildland-Urban Interface Code is adopted and reproduced in its entirety subject to the modifications thereto which are set forth below.

SECTION A101—GENERAL

A101.1 Scope. The provisions of this appendix establish general requirements applicable to new and existing properties located within wildland-urban interface areas.

A101.2 Objective. The objective of this appendix is to provide necessary fire protection measures to reduce the threat of wildfire in a wildland-urban interface area and improve the capability of controlling such fires.

SECTION A102—VEGETATION CONTROL

A102.1 General. Vegetation control shall comply with Sections A102.2 through A102.4.

A102.2 Clearance of brush or vegetative growth from roadways. The code official is authorized to require areas within 10 feet (3048 mm) on each side of portions of fire apparatus access roads and driveways to be cleared of *nonfire-smart* vegetation growth.

Exception: Single specimens of trees, ornamental vegetative fuels or cultivated ground cover, such as green grass, ivy, succulents or similar plants used as ground cover, provided they do not form a means of readily transmitting fire.

~~**A102.3 Clearance of brush and vegetative growth from electrical transmission and distribution lines.** Clearance of brush and vegetative growth from electrical transmission and distribution lines shall be in accordance with Sections A102.3.1 through A102.3.2.3.~~

Exception: Sections A102.3.1 through A102.3.2.3 do not authorize persons not having legal right of entry to enter on or damage the property of others without consent of the owner.

A102.3.1 Support clearance. Persons owning, controlling, operating or maintaining electrical transmission or distribution lines shall have an approved program in place that identifies poles or towers with equipment and hardware types that have a history of becoming an ignition source, and provides a combustible free space consisting of a clearing of not less than 10 feet (3048 mm) in each direction from the outer circumference of such pole or tower during such periods of time as designated by the code official.

Exception: Lines used exclusively as telephone, telegraph, messenger call, alarm transmission or other lines classed as communication circuits by a public utility.

A102.3.2 Electrical distribution and transmission line clearances. Clearances between vegetation and electrical lines shall be in accordance with Sections A102.3.2.1 through A102.3.2.3.

A102.3.2.1 Trimming clearance. At the time of trimming, clearances not less than those established by Table A102.3.2.1 shall be provided. The radial clearances shown are minimum clearances that shall be established, at time of trimming, between the vegetation and the energized conductors and associated live parts.

Exception: The code official is authorized to establish minimum clearances different than those specified by Table A102.3.2.1 when evidence substantiating such other clearances is submitted to and approved by the code official.

TABLE A102.3.2.1—MINIMUM CLEARANCES BETWEEN VEGETATION AND ELECTRICAL LINES AT TIME OF TRIMMING	
LINE VOLTAGE	MINIMUM RADIAL CLEARANCE FROM CONDUCTOR (feet)
2,400–72,000	4
72,001–110,000	6
110,001–300,000	10
300,001 or more	15
For SI: 1 foot = 304.8 mm.	

102.3.2.2 Minimum clearance to be maintained. Clearances not less than those established by Table A102.3.2.2 shall be maintained during such periods of time as designated by the code official. The site specific clearance achieved, at time of pruning, shall vary based on species growth rates, the utility company specific trim cycle, the potential line sway due to wind, line sag due to electrical loading and ambient temperature and the tree's location in proximity to the high voltage lines.

Exception: ~~The code official is authorized to establish minimum clearances different than those specified by Table A102.3.2.2 when evidence substantiating such other clearances is submitted to and approved by the code official.~~

TABLE A102.3.2.2—MINIMUM CLEARANCES BETWEEN VEGETATION AND ELECTRICAL LINES TO BE MAINTAINED	
LINE VOLTAGE	MINIMUM CLEARANCE (inches)
750–35,000	6
35,001–60,000	12
60,001–115,000	19
115,001–230,000	30.5
230,001–500,000	115
For SI: 1 inch = 25.4 mm.	

102.3.2.3 Electrical power line emergencies. ~~During emergencies, the utility shall perform the required work to the extent necessary to clear the hazard. An emergency can include situations such as trees falling into power lines or trees in violation of Table A102.3.2.2.~~

A102.4 Correction of condition. The code official is authorized to give notice to the owner of the property on which conditions regulated by Section A102 exist to correct such conditions. If the owner fails to correct such conditions, the legislative body of the jurisdiction is authorized to cause the same to be done and make the expense of such correction a lien on the property where such condition exists.

SECTION A103—ACCESS RESTRICTIONS

A103.1 Restricted entry to public lands. The code official is authorized to determine and publicly announce when wildland-urban interface areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of wildland-urban interface areas, except public roadways, inhabited areas or established trails and campsites that have not been closed during such time when the wildland-urban interface area is closed to entry, is prohibited.

Exceptions:

1. Residents and owners of private property within wildland-urban interface areas and their invitees and guests going to or being on their lands.
2. Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the Wildland Firefighting Service.

A103.2 Trespassing on posted private property. Where the code official determines that a specific area within a wildland-urban interface area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be restricted or closed until changed conditions warrant termination of such restriction or closure. Such areas shall be posted in accordance with Section A103.2.1.

A103.2.1 Signs. Approved signs prohibiting entry by unauthorized persons and referring to this code shall be placed on every closed area.

A103.2.2 Trespassing. Entering and remaining within areas closed and posted is prohibited.

Exception: Owners and occupiers of private or public property within closed and posted areas; their guests or invitees; authorized persons engaged in the operation and maintenance of necessary utilities such as electrical power, gas, telephone, water and sewer; and local, state and federal public officers and their authorized agents acting in the course of duty.

A103.3 Use of fire roads, fire breaks, fire trails and defensible space. Motorcycles, motor scooters and motor vehicles shall not be driven or parked on, and trespassing is prohibited on, fire roads, fire breaks, fire trails or defensible space beyond the point where travel is restricted by a cable, gate or sign, without the permission of the property owners. Vehicles shall not be parked in a manner that obstructs the entrance to a fire road or defensible space.

Exception: Public officers acting within their scope of duty.

A103.3.1 Obstructions. Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads, fire breaks, fire trails or defensible spaces, unless located 16 feet (4877 mm) or more above such fire road or defensible space.

A103.3.2 Public access roads, fire roads, firebreaks and fire trails. No person(s) shall use any public access road, fire road, firebreak or fire trail for the storage of any construction material, stationary construction equipment, construction office, portable refuse container, earth from any grading or excavating, or any other construction related activity.

A103.4 Use of motorcycles, motor scooters, ultralight aircraft and motor vehicles. Motorcycles, motor scooters, ultralight aircraft and motor vehicles shall not be operated within wildland-urban interface areas, without a permit by the code official, except on clearly established public or private roads designated for use by motorcycles, motor scooters, ultralight aircraft and motor vehicles. Permission from the property owner shall be presented when requesting a permit.

A103.5 Tampering with locks, barricades, signs and address markers. Locks, barricades, seals, cables, signs and address markers installed within wildland-urban interface areas, by or under the control of the code official, shall not be tampered with, mutilated, destroyed or removed.

A103.5.1 Gates, doors, barriers and locks. Gates, doors, barriers and locks installed by or under the control of the code official shall not be unlocked.

SECTION A104—IGNITION SOURCE CONTROL

A104.1 General. Ignition sources shall be controlled in accordance with Sections A104.2 through A104.10.

A104.2 Objective. Regulations in this section are intended to provide the minimum requirements to prevent the occurrence of wildfires.

A104.3 Clearance from ignition sources. Clearance between ignition sources and grass, brush or other combustible materials shall be maintained at not less than 30 feet (9144 mm).

A104.4 Smoking. Where required by the code official, signs shall be posted stating NO SMOKING. ~~Persons shall not smoke within 15 feet (4572 mm) of combustible materials or nonfire-smart vegetation. Lighting, igniting or otherwise setting fire to or smoking tobacco, cigarettes, pipes, cigars, joints, or other device used to burn or heat a substance for inhalation in Wildland-Urban Interface areas are prohibited.~~

Exception: Places of habitation or in the boundaries of established smoking areas or campsites as designated by the code official.

A104.5 Equipment and devices generating heat, sparks or open flames. Equipment and devices generating heat, sparks or open flames capable of igniting nearby combustibles shall not be used in wildland-urban interface areas without a permit from the code official. See Berkeley Fire Code Sections 308.1.5 Open Flame Devices in Wildfire Risk Areas and 308.1.5.1 Signals and Markers.

Exception: Use of approved equipment within inhabited premises or designated campsites that are not less than 30 feet (9144 mm) from grass-, grain-, brush- or forest-covered areas.

A104.6 Fireworks. Fireworks shall not be used or possessed in wildland-urban interface areas.

Exception: Fireworks allowed by the code official under permit in accordance with the California Fire Code where not prohibited by applicable local or state laws, ordinances and regulations.

A104.6.1 Authority to seize. The code official is authorized to seize, take, remove or cause to be removed fireworks in violation of this section.

A104.7 Outdoor fires. Outdoor fires in wildland-urban interface areas shall comply with Sections A104.7.1 through A104.7.3.

A104.7.1 General. Persons shall not build, ignite or maintain any outdoor fire of any kind for any purpose in or on any wildland-urban interface area, except by the authority of a written permit from the code official.

Exception: Outdoor fires within inhabited premises or designated campsites where such fires are in a permanent barbecue, portable barbecue, outdoor fireplace, incinerator, fire pits or grill and are not less than 30 feet (9144 mm) from any combustible material or *nonfire-smart* vegetation.

A104.7.2 Permits. Permits shall incorporate such terms and conditions that will reasonably safeguard public safety and property. Outdoor fires shall not be built, ignited or maintained in or on hazardous fire areas under any of the following conditions:

1. When red flag conditions exist as defined by the National Oceanic and Atmospheric Administration.

2.4. When high winds are blowing.

3.2. When a person 17 years old or over is not present at all times to watch and tend such fire.

4.3. When a public announcement is made that open burning is prohibited. Permanent barbecues, portable barbecues, outdoor fireplaces, fire pits or grills shall not be used if solid or liquid fueled.

A104.7.3 Restrictions. Persons shall not use a permanent barbecue, portable barbecue, outdoor fireplace, incinerator, fire pit or grill for the disposal of rubbish, trash or combustible waste material.

A104.8 Incinerators, outdoor fireplaces, permanent barbecues, fire pits and grills. Incinerators, outdoor fireplaces, permanent barbecues, fire pits and grills shall not be built, installed or maintained in wildland-urban interface areas without prior approval of the code official. Existing incinerators, outdoor fireplaces, fire pits, permanent barbecues and grills shall be maintained in good repair and in a safe condition at all times. Openings in such appliances shall be provided with an approved spark arrester, screen or door.

Exception: When approved, unprotected openings in barbecues and grills necessary for proper functioning shall be allowed.

A104.8.1 Maintenance. Incinerators, outdoor fireplaces, permanent barbecues and grills shall be maintained in good repair and in a safe condition at all times. Openings in such appliances shall be provided with an approved spark arrester, screen or door.

Exception: Where approved by the code official, unprotected openings in barbecues and grills necessary for proper functioning.

A104.9 Reckless behavior. The code official is authorized to stop any actions of a person or persons if the official determines that the action is reckless and could result in an ignition of fire or spread of fire.

A104.10 Planting vegetation under or adjacent to energized electrical lines. Vegetation that, at maturity, would grow to within 10 feet (3048 mm) of the energized conductors shall not be planted under or adjacent to energized power lines.

A104.11 Tracer Bullets, Tracer Charges, Rockets and Model Aircraft. Tracer bullets and tracer charges shall not be possessed, fired or caused to be fired into or across Wildland-Urban Interface areas. Rockets, model planes, gliders and balloons powered with an engine, propellant or other feature liable to start or cause fire shall not be fired or projected into or across Wildland-Urban Interface Areas.

A104.12 Explosives and Blasting. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within Wildland-Urban Interface areas except by permit from the code official.

A104.13 Apiaries. Lighted and smoldering material shall not be used in connection with smoking bees in or upon Wildland-Urban Interface areas except by permit from the code official.

SECTION A105—CONTROL OF STORAGE

A105.1 General. In addition to the requirements of the California Fire Code, storage and use of the materials shall be in accordance with Sections A105.2 through A105.4.2.

A105.2 Hazardous materials. Hazardous materials in excess of 10 gallons (37.8 L) of liquid, 200 cubic feet (5.66 m³) of gas, or 10 pounds (4.54 kg) of solids require a permit and shall comply with nationally recognized standards for storage and use.

A105.3 Explosives. Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within wildland-urban interface areas, except by permit from the code official.

A105.4 Combustible materials. Outside storage of combustible materials such as, but not limited to, wood, rubber tires, building materials or paper products shall comply with the other applicable sections of this code and this section.

A105.4.1 Individual piles. Individual piles shall not exceed 5,000 square feet (465 m²) of contiguous area. Piles shall not exceed 50,000 cubic feet (1416 m³) in volume or 10 feet (3048 mm) in height.

A105.4.2 Separation. A clear space of not less than 40 feet (12 192 mm) shall be provided between piles. The clear space shall not contain combustible material or *nonfire-smart* vegetation.

SECTION A106—DUMPING

A106.1 Waste material. Waste material shall not be placed, deposited or dumped in wildland-urban interface areas or in, on or along trails, roadways or highways or against structures in wildland-urban interface areas.

Exception: Approved public and approved private dumping areas.

A106.2 Ashes and coals. Ashes and coals shall not be placed, deposited or dumped in or on wildland-urban interface areas.

Exceptions:

1. In the hearth of an established fire pit, camp stove or fireplace.
2. In a noncombustible container with a tightfitting lid, which is kept or maintained in a safe location not less than 10 feet (3048 mm) from *nonfire-smart* vegetation or structures.
3. Where such ashes or coals are buried and covered with 1 foot (305 mm) of mineral earth not less than 25 feet (7620 mm) from *nonfire-smart* vegetation or structures.

SECTION A107—PROTECTION OF PUMPS AND WATER STORAGE FACILITIES

A107.1 General. The reliability of the water supply shall be in accordance with Sections A107.2 through A107.5.

A107.2 Objective. The intent of this section is to increase the reliability of water storage and pumping facilities and to protect such systems against loss from intrusion by fire.

A107.3 Fuel modification area. Water storage and pumping facilities shall be provided with a defensible space of not less than 30 feet (9144 mm) clear of nonfire-resistive vegetation or growth around and adjacent to such facilities.

Persons owning, controlling, operating or maintaining water storage and pumping systems requiring this defensible space are responsible for clearing and removing *nonfire-smart* vegetation and maintaining the defensible space on the property owned, leased or controlled by said person.

A107.4 Trees. Portions of trees that extend to within 30 feet (9144 mm) of combustible portions of water storage and pumping facilities shall be removed.

A107.5 Protection of electrical power supplies. Where electrical pumps are used to provide the required water supply, such pumps shall be connected to a standby power source to automatically maintain electrical power in the event of power loss. The standby power source shall be capable of providing power for not less than 2 hours in accordance with Chapter 27 of the California Building Code, Section 1203 of the California Fire Code and the California Electrical Code.

Exception: A standby power source is not required where the primary power service to pumps is underground as approved by the code official.

SECTION A108—LAND USE LIMITATIONS

A108.1 General. Temporary fairs, carnivals, public exhibitions and similar uses must comply with all other provisions of this code in addition to enhanced ingress and egress requirements.

A108.2 Objective. The increased public use of land or structures in wildland-urban interface areas increases the potential threat to life safety. The provisions of this section are intended to reduce that threat.

A108.3 Permits. Temporary fairs, carnivals, public exhibitions or similar uses shall not be allowed in a designated wildland-urban interface area, except by permit from the code official.

Permits shall incorporate such terms and conditions that will reasonably safeguard public safety and property.

A108.4 Access roadways. In addition to the requirements in Section 403, access roadways shall be not less than 24 feet (7315 mm) wide and posted NO PARKING. Two access roadways shall be provided to serve the permitted use area.

Where required by the code official to facilitate emergency operations, approved emergency vehicle operating areas shall be provided.

SECTION A109—REFERENCED STANDARDS

A109.1 General. See Table A109.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title and the section or sections of this appendix that reference the standard.

TABLE A109.1—REFERENCED STANDARDS		
STANDARD ACRONYM	STANDARD NAME	SECTIONS HEREIN REFERENCED
<i>CBC—25</i>	<i>California Building Code</i>	<i>A107.5</i>
<i>CFC—25</i>	<i>California Fire Code</i>	<i>A104.6, A105.1, A107.5</i>
<i>CEC—25</i>	<i>California Electrical Code</i>	<i>A107.5</i>

Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of Council Chambers, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

* * * * *

ATTACHMENT 1

Chapter 49 of the California Fire Code is adopted in its entirety subject to the modifications thereto which are set forth below.

CHAPTER 49 – REQUIREMENTS FOR WILDLAND-URBAN INTERFACE FIRE AREAS

SECTION 4902 DEFINITIONS

Section 4902.1 General. *For the purpose of this chapter, certain terms are defined as follows:*

BOLE OF A TREE. A bole of a tree is its main trunk, specifically the part extending from the roots up to the first branches and canopy.

FIRE PROTECTION PLAN. A document prepared for a specific premises, project or development, either existing or proposed for a Wildland-Urban Interface (WUI) area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

FIRE HAZARD SEVERITY ZONES. Geographical areas designated pursuant to California Public Resources Codes, Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Area or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189, and locally amended and adopted under ordinance 7958-N.S.

The California Code of Regulations, Title 14, Section 1280 entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

FLATLANDS MITIGATION AREA encompasses the entire City of Berkeley except for areas in the Hills Mitigation Area, Panoramic Mitigation Area and Grizzly Peak Mitigation Area.

FORBS. Forbs are herbaceous, non-woody flowering plants that are not grasses, sedges, or rushes

GRIZZLY PEAK MITIGATION AREA encompasses those areas of the city from parcels addressed on the west side of Grizzly Peak Boulevard to the eastern city boundary. Homes addressed on, or with a structural frontage on either side of Grizzly Peak Boulevard are included in the area. The Grizzly Peak Mitigation Area is designated as a Very-High Fire Hazard Severity Zone.

HIGH FIRE HAZARD SEVERITY ZONE encompasses those areas designated as High Fire Hazard Severity Zones, adopted and locally amended pursuant to California Government Code, Sections 51175 through 51189.

This area includes areas of the City east / north east of the line formed by these roads. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:

ATTACHMENT 1

- a. The Arlington Avenue from the Kensington Border to Marin Avenue
- b. Fountain Walk from Marin Avenue to Sutter Street
- c. Sutter Street from the southern portal of the Northbrae Tunnel to Eunice Street.
- d. Eunice Street from Sutter Street to Spruce Street
- e. Spruce Street from Eunice Street to Hearst Avenue
- f. Hearst Ave from Spruce Street to Gayley Road
- g. Gayley Road from Hearst Avenue to Piedmont Ave
- h. Piedmont Avenue from Gayley Road to Bancroft Way.
- i. Piedmont Crescent from Piedmont Ave to Warring Street.
- j. Warring Street from Dwight Way to Derby Street.
- k. Derby Street from Warring Street to Belrose Avenue.
- l. Belrose Avenue from Derby Street to Garber Street
- m. Claremont Boulevard from Garber Street to Claremont Avenue
- n. Claremont Avenue from Claremont Boulevard to the Oakland Border

IGNITION-RESISTANT MATERIAL. A type of building material that complies with the requirements in Section 704A.2 in the California-Berkeley Building Code.

LOCAL RESPONSIBILITY AREAS (LRA). Areas of the state in which the financial responsibility of preventing and suppressing fires is the primary responsibility of a city, county, city and county, or district.

PANORAMIC MITIGATION AREA (ZONE 3) encompasses those areas of the city bounded by the line formed by these roads and by the City Limit to the east. The entirety of the Panoramic Mitigation Area is designated as a Very High Fire Hazard Severity Zone. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:

- a. Centennial Drive from the Oakland border to Stadium Rim Way
- b. Stadium Rim Way from Centennial Drive to Canyon Road
- c. Canyon Road from Stadium Rim Way to Bancroft Way
- d. Bancroft Way from Canyon Road to Bancroft Steps
- e. Bancroft Steps from Bancroft Way to Bancroft Way
- f. Bancroft Way from Bancroft Steps to Piedmont Avenue
- g. Piedmont Avenue from Bancroft Way to Dwight Way
- h. Dwight Way East from Piedmont Avenue to the eastern terminus of Dwight Way.

ATTACHMENT 1

- i. A straight line extending East from the terminus of Dwight Way to the Oakland border.

STATE RESPONSIBILITY AREA (SRA). Lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing wildfires is primarily the responsibility of the state.

VERY HIGH FIRE HAZARD SEVERITY ZONE. Encompasses those areas identified by CalFIRE as Very High Fire Hazard Severity Zones pursuant to California Government Code 51175-51189 and locally amended and adopted under ordinance 7958-N.S.

WILDFIRE. Any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources as defined in Public Resources Code, Sections 4103 and 4104.

WILDFIRE EXPOSURE. One or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.

WILDLAND-URBAN INTERFACE (WUI). A geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

SECTION 4903 PLANS

Section 4903.3 Submittal, approval and fees. When required to submit a Fire Protection Plan or Vegetation Management Plan for any reason the responsible party shall prepare or cause to be prepared a Fire Protection Plan in accordance with the latest standards of the Berkeley Fire Department. The Fire Protection Plan shall be submitted to, reviewed and approved by the Berkeley Fire Department and shall be enforced and maintained by the responsible party or their designated agent. The Berkeley Fire Department may charge an appropriate fee for the review, approval and processing of the Fire Protection Plan in accordance with the hourly rate established by City Council resolution.

SECTION 4905 WILDFIRE PROTECTION BUILDING CONSTRUCTION

Section 4905.2 Construction methods and requirements within established limits. Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements contained in the ~~California Building Standards Code~~ Berkeley Building Code and Berkeley Residential Code, including the following:

1. California Building Code, Chapter 7A. Chapter 7A of the Berkeley Building Code (B.B.C), Berkeley Municipal Code Section 19.28.030.
2. California Residential Code Section R337 of the Berkeley Residential Code (B.R.C.), Berkeley Municipal Code Section 19.29.050.
3. California Referenced Standards Code, Chapter 12-7A.

ATTACHMENT 1

SECTION 4907 DEFENSIBLE SPACE

Property owners are not required or authorized by this code to enter the properties of another person to implement the requirements of this Section.

Section 4907.3 Adjacent Property Requirements.

The Fire Code Official may require a property owner to perform hazardous vegetation and fuel management on their land to maintain defensible space up to 100 feet from structures located on adjacent properties.

Section 4907.4 Mitigations Required.

Within the locally adopted Very High Fire Hazard Severity Zone a person who owns, leases, controls, operates, or maintains lands shall at all times:

1. Remove all branches within 10 feet of any chimney or stovepipe outlet.
2. Maintain the roof and roof gutters of any structure, and the surface of any attached deck, porch, landing, or stairs free of leaves, needles, or other deposited vegetative materials.
3. Maintain 6 feet of vertical clearance between branches and all other parts of trees or other vegetation overhanging the roof or other portion of any Structure or attached deck.
4. Zone 0: 0-5 feet from any structure: The requirements of 4907.4.5 below apply to this zone.
5. Zone 1: 5 to 30 feet from any structure:
 - a. Remove contiguous vegetation without adequate fuel separation to prevent spread to the structure.
 - b. Maintain any tree, shrub, or other plant adjacent to or overhanging any Structure or attached deck free of dead or dying wood.
 - c. Maintain trees to remove Ladder Fuels so that foliage, twigs, or branches are greater than 6' feet above the ground or surface fuels.
 - d. Where shrubs or small trees are located below or within a tree's drip line, the lowest tree branch shall be a minimum of three times the height of the understory shrubs or 6 feet, whichever is greater.
 - e. New structures on the same property, such as a shed, hot tub, and playset, ensure these structures are spaced at least 10 feet apart. Have at most three (3) of these structures within 30 feet of a building or structure.
 - i. Existing moveable structures shall comply with the above.
 - f. Relocate storage of exposed firewood piles or lumber unless they are completely covered in a fire-resistant covering approved by the State Fire Marshal's Building Material Listing Service.

ATTACHMENT 1

6. Zone 2: 30 to 100 feet from any structure:
 - a. All exposed wood piles must have a minimum of ten feet (10 ft.) of clearance, down to bare mineral soil, in all directions.
7. For both Zones 1 and 2:
 - a. Remove vegetative and combustible material capable of transmitting fire to a structure as determined by the Fire Code Official.
 - b. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.).
 - c. Cut annual grasses and annual forbs to a maximum height of four inches (4 in.) prior to, or upon reaching the senescent or ripening phase when the preponderance of vegetative material is cured or dead.
 - d. Vertical Spacing: Limb trees by removing hanging bark, debris and branches that are within six feet (6 ft.) of the ground.
 - e. Create horizontal and vertical spacing among shrubs and trees using the "Fuel Separation" method, the "Continuous Tree Canopy" method or a combination of both to achieve defensible space clearance requirements. Further guidance regarding these methods is contained in the State Board of Forestry and Fire Protection's, "General Guidelines for Creating Defensible Space, February 8, 2006," incorporated herein by reference.
 - f. Maintain horizontal spacing between shrubs. Consistent with fuel management objectives, steps should be taken to minimize erosion, soil disturbance, and the spread of flammable, non-native grasses and weeds.
 - i. Flat or mild slope (less than 20%): Two times the height of the shrub.
 - ii. Mild to moderate slope (20-40%): Four times the height of the shrub
 - iii. Moderate to steep slope (greater than 40%): Six times the height of the shrub
 - iv. Shrubs maintained as trees shall comply with requirements for trees, and not this section.

ATTACHMENT 1

- g. New trees shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 feet from any structure or the canopy of other trees.

Section 4907.6 Specific requirements. Effective January 1, 2026 the Grizzly Peak Mitigation Area and Panoramic Mitigation Area shall be subject to 4907.6 in addition to 4907.4.

A person who owns, leases, controls, operates, or maintains lands shall at all times:

1. Zone 0: 0 to 5 feet from any structure:

- a. Maintain all areas within five (5) horizontal feet of any structure, outbuildings, attached deck or stairs, and the area under attached decks and stairs free of vegetative and non-vegetative combustible material.
- i. This includes but is not limited to shrubs, vegetative ground cover, climbing vines, combustible boards, timbers, firewood, debris, synthetic lawn, wood mulch products, playsets, plastic trash and recycle cans, trellises, pergolas, shade coverings, planters, attached window boxes, privacy walls, boats, RVs, and other material that could be ignited by embers, radiant heat, or direct flame.
 - ii. Hardscape materials, such as gravel, pavers, concrete, and other noncombustible materials, including bare mineral soil, are permitted.
 - iii. Exception: Plants in pots are allowable if they are in areas that are not directly beneath, above, or adjacent to a window or eave; are kept in an unaffixed, non-combustible pot or container that is no larger than 5-gallon capacity; and set apart by 1.5 times the height of the plant or 12 inches, whichever is greater, from the structure and each other. These plants shall be no greater than 18 inches in height. Dead or dying material on, around and under the plants shall be removed.
 - iv. Exception: Hot tubs may be installed within five (5) horizontal feet of a structure, provided they comply with all Zone 0 clearance requirements applicable to structures.
- b. Trees: Existing single specimens of trees are permitted in Zone Zero if:
- i. Maintained free of dead material.
 - ii. The canopy is maintained to create:
 - 1. Six feet (6') above the adjacent building or structure's roof
 - 2. Ten feet (10') away from chimneys and stovepipe outlets; and
 - 3. Five feet (5') of horizontal clearance from the sides of any Building, Structure, attached deck, porch, landing or stairs, and hot tubs within five (5) feet of a structure.

ATTACHMENT 1

- 4. 6' of vertical clearance above attached decks, attached, landing or stairs, and hot tubs within 5' of a structure.
- c. The roof and rain gutters of a Building or Structure shall be kept clear of leaves, needles, and vegetative material.
- d. Existing fences that are directly attached to a Building or Structure shall have a five foot (5 ft) non-combustible span at the point of attachment. After the effective date of this regulation, no new or replacement sections of combustible fence (parallel or perpendicular) are permitted within 5 feet of a building or structure including an attached deck.
- e. Outbuildings are not permitted in Zone 0, unless constructed according to the standards in Chapter 7A (commencing with Section 701A.1) of Part 2 of Title 24 of the California Code of Regulations. Outbuildings that meet these standards shall be considered part of the Building or Structure for the purpose of measuring Zone 0.

From: [Arnold, Colin](#)
To: [Wild Fire](#)
Subject: FW: Following up on Zone Zero scientific studies
Date: Monday, December 15, 2025 6:00:22 AM

For WUI Packet

From: Margit Roos-Collins <margit@rooscollins.net>
Sent: Saturday, December 13, 2025 10:35 AM
To: Blackaby, Brent <BBlackaby@berkeleyca.gov>; Eric Weaver <ericmartinweaver@gmail.com>; georgeperezvelez@gmail.com; rfillgen@gmail.com
Cc: Winnacker, Dave <DWinnacker@berkeleyca.gov>; Arnold, Colin <CArnold@berkeleyca.gov>; rhondagruska@gmail.com; Michel Thouati <thouati@gmail.com>; Henry DeNero <htdenero@gmail.com>; Marcus von Engel <marcus@firesafeberkeley.org>; Candace Hyde-Wang <candacehw@gmail.com>; Susan Wengraf <swengraf@comcast.net>; McWhorter, Laurie <LMcWhorter@berkeleyca.gov>
Subject: Re: Following up on Zone Zero scientific studies

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Brent,

Given the broad distribution of this email thread and my awareness that my WUI-fire-mitigation learning curve remains steep, I hate to contemplate the errors that may show up in this response. I hope that if anything I say below reflects a misunderstanding of fire science or BFD intentions, Colin Arnold or Dave Winnacker will speak up. Please know that I speak only for my own understanding of the Berkeley WUI Vegetation committee's look at the science and how it relates to Berkeley's EMBER plan.

In my response to Rhonda's email, I addressed the work that LA cited as showing a **protective effect** from plants and I explained why none of the peer-reviewed science cited appears to conflict with Berkeley's EMBER approach. In this email, I will address your question about any research showing a **neutral effect** on house ignitions from plants.

It's taken years of personal struggle with the Zone 0 concept for this plant lover to get with the program, starting in 2020 when I first read of it at the state level. What follows is why I've concluded that Berkeley's version of Zone 0 rules, including the WAMMR process that most folks haven't yet heard enough about, would make sense even if all research found that living plant material, standing alone, posed a neutral risk in the face of an ember storm.

For most of this process, I've been frustrated by the absence of studies showing risks from embers when they land on green lawn, say, or a camellia type of shrub – open and limbed up. If you take the shredded bark mulch away from Zone 0 and keep plant litter from piling up near the house and detach any wood fences or gates, and get rid of manmade combustible items, I haven't seen research that shows embers lighting up a healthy lawn or igniting an open-architecture shrub or small tree with no duff beneath them. I now doubt such research exists. It has taken months of exposure to Colin and Dave to conclude that they basically seem to agree that healthy green plants usually don't catch fire from embers BUT with the following caveats:

- Many healthy green plants, by their structure and growth habits, inevitably shelter or catch the plant duff and dead twigs or needles that embers do easily ignite. Those all need to be out of Zone 0.
- The same grass that might be safe against embers when it is short and green could become unsafe and fire-prone if allowed to go dry and grow tall.
- If there are easily ignited shrubs (for example, a juniper or bamboo) or objects in Zone 1 that are readily lit by embers, then the resulting fire (which is much hotter than the embers themselves) could indeed ignite a nearby Zone 0 shrub that might have been able to shrug off an ember storm.
- Then, since plants ignite at lower temperatures than houses do, the burning shrub in Zone 0 hastens the ignition of the house, with a speed that's affected by how hardened the house is at that location.

Each of those caveats are supported by strong science and fire-fighting experience and make intuitive sense. I'm sure BFD has other caveats that I'm unaware of or forgetting but you understand the point: **even healthy, sufficiently moist vegetation exists in a context of maintenance practices and proximities to other risks and that context is what drives a safety assessment.**

It's only been in the last few weeks that I've even started to understand BFD's very intelligent plan to help people keep cherished vegetation in Zone 0 if associated risks and caveats can be managed through the WAMMR process. I think when people understand the plan, and how very specific it must be for a given yard, plant, and house in order to make any fire sense, they will finally be able to reconcile their lived experience (starting a fire with matches/embers on green, living wood and attached green leaves is difficult to say the least) with EMBER's requirements.

Our committee is currently working to flesh out the guidance document language pertaining the WAMMR process. **One of my key takeaways from the committee's work has been that it can be a mistake to remove a beloved plant before consulting directly with the fire department to ensure that it needs to go. I wish more people**

understood that. Sometimes people have no choice because insurers insist on a clean Zone 0, but it's fascinating to hear our WUI experts explain how they read a yard and a house. A vegetation-free Zone 0 is the simplest, safest default but the WAMMR process exists precisely because BFD thinks some Zone 0 vegetation is acceptable when the associated risks are managed to achieve an outcome that's comparable in safety to a plant-free Zone 0.

Thank you for reaching out to all of us on the committee to give us a chance to compose our individual thoughts on the question of research at this stage of our review. As you know, we have not put forward anything on this topic from the committee as a whole and it is possible that we will not do so, absent more time and a specific charge to do so. In the meantime, I hope that affected and concerned owners in the VHFHSZ reach out early for their appointments with BFD personnel and find out how BFD is planning to help them into greater safety in a plant-friendly way.

Cheers,
Margit Roos-Collins

From: "Blackaby, Brent" <BBlackaby@berkeleyca.gov>

Date: Friday, December 12, 2025 at 1:13 PM

To: Eric Weaver <ericmartinweaver@gmail.com>, George Perez Velez <georgeperezvelez@gmail.com>, Margit Roos-Collins <margit@rooscollins.net>, Richard Illgen <rfillgen@gmail.com>

Cc: "Winnacker, Dave" <DWinnacker@berkeleyca.gov>, "Arnold, Colin" <CArnold@berkeleyca.gov>, "rhondagraska@gmail.com" <rhondagraska@gmail.com>, Michel Thouati <thouati@gmail.com>, Henry DeNero <htdenero@gmail.com>, Marcus von Engel <marcus@firesafeberkeley.org>, Candace Hyde-Wang <candacehw@gmail.com>, Susan Wengraf <swengraf@comcast.net>, "McWhorter, Laurie" <LMcWhorter@berkeleyca.gov>

Subject: Following up on Zone Zero scientific studies

Hi WUI vegetation management workgroup team,

First of all, I just wanted to thank each of you again for your participation on the workgroup. Your refinement to the language in the code, the development of the resident guide, and your recommendations for additional follow-up — which we've referred to staff for their iteration — have been incredibly valuable.

I know we don't necessarily agree on every component of EMBER, but I appreciate the work you've done across those differences to really improve the product. Thank you.

Second, in that same spirit, I had an additional request, since one of the other parts of your remit was to review and surface more scientific research (replicable studies or experiments) about in-ground vegetation in Zone Zero.

I noticed that there were a number of workgroup meetings where this action item was on the agenda, but notes from those meetings, and the summary from some of you, was that the group hadn't identified direct, relevant evidence that would substantially change or improve our approach from a fire safety perspective. This discussion obviously continues publicly, with varying levels of emotion. But I am of course committed to providing for fire safety without unnecessary hardship. So I am particularly invested in confirming:

Have you identified any scientific research that shows that in-ground vegetation, in Zone Zero specifically, has a neutral to positive impact on protecting structures in an ember storm?

Specifically:

- I'm not looking for studies that say green vegetation has a positive impact in defensible space more broadly, like Zones 1 or 2 — just the impact of that vegetation in Zone Zero itself.
 - What may be acceptable Zone 1 or 2 may look considerably different than what is tolerable in Zone Zero from a fire safety perspective.
 - BFD tells me that much of the research that shows the diminishing lack of effectiveness of complete in-ground vegetation removal pertains to the broader concept of defensible space, and didn't study the first 5 feet; and that these studies often are referencing why zone 1 actually works as prescribed.
 - I'm told we can't automatically assume that the same fire resistance value in Zone 1 or 2 would absolutely apply in Zone Zero, where our risk tolerance is greatly reduced since we're right next to a structure.
 - Have you found that to be true in your research? Is there evidence that you have found that might refute that?
- Further clarifying, I'm looking for any research about the impact of that Zone Zero in-ground vegetation just with respect to the ability to have a neutral impact, or positive impact, on inhibiting embers in an ember storm from igniting structures.
 - I know there are also conversations around the theory that live vegetation can protect structures from an adjacent structure, which would be useful to know given the narrow structure separation distances in the Berkeley Hills.
 - I would be interested to learn if you have uncovered that evidence as well.

I've been talking to Colin Arnold and Dave Winnacker to try to find any studies that would give us some data we can work with here, as part of the AMMR process or more broadly. I am

invested in making the AMMR process work for residents interested in taking that on, and I would certainly like to arm them with the right tools to accomplish their goals.

I think we would agree that, in order for it to be reflected in legislation or become law, we can't rely on someone's opinion or interpretation of another's work, but would of course need it to come from a legitimate scientific foundation. (Sorry, I know I'm preaching to some with law degrees here, so my apologies if this is already clear.)

Can you point me to anything that satisfies these criteria?

Thank you, and Happy Holidays!

Brent

Brent Blackaby

Berkeley City Councilmember

District 6

Phone: (510) 981-7160

bblackaby@berkeleyca.gov

From: [Arnold, Colin](#)
To: [Wild Fire](#)
Subject: FW: Following up on Zone Zero scientific studies
Date: Monday, December 15, 2025 6:19:24 AM

For the WUI packet

From: George Perezvelez <georgeperezvelez@gmail.com>
Sent: Friday, December 12, 2025 2:05 PM
To: Blackaby, Brent <BBlackaby@berkeleyca.gov>
Cc: Eric Weaver <ericmartinweaver@gmail.com>; Margit Roos-Collins <margit@rooscollins.net>; rfillgen@gmail.com; Winnacker, Dave <DWinnacker@berkeleyca.gov>; Arnold, Colin <CArnold@berkeleyca.gov>; McWhorter, Laurie <LMcWhorter@berkeleyca.gov>
Subject: Re: Following up on Zone Zero scientific studies

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Councilmember Blackaby,

I need to address the inclusion of individuals who are not members of the WUI Working Group in your recent email regarding Zone Zero science and the five-foot vegetation standard.

The Working Group was established to ensure a focused, disciplined, and technically credible process. Bringing individuals into the conversation who have not participated in the meetings, reviewed the materials, or engaged in the scientific discussions undermines that structure and creates confusion about who is actually responsible for the analysis. It also risks misrepresenting the work, as those outside the Group are not familiar with the methodologies and literature that inform our deliberations.

If there are perspectives you believe should be considered, the appropriate path is to bring them directly **to the Working Group through the established process**, not through after-the-fact email additions. That approach bypasses the group's accountability framework and places the integrity of the work at risk.

I would also strongly encourage you to **attend the Working Group meetings in person** if you want to ensure true participation and real involvement in the process. Meaningful engagement happens through direct contribution and shared understanding.

The Working Group's mandate is to provide evidence-based recommendations developed through a consistent, transparent, and accountable process. Maintaining those boundaries is essential. Please also note that a single response from one individual member of the group might not be representative of the collective.

Respectfully,

George Perezvelez

On Fri, Dec 12, 2025 at 10:13 AM Blackaby, Brent <BBlackaby@berkeleyca.gov> wrote:

Hi WUI vegetation management workgroup team,

First of all, I just wanted to thank each of you again for your participation on the workgroup. Your refinement to the language in the code, the development of the resident guide, and your recommendations for additional follow-up — which we've referred to staff for their iteration — have been incredibly valuable.

I know we don't necessarily agree on every component of EMBER, but I appreciate the work you've done across those differences to really improve the product. Thank you.

Second, in that same spirit, I had an additional request, since one of the other parts of your remit was to review and surface more scientific research (replicable studies or experiments) about in-ground vegetation in Zone Zero.

I noticed that there were a number of workgroup meetings where this action item was on the agenda, but notes from those meetings, and the summary from some of you, was that the group hadn't identified direct, relevant evidence that would substantially change or improve our approach from a fire safety perspective. This discussion obviously continues publicly, with varying levels of emotion. But I am of course committed to providing for fire safety without unnecessary hardship. So I am particularly invested in confirming:

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 - What may be acceptable Zone 1 or 2 may look considerably different than what is tolerable in Zone Zero from a fire safety perspective.
 - BFD tells me that much of the research that shows the diminishing lack of effectiveness of complete in-ground vegetation removal pertains to the broader concept of defensible space, and didn't study the first 5 feet; and that these studies often are referencing why zone 1 actually works as prescribed.
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 - Have you found that to be true in your research? Is there evidence that you

have found that might refute that?

- Further clarifying, I'm looking for any research about the impact of that Zone Zero in-ground vegetation just with respect to the ability to have a neutral impact, or positive impact, on inhibiting embers in an ember storm from igniting structures.

- I know there are also conversations around the theory that live vegetation can protect structures from an adjacent structure, which would be useful to know given the narrow structure separation distances in the Berkeley Hills.

- I would be interested to learn if you have uncovered that evidence as well.

I've been talking to Colin Arnold and Dave Winnacker to try to find any studies that would give us some data we can work with here, as part of the AMMR process or more broadly. I am invested in making the AMMR process work for residents interested in taking that on, and I would certainly like to arm them with the right tools to accomplish their goals.

I think we would agree that, in order for it to be reflected in legislation or become law, we can't rely on someone's opinion or interpretation of another's work, but would of course need it to come from a legitimate scientific foundation. (Sorry, I know I'm preaching to some with law degrees here, so my apologies if this is already clear.)

Can you point me to anything that satisfies these criteria?

Thank you, and Happy Holidays!

Brent

Brent Blackaby

Berkeley City Councilmember

District 6

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--

George D. Perezvelez

415.994.3234

Vice President, NACOLE

Founding Board Member, BART Police Citizen Review Board

Finance Committee Advisor, The HAVI (Health Alliance for Violence Intervention)
Board Member, Alameda County Fire Advisory Commission D5
Treasurer, Alameda County Democratic Central Committee (ACDCC)
Alternate Member, Assembly District 14
Member, California Democratic Party Finance Committee

From: [Margit Roos-Collins](#)
To: [Wild Fire; Arnold, Colin](#)
Subject: FW: Following up on Zone Zero scientific studies
Date: Friday, December 19, 2025 6:55:41 AM

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Lastly, please include in the packet the correspondence from last week that went to and from the committee members, from Brent Blackaby and from Rhonda Gruska. There were responses to Brent from George and Eric as well as my responses to both Rhonda (below) and Brent.

I know you were planning to – sorry if this is too much mother henning but I’m in full mother hen mode right now with my extended family as we juggle plans.

From: Margit Roos-Collins <margit@rooscollins.net>
Date: Saturday, December 13, 2025 at 1:33 PM
To: Rhonda Gruska <rhondagruska@gmail.com>, Brent Blackaby <bblackaby@berkeleyca.gov>
Cc: Eric Weaver <ericmartinweaver@gmail.com>, George Perez Velez <georgeperezvelez@gmail.com>, Richard Illgen <rfillgen@gmail.com>, Dave Winnacker <DWinnacker@berkeleyca.gov>, Colin Arnold <carnold@berkeleyca.gov>, Michel Thouati <thouati@gmail.com>, Henry DeNero <htdenero@gmail.com>, Marcus von Engel <marcus@firesafeberkeley.org>, Candace Hyde-Wang <candacehw@gmail.com>, Susan Wengraf <swengraf@comcast.net>, Laurie McWhorter <LMcWhorter@berkeleyca.gov>
Subject: Re: Following up on Zone Zero scientific studies

Hello, Rhonda. Thank you for raising the LA report to this group and thanks for your kind comments on our committee’s work. I’ve responded below to the section of the LA report relating to potential **protective qualities** of vegetation. Please read my response to Councilmember Blackaby’s email for my take on the committee’s work and EMBER as they relate to the state of research on the **neutral qualities** of plants in ember storms.

My responses reflect my admittedly lay understanding, based on listening to Colin Arnold’s and Dave Winnacker’s answers to our WUI Vegetation committee’s questions over the past several months and based on attending most of the state Zone 0 Committee’s workshops this year and my own reading. I speak only for myself and have not asked anyone else to review this for accuracy.

At the outset, I want to emphasize my agreement and, I believe, BFD’s agreement with a key point of the LA report: one size does not fit all. A universal vegetation-free Zone 0 (maybe excepting tall trees with clearances) is what the insurance industry looks for,

and it will provide homeowners their best, simplest defense against both loss of insurance and fire loss. But for those of us who particularly treasure our near-home plants, BFD has designed their Zone 0 approach to allow for inspectors to go yard by yard, evaluating and planning with each owner individually.

By getting ahead of the state's rules and starting now with the Tilden-proximate half of the state-designated Very High Fire Hazard Severity Zone, BFD has reduced the number of houses required to comply down to a number that will allow BFD to offer an individualized approach. They now have a couple of years to focus on the houses most directly at risk, house by house and owner by owner, taking into account people's varying degrees of investment in their gardens and plants. **Making a flat Zone 0 rule and allowing exceptions only through the Wildland Alternative Means and Measures (WAMMRs) gives BFD the control they need to ensure that the vegetation that they permit to remain close to houses is indeed safe. They do not argue that there is no such thing or that all houses need to be vegetation free. But they do make compelling arguments that whether a shrub or groundcover or tree is safe in a particular Zone 0 setting requires professional appraisal of many different fire risks and may require maintenance and self-reporting agreements to ensure its continuing safety.** The plan for using WAMMRs is not visible from reading the Fire Code alone and I believe that gap has been responsible for considerable public distress. When the accompanying guidance documents are published this winter and firefighters start teaching owners how EMBER works in fact, I expect that there will be huge relief at the intelligence and adaptability of it.

This is why I am finally comfortable supporting Berkeley's approach to Zone 0 and indeed, so far, it's the only approach I've seen that makes sense in balancing the many values of plants in the WUI environment with the need to minimize risk of urban conflagration in our dense setting.

There's so much we could discuss about each part of the LA study but I'm going to focus on the study's primary focus and on what they say about vegetation's potentially protective role.

First, in their Background section on page 1, the LA report clarifies that its focus on the greater importance of home hardening and spacing is based on what happens in structure to structure fire.

Research shows that modern urban fires are primarily driven by house-to-house ignition during wind events rather than vegetation, making structure spacing and home hardening more effective than widespread vegetation removal. Effective

mitigation should focus on ignition prevention, building hardening, and managing the spacing and vulnerability of structures, more than removing vegetation.

My sense is that Berkeley Fire would agree with these statements – once a wildland fire progresses to house to house in our dense town of older construction, it's an urban fire. If the winds are high enough or it otherwise moves too quickly, it can become an urban conflagration. The absence of vegetation in Zone 0 is not at that point a primary driver of outcomes (though, per Gollner's recent piece in Nature Communications, it might increase the number of houses left standing, by his calculations from 20% without Zone 0 to 37% with it, on average).

EMBER's focus is not on urban fire primarily. It's on interrupting and slowing the progression of wildland fires as they enter town, so that firefighting resources from throughout the region have time to assemble and beat back the fire before it becomes an urban fire. It's in that earlier phase, along the border between Tilden and Berkeley, that managing vegetation and creating a Zone 0 is expected to buy critical time.

Understanding that we are focusing on a different phase, and that vegetation has a different role to play in that phase, let's look at what's said in the report about vegetation's potential protective effect.

On pp. 7 and 8, in the section titled "Protective Properties of Vegetation," the LA report cites five sources. Here's my understanding of how those relate to the work our committee has done and the approach of BFD.

1. LA cites the Moritz and Carmignani LA Times piece showing a hedge that burned on the side of a house that burned and that stayed green on the side of a house that was spared, arguing that this is an example of a hedge that stopped the embers.

This is not peer-reviewed science. Firefighters both at the state and local level have pointed out that you cannot tell from the photo whether the wind shifted direction away from the surviving house or whether that house had firefighters protecting it. In their experience, either of those is more likely than that the hedge stopped the fire. Depending on the species, a thick hedge typically contains enough twiggy inner material to trap leaf litter and both the twigs and duff are perfect tinder for embers.

In the absence of a peer-reviewed study testing the protective shrub theory, the Moritz and Carmignani assertion is not a basis for changing the regulations.

2. LA cites Escobedo et al (2025) showing "that moisture content in trees correlates

with lower structure loss.”

EMBER doesn’t conflict with this. EMBER protects trees that overhang houses and trees in yards and along streets. Through the WAMMR process, a resident can also explore options to save a smaller tree adjacent to a house, in cases where the specific circumstances of that yard, house, and tree allow it. Since all trees will burn if exposed to hot enough flames long enough, there are situations in which a nearby object or plant that is vulnerable to ember fire could, if it ignited, ignite in turn the Zone 0 tree, with resulting increased risk to the house. This is why EMBER does not allow small trees and shrubs in Zone 0 without a WAMMR process.

What has conflicted with the Escobedo study is the insurance industry’s prohibition on all Zone 0 trees in order to qualify as a Wildfire Prepared Home. At this month’s state Zone 0 committee meeting, I heard (but haven’t yet confirmed) that the industry may be planning to drop that prohibition, which will help bring the state and local regulations and the insurance requirements into a very important alignment.

3. LA notes that “irrigation and plant hydration are key fire-resistance variables,” again citing Escobedo et al (2025).

Again, I don’t see any conflict with EMBER here. The fact that plant hydration can make an important difference in fire resistance is why BFD contemplates maintenance requirements, including irrigation, being part of certain WAMMR agreements.

4. LA cites an interview with John Keeley in The Smoky Wire, to the effect that “Historic orchard buffers reduced fire spread in LA suburbs like Altadena. ‘The urban environment was surrounded by citrus orchards. And that’s what buffered the communities from the wildland areas. And if fires ... burned into them, they generally burned out. Today, we don’t have citrus orchards. We just have more homes.’ “

That’s an interesting point. It’s anecdotal (Keeley cites no studies in the interview), but it aligns with the work being done by EBRPD along the Tilden border to clear below the trees and it aligns with EMBER’s allowance for trees as long as there is no or low-enough ground cover below them. Southern California citrus orchards, in the period Keeley is referencing, typically had nothing but bare dirt or grass below the trees. They fit the Closed Canopy description which EMBER allows.

Bottom line? I don’t see anything in EMBER that conflicts with the research cited by LA and in fact, EMBER seems to be fully aligned with that research.

This is consistent with the Berkeley WUI Vegetation committee's failure so far to find compelling peer-reviewed research demonstrating a protective quality to plants in a pathway that was not already contemplated and incorporated into EMBER. Members continue to be alert for new information that might be grounds for changing any of the rules, but from what I've seen so far, the Berkeley Fire Department's WUI professionals are on top of the latest research in the relationship between plants and WUI fires and are taking it into account in their approach to regulation.

I hope this is helpful. As a passionate lover of plants, it has been a great comfort to me to discover the plant-friendly nuances in the EMBER approach and the eagerness of BFD's WUI team to protect any plants that can be protected, consistent with their safety mission.

This adjustment is still going to be hard for people who will have to give up a beloved sprawling, woody vine or a dense privacy hedge that harbored annual bird nests just outside the window. Learning how to live in relationship to land that wants burning is a tough adjustment for those of us whose tastes in plants were shaped by generations in other, moister environments. But trying to live sustainably is at the core of Berkeley's identity.

Cheers,

Margit Roos-Collins

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From: Rhonda Gruska <rhondagruska@gmail.com>

Date: Friday, December 12, 2025 at 6:14 PM

To: Brent Blackaby <bblackaby@berkeleyca.gov>

Cc: Eric Weaver <ericmartinweaver@gmail.com>, George Perez Velez <georgeperezvelez@gmail.com>, Margit Roos-Collins <margit@rooscollins.net>, Richard Illgen <rfillgen@gmail.com>, Dave Winnacker <DWinnacker@berkeleyca.gov>, Colin Arnold <carnold@berkeleyca.gov>, Michel Thouati <thouati@gmail.com>, Henry DeNero <htdenero@gmail.com>, Marcus von Engel <marcus@firesafeberkeley.org>, Candace Hyde-Wang <candacehw@gmail.com>, Susan Wengraf <swengraf@comcast.net>, Laurie McWhorter <LMcWhorter@berkeleyca.gov>

Subject: Re: Following up on Zone Zero scientific studies

Hi Brent,

I would personally encourage everyone study the City of Los Angeles Community Forest Advisory Committee (CFAC) recommendations prior to their city council of fifteen voting unanimously to push back on draconian plant removal mandates.

https://cityclerk.lacity.org/online/docs/2010/10-2468-S2_misc_9-8-25.pdf
<10-2468-S2_misc_9-8-25.pdf>

If Berkeley had a committee like this, perhaps you would not be in the position of trying to put the horse back in front of the cart.

And many thanks to George, Eric, Margit and Richard for the numerous volunteer hours they have been spending to try and clarify and clean up the EMBER legislation.

Happy Holidays,
Rhonda Gruska

Sent from my iPhone

On Dec 12, 2025, at 10:13 AM, Blackaby, Brent
<bblackaby@berkeleyca.gov> wrote:

Hi WUI vegetation management workgroup team,

First of all, I just wanted to thank each of you again for your participation on the workgroup. Your refinement to the language in the code, the development of the resident guide, and your recommendations for additional follow-up — which we've referred to staff for their iteration — have been incredibly valuable.

I know we don't necessarily agree on every component of EMBER, but I appreciate the work you've done across those differences to really improve the product. Thank you.

Second, in that same spirit, I had an additional request, since one of the other parts of your remit was to review and surface more scientific research (replicable studies or experiments) about in-ground vegetation in Zone Zero.

I noticed that there were a number of workgroup meetings where this action item was on the agenda, but notes from those meetings, and the summary from some of you, was that the group hadn't identified direct, relevant evidence that would

substantially change or improve our approach from a fire safety perspective. This discussion obviously continues publicly, with varying levels of emotion. But I am of course committed to providing for fire safety without unnecessary hardship. So I am particularly invested in confirming:

Have you identified any scientific research that shows that in-ground vegetation, in Zone Zero specifically, has a neutral to positive impact on protecting structures in an ember storm?

Specifically:

- I'm not looking for studies that say green vegetation has a positive impact in defensible space more broadly, like Zones 1 or 2 — just the impact of that vegetation in Zone Zero itself.
 - What may be acceptable Zone 1 or 2 may look considerably different than what is tolerable in Zone Zero from a fire safety perspective.
 - BFD tells me that much of the research that shows the diminishing lack of effectiveness of complete in-ground vegetation removal pertains to the broader concept of defensible space, and didn't study the first 5 feet; and that these studies often are referencing why zone 1 actually works as prescribed.
 - I'm told we can't automatically assume that the same fire resistance value in Zone 1 or 2 would absolutely apply in Zone Zero, where our risk tolerance is greatly reduced since we're right next to a structure.
 - Have you found that to be true in your research? Is there evidence that you have found that might refute that?
- Further clarifying, I'm looking for any research about the impact of that Zone Zero in-ground vegetation just with respect to the ability to have a neutral impact, or positive impact, on inhibiting embers in an ember storm from igniting structures.
 - I know there are also conversations around the theory that live vegetation can protect structures from an adjacent structure, which would be useful to know given the narrow structure separation distances in the Berkeley Hills.
 - I would be interested to learn if you have uncovered that evidence as well.

I've been talking to Colin Arnold and Dave Winnacker to try to find any studies that would give us some data we can work with here, as part of the AMMR process or more broadly. I am invested in making the AMMR process work for residents

interested in taking that on, and I would certainly like to arm them with the right tools to accomplish their goals.

I think we would agree that, in order for it to be reflected in legislation or become law, we can't rely on someone's opinion or interpretation of another's work, but would of course need it to come from a legitimate scientific foundation. (Sorry, I know I'm preaching to some with law degrees here, so my apologies if this is already clear.)

Can you point me to anything that satisfies these criteria?

Thank you, and Happy Holidays!

Brent

Brent Blackaby

Berkeley City Councilmember

District 6

Phone: (510) 981-7160

bblackaby@berkeleyca.gov

From: [Eric Weaver](#)
To: [Blackaby, Brent](#)
Cc: [georgeperezvelez@gmail.com](#); [Margit Roos-Collins](#); [rfillgen@gmail.com](#); [Winnacker, Dave](#); [Arnold, Colin](#); [rhondagraska@gmail.com](#); [Michel Thouati](#); [Henry DeNero](#); [Marcus von Engel](#); [Candace Hyde-Wang](#); [Susan Wengraf](#); [McWhorter, Laurie](#)
Subject: Re: Following up on Zone Zero scientific studies
Date: Friday, December 12, 2025 10:55:56 AM

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Hi Brent. A lot of time was put into searching for studies that specifically address the questions you raise. We were unable to find any studies specifically addressing these questions. There are studies of other issues with incidental comments about in-ground vegetation but none that specifically studied the precise questions. That being said, the group realized that (hopefully) it is possible that in the future there will be studies that specifically focus on these questions. For the moment, there are no studies that we could find. The EMBER regulations represent the best currently available science but that may change in the future.

Eric Weaver

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