



Office of the City Manager

ACTION CALENDAR

April 15, 2025

To: Honorable Mayor and Members of the City Council

From: Paul Buddenhagen, City Manager

Submitted by: David Sprague, Fire Chief

Subject: Adoption of CALFIRE Map and Additional Areas Designated as the City of Berkeley Fire Hazard Severity Zones

RECOMMENDATION

1. Adopt first reading of an Ordinance to designate Fire Hazard Severity Zones (FHSZ) within the Local Responsibility Area as recommended by the California Department of Forestry and Fire Protection (CALFIRE) pursuant to Government Code Section 51178, and
2. Designate areas not identified as Very High and High Fire Hazard Severity Zones by the State Fire Marshal, as Very High, and High Fire Hazard Severity Zones following a finding supported by substantial evidence in the record that the requirements of Government Code Section 51182 are necessary for effective fire protection within the area.

POLICY COMMITTEE RECOMMENDATION

On March 24, 2025, the Public Safety Committee adopted the following action: M/S/C (Blackaby/Kesarwani) to send item to City Council with a positive recommendation.

Vote: All Ayes.

FISCAL IMPACTS OF RECOMMENDATION

There are substantial financial impacts to the Department in the form of staff and program costs associated with this recommendation, all of which can currently be absorbed within the Department's budget.

CURRENT SITUATION AND ITS EFFECTS**Adoption of CALFIRE Maps:**

An interactive, live storyboard that helps summarize the methodology informing this staff report can be found here: (<https://arcg.is/1iDbf02>)

Pursuant to California Government Code 51177-51179, CALFIRE has released recommended updates to Fire Hazard Severity Zones in the Local Responsibility Area¹.

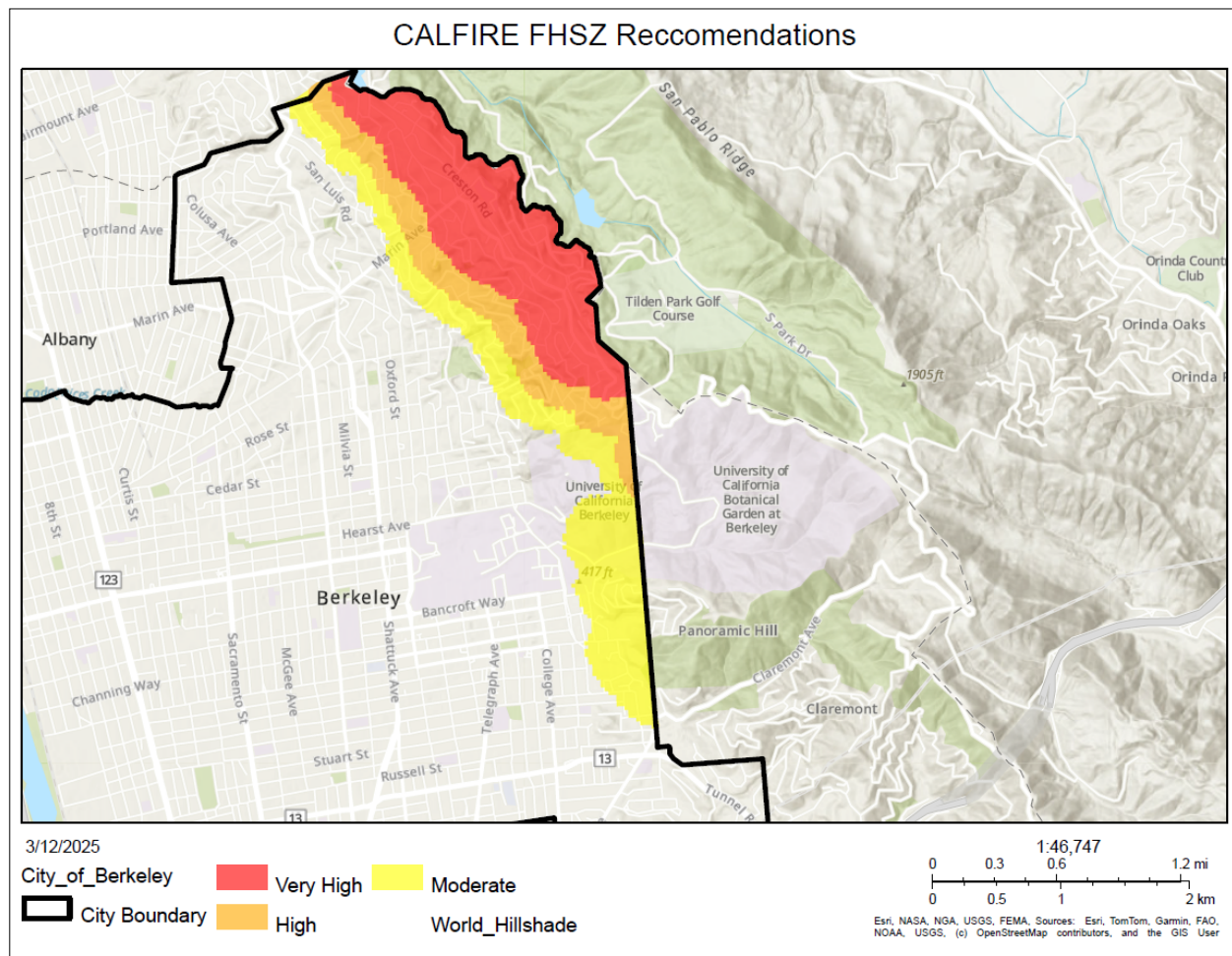
¹ CALFIRE Fire Hazard Severity Zone Map within the Local Responsibility Area
 2180 Milvia Street, Berkeley, CA 94704 • Tel: (510) 981-7000 • TDD: (510) 981-6903 • Fax: (510) 981-7099
 E-Mail: manager@berkeleyca.gov Website: <https://berkeleyca.gov/>

The City has received formal notification from CALFIRE and, at a minimum, must adopt the map produced by the State no later than June 24, 2025.

With the adoption of the Local Responsibility Area maps, all properties in those areas designated as Very High (1) are required to meet the vegetation management requirements identified in Government Code Section 51182 as a minimum standard, and (2) all new buildings constructed, or major remodels classified by the Building Official as new construction, will be required to incorporate the ignition resistant building standards required in Chapter 7A of the Building Standards Code.

In areas designated as High Fire Hazard Severity Zones, all new construction, or major remodels classified by the Building Official as new construction, are required to meet the wildfire resistant construction requirements included in Chapter 7A of the Building Standards Code.

Properties within the Very High and High Fire Hazard Severity Zones must conduct a natural hazard real estate disclosure at time of sale per CA CIV 1102.19 (AB 38, 2019).



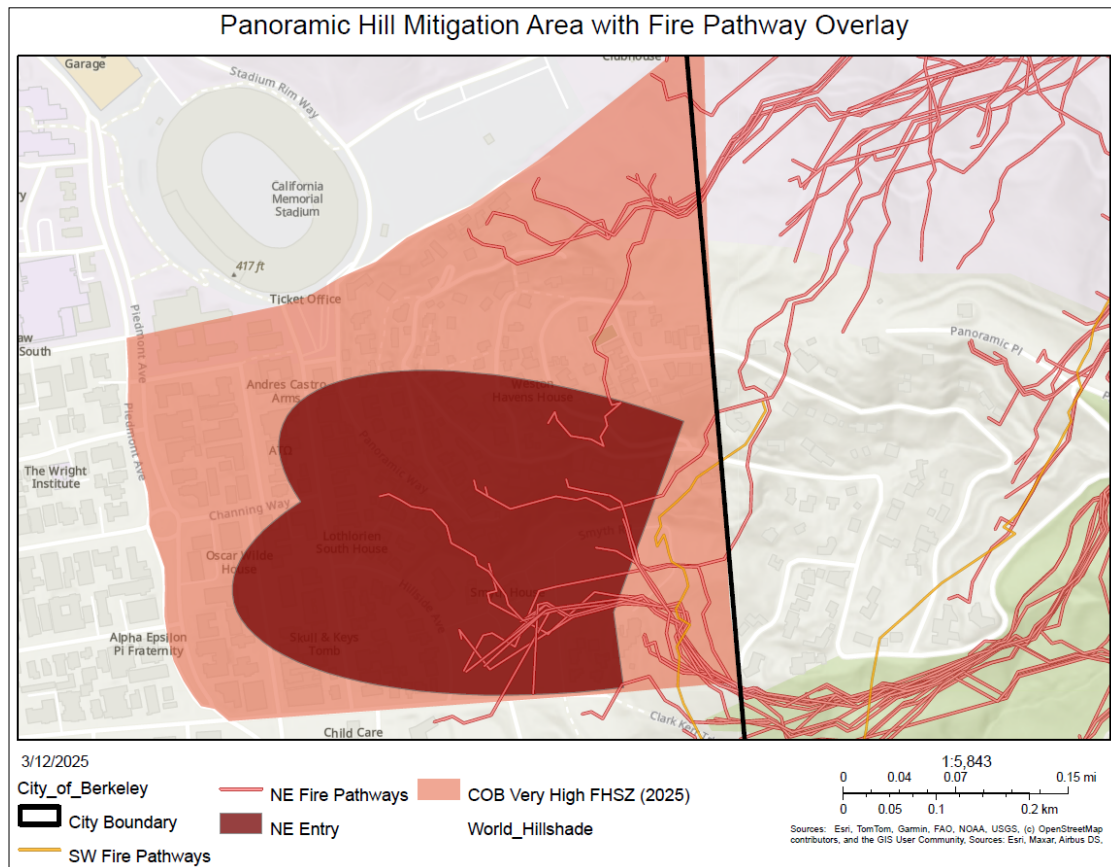
Additional Designation of High and Very High Hazard Fire Severity Zones:

Notwithstanding the minimum Fire Hazard Severity Zones that the City is required to adopt by state law, under the authority included in Government Code 51175, the City may designate areas not included in the recommended CALFIRE maps as Moderate, High, or Very High Fire Hazard Severity Zones. The City may not reduce the recommended designations, or boundaries, included on the CALFIRE maps.

Staff have reviewed the CALFIRE maps and suggest the following additional geographic designations:

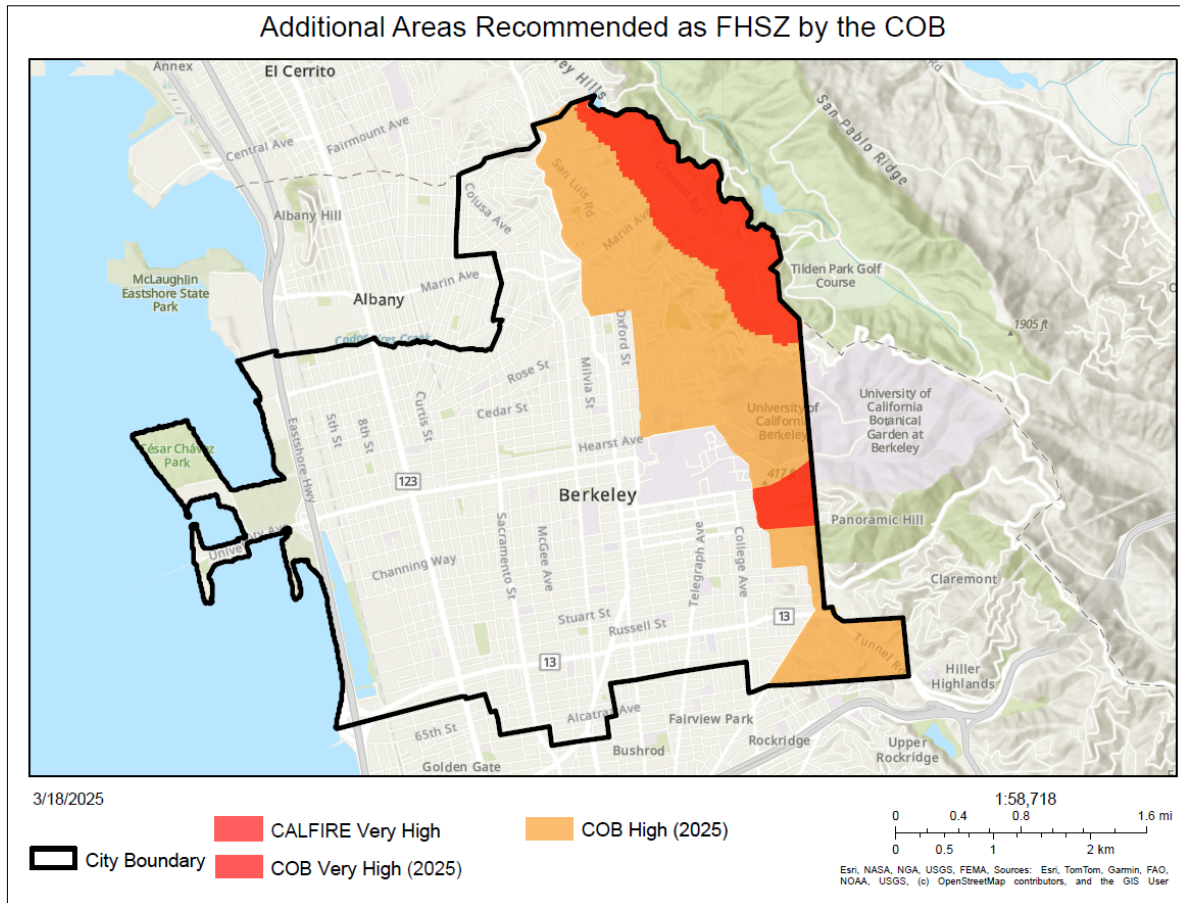
1. Designate as Very High Fire Hazard Severity Zones² those areas of the City bounded by the line formed by these roads. Homes addressed on, or with a structural frontage on either side of these road segments are included in the zone:
 - a. Canyon Road from the Oakland border to Stadium Rim Way
 - b. 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
 - 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

² Additional Area Recommended as a Very High Fire Hazard Severity Zone by the City of Berkeley
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2. Designate as High Fire Hazard Severity Zones³ those areas of the City west of the CALFIRE Very High Fire Hazard Severity Zone and 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. Sutter Street from the Southern portal of the Northbrae Tunnel to Eunice Street
 - c. Spruce Street from Eunice Street to Hearst Avenue
 - d. Gayley Road from Hearst Avenue to Stadium Rim Way
 - e. Piedmont Avenue from Stadium Rim Way to Bancroft Way
 - f. Warring Street from Dwight Way to Derby Street
 - g. Belrose Avenue from Derby Street to Garber Street
 - h. Claremont Boulevard from Garber Street to Claremont Avenue
 - i. Claremont Avenue from Claremont Boulevard to the Oakland Border
 - j. Tunnel Road from Ashby Avenue to the Oakland Border

³ Additional Area Recommended as a High Fire Hazard Severity Zone by the City of Berkeley



The City's official maps are located electronically in GIS: [Risk Comparison Map App \(https://berkeley.maps.arcgis.com/apps/instant/basic/index.html?appid=d5510e8fb6c74fa38a89f0a512d16a0\)](https://berkeley.maps.arcgis.com/apps/instant/basic/index.html?appid=d5510e8fb6c74fa38a89f0a512d16a0). The official CALFIRE map is located electronically on the "CALFIRE Fire Hazard Severity Zones in the Local Responsibility Area Map" page.

BACKGROUND

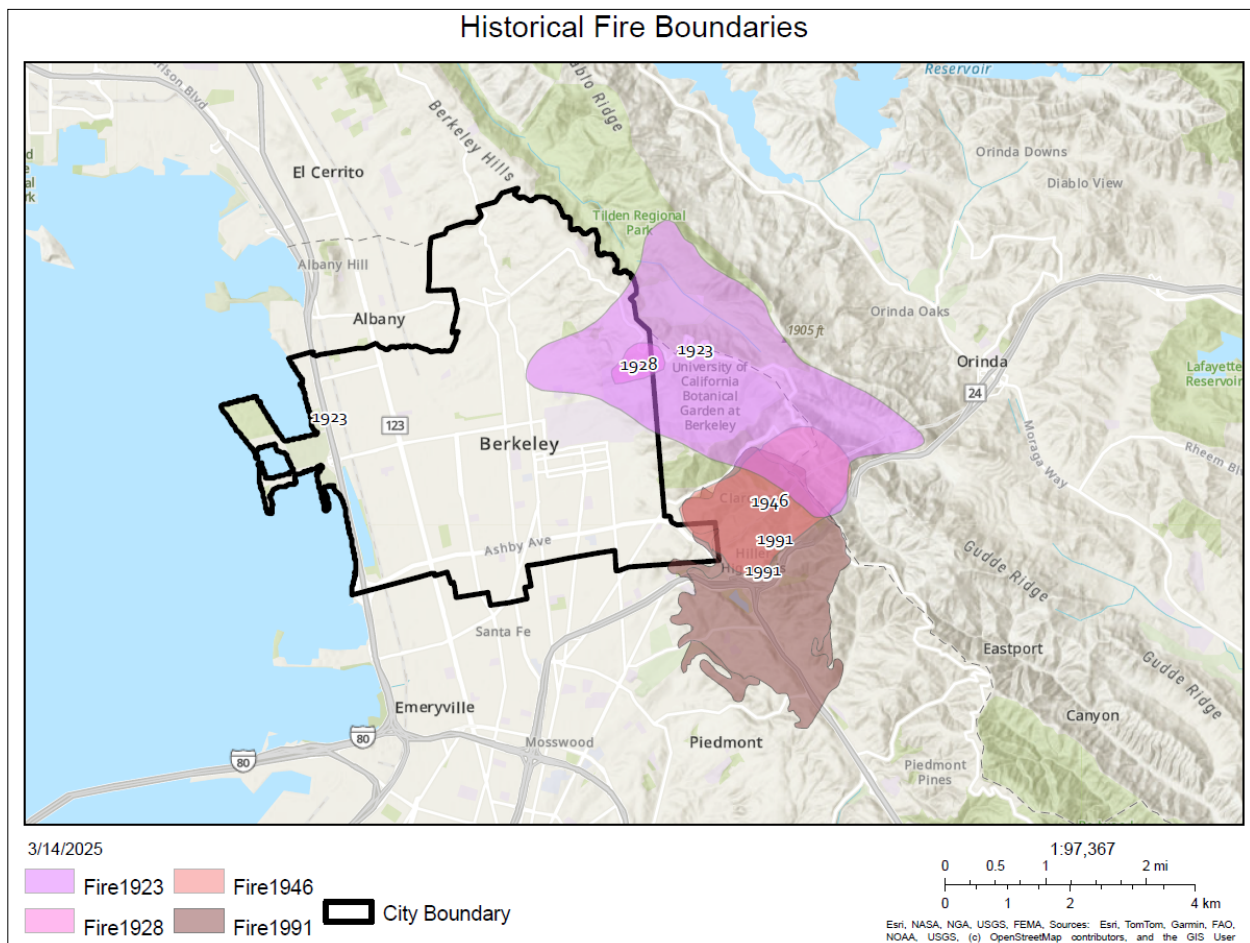
Local Conditions That Justify Additional Areas Designated as Very High or High Fire Hazard Severity Zones:

Panoramic Hill and the areas immediately surrounding it are recommended for inclusion in the Very High Fire Hazard Severity Zone due to narrow structure separation distance and high housing density, limited retrofitting of structures to bring them in compliance with Chapter 7A of the Building Standards Code, a single evacuation route that will cause extended evacuation time, proximity to dense vegetation and topographic features capable of supporting fast moving wind driven fire⁴, the benefits to evacuation and wildfire risk reduction associated with long term replacement of existing housing stock with structures that meet wildfire resistive construction standards, and the strategic opportunity that the relatively straight, wide, north-south street selected as the

⁴ Panoramic Hill Mitigation Area with Fire Pathway Overlay
Page 5

western boundary could provide in terms of stopping or slowing the advance of a fire moving from the hills, west into the City.

The areas recommended for inclusion in the High Fire Hazard Severity Zones are included due to fire history, with major fires occurring in and around this area in 1905, 1923, 1928, 1946, 1970, 1980, and 1991⁵, the narrow structure separation distance between homes, the limited retrofitting of structures to bring them in compliance with Chapter 7A of the Building Standards Code^{6 7}, the benefits to evacuation and wildfire risk reduction associated with long term replacement of existing housing stock with wildfire resistive construction, limited east to west evacuation routes that will cause extended evacuation time, and the strategic opportunity that the relatively straight, wide, north-south streets selected as western boundaries could provide in terms of stopping or slowing the advance of a fire moving from the hills, west into the City.



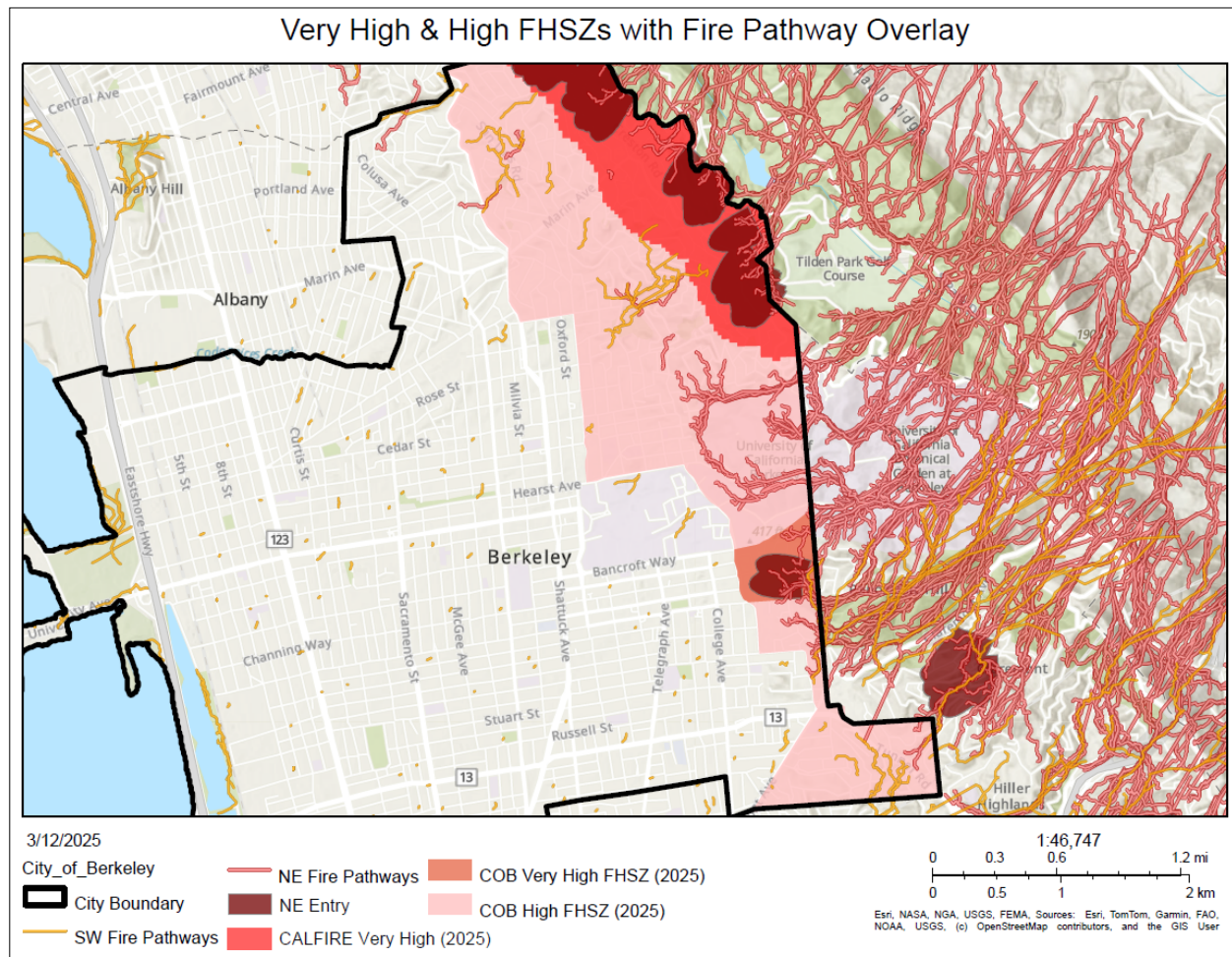
In addition to these factors the City has considered fire pathways which are the routes formed by the combination of topography, weather, and continuous vegetative fuel that

⁵ Historical Fire Boundaries

⁶ Year Built, North Hills. Shows which structures have been built to the new Chapter 7A building standards.

⁷ Year Built, South Hills. Shows which structures have been built to the new Chapter 7A building standards.

bring wildfire to values at risk (such as structures, critical infrastructure, or anything that the community finds of value), during a fast-moving, wind-driven fire event. Fire pathways highlight where rapid-fire growth may outpace the local firefighting response, resulting in wildfire arrival to the built environment and the potential for urban conflagration. The fire pathways mapping was created using the minimum travel time algorithm, a peer-reviewed algorithm built into FlamMap, the industry-standard tool for fire behavior analysis in the United States. The analysis found numerous entry points from Diablo Wind events (from the northeast) and several entry points from Maritime Influence winds (from the southwest) into the City⁸.



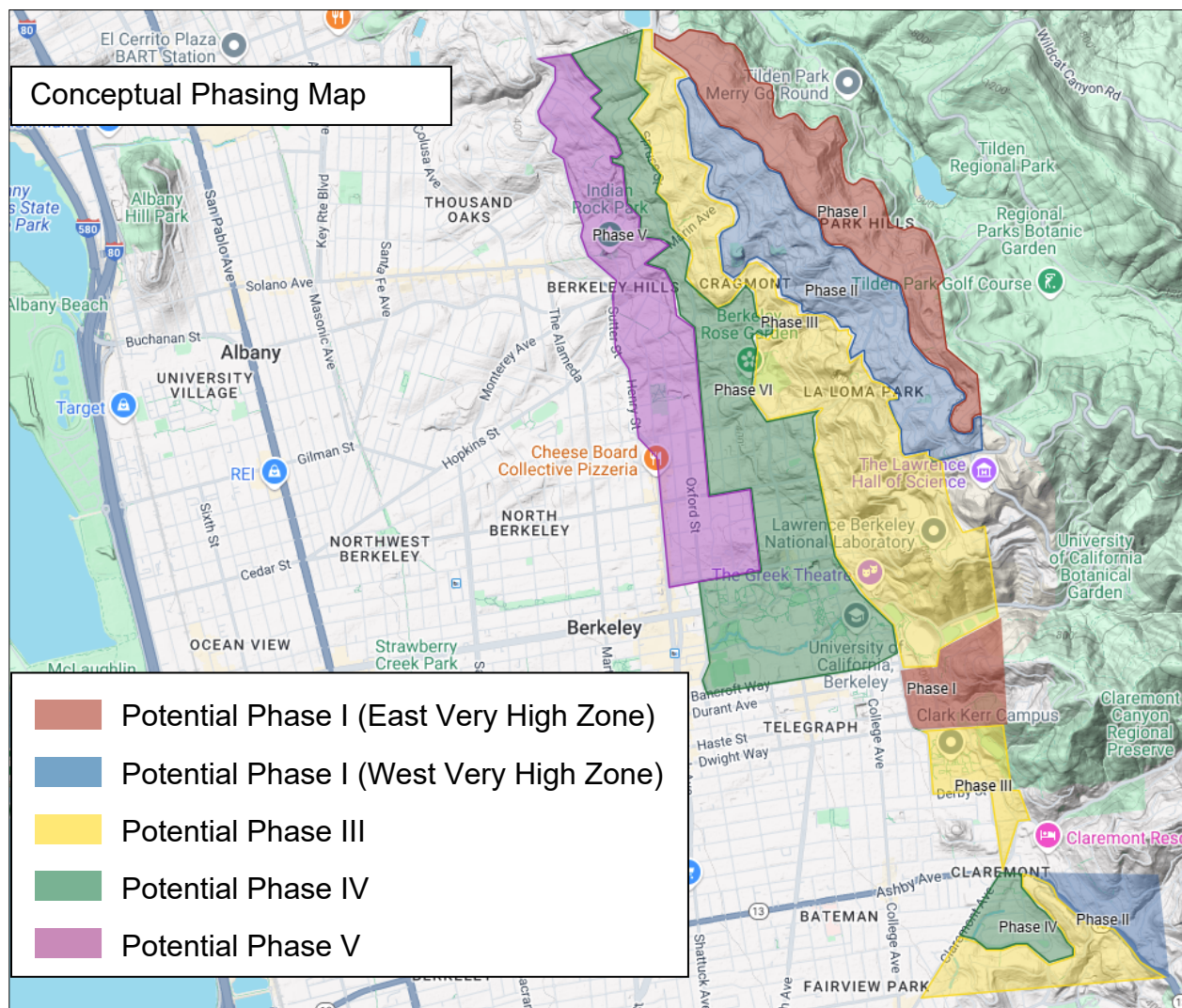
Future intent to expand the Very High Fire Hazard Severity Zone:

The City will initially focus on the highest risk areas of the built environment where ember cast from vegetation along fire pathways is likely and should be prioritized for home hardening and defensible space education, incentives, and enforcement. This will prioritize effective mitigations with limited resources. Focusing resources on the highest priority areas, creating a buffer along the edges of the community can prevent the

⁸ Very High and High FHSZ with Fire Pathway Overlay

transition of fire from vegetation to densely spaced structures, interrupting the initiation and propagation of urban conflagration in the built environment.

Phase I will include the Panoramic Mitigation Area and the Grizzly Peak Mitigation area. Phase II will include, at minimum, additional areas of the CALFIRE Very High Fire Hazard Severity Zone. Subsequent phases will complete work in the CALFIRE Very High Fire Hazard Severity Zone. With City Council approval, additional slices of the High Fire Hazard Severity Zone will be transitioned to meet defensible space requirements systematically until all of the High Fire Severity Zone has the defensible space requirements outlined in this code. The Department will be able to provide a better estimate of how long subsequent phases will take once staff have begun work in Phase I. A map demonstrating the conceptual phasing is shown below⁹.



History of CALFIRE Fire Hazard Severity Zones:

⁹ City of Berkeley Fire Hazard Severity Zone Conceptual Phasing Map;

<https://www.google.com/maps/d/u/0/edit?mid=1tNP0IWFdz2ACKj2v6eijTLBBaboYc9o&usp=sharing>

Assembly Bill 337 (Bates 1992), prompted by the devastating Oakland/Berkeley Hills fire of 1991, calls for CALFIRE to evaluate fire hazard severity in the Local Responsibility Area and to make a recommendation to the local jurisdiction where Very High Fire Hazard Severity Zones exist (CA GC 51175).

The Local Responsibility Area includes incorporated cities, urban regions, agriculture lands, and portions of the desert where the local government is responsible for wildfire protection (CA PRC 4125).

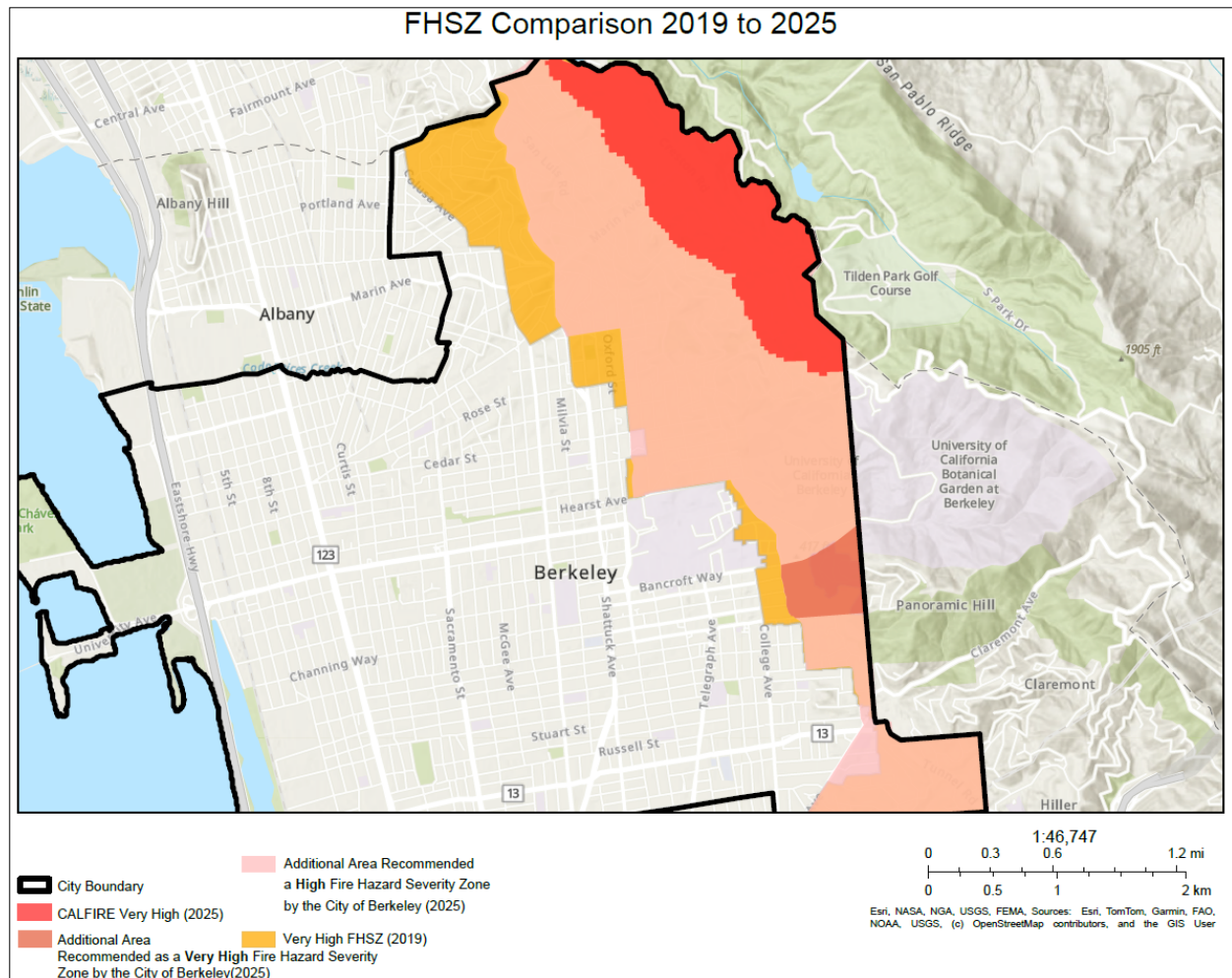
This process last occurred in 2007 and is directed by state law. Fire Hazard Severity Zones consist of Very High, High, and Moderate designations. Of note, when the current maps were released in 2007 the High and Moderate designations did not apply to the Local Responsibility Area and only Very High designations were adopted by the City Council. Senate Bill 63 (Stern, 2021) amended Government Code 51178 to add the Moderate and High Fire Hazard Severity Zones in the Local Responsibility Area¹⁰.

Comparison of historical Zones to the 2025 recommendations:

The CALFIRE recommended Fire Hazard Severity Zone has substantially contracted in the 2025 Local Responsibility Area maps. This is not indicative of a decrease in risk as the CALFIRE Fire Hazard Severity Zones are not a structure loss model, as key information regarding structure ignition (such as roof type, etc.) is not considered. Nor do the CALFIRE maps consider local factors inclusive of structure separation distance, year of construction, construction type, or roadway design and capacity. The factors considered by CALFIRE in determining fire hazard within wildland areas are fire history, flame length, terrain, local weather, and potential fuel over a 50-year period. Outside of wildlands, the model considers factors that might lead to buildings being threatened, including terrain, weather, urban vegetation cover, blowing embers, proximity to wildland, fire history, and fire hazard in nearby wildlands.

The City has, since the mid-1990s, recommended that a larger geographic area be identified as a Very High Fire Hazard Severity Zone than what CALFIRE recommends. In the map below, the area that has historically been recognized, through local amendment to the CALFIRE maps as a Very High Fire Hazard Severity Zone is shown in orange. The areas recommended by CALFIRE and the City as Fire Hazard Severity Zones in 2025 are shown in the other colors and are smaller than the 2019 adopted boundary. This contraction is based on a City analysis of fire history, transportation network design, strategic positioning of boundaries along major thoroughfares that could be used during a firefight, and fire pathway modeling.

¹⁰ Fire Hazard Severity Zone 2019 to 2025 Comparison
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Analysis of additional cost to build to Chapter 7A:

Building a new home to meet Chapter 7A standards in Berkeley does not appear to dramatically increase construction costs compared to a standard home¹¹. The data Staff found indicates that a code-compliant wildfire-resistant home can be built for about the same cost as a typical home. This is because some upgrades (like fiber-cement siding) may reduce costs, offsetting the added expense of other features. Overall, the cost premium for Chapter 7A compliance in new construction ranges between 0–5%, and can even be cost-neutral in some cases. The table below itemizes the estimated cost impact for each required feature, assuming a baseline new home built with conventional materials (as might be used outside fire zones):

¹¹ Hedgewater Economics, (November 2018), Building a Wildfire-Resistant Home: Codes and Costs, <https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes/#:~:text=Wildfire,neighboring%20home%20spacing%2C%20not%20all>

Table 1. Added Cost for Chapter 7A Features – New 2,500 sq. ft. Home

Feature	Baseline (Non-7A) Standard	Chapter 7A Requirement	Estimated Added Cost (New Construction)
Class A Roof Assembly	Class C/B roof (e.g. wood shakes) or basic asphalt shingles	Class A fire-rated roof (e.g. composition shingles) plus enclosed eaves, fireproof soffits, metal drip edges, etc.	+\$5,860 (+27% vs. a typical roof). Covers upgraded vents, soffits & gutter guards.
Tempered Glass Windows	Dual-pane windows (tempered only where building code requires, e.g. near doors)	Dual-pane windows with <i>at least one</i> tempered glass pane each (often both panes)	+\$1,000–\$2,000 (approx. \$7 extra per sq ft of glass) for a whole-house window package (e.g. ~15 windows).
Ember-Resistant Vents	Standard attic/foundation vents (1/4-inch mesh)	Wildfire-rated ember- and flame-resistant vents ($\leq 1/8$ -inch mesh or intumescent)	+\$500 (assuming ~10–20 vents at ~\$50 each vs. ~\$10 each standard)
Covered Gutters	Standard aluminum gutters (open, no covers)	Metal gutters with non-combustible mesh covers (“gutter guards”) to prevent debris buildup	+\$800 (for ~120 lf of gutter; gutter guard ~\$4–\$12 per lf in Berkeley. Minimal if gutters are already metal.
Non-Combustible Siding	Wood or vinyl siding (combustible)	Fiber-cement siding or stucco (non-combustible Class A)	~\$0 (cost-neutral on average). Using fiber-cement lap siding can save up to ~\$12,190 compared to cedar wood siding, offsetting other costs.
Underfloor Protection	Open crawl space or exposed eaves/floor appendages	5/8" Type X gypsum sheathing or other protection under exposed floors/eaves	+\$2,500 (if needed). Approx. \$1.24 per sq ft of area to cover (Homes on slab or with enclosed crawlspace incur \$0 extra cost.)
Fire-Resistant Decking	Wood deck (e.g. redwood or cedar)	Deck boards of non-combustible or ignition-resistant material (composite, trex, etc.) and metal flashing at wall interface	+\$1,850 (~19% premium) for a typical deck (e.g. 300–400 sq ft). Composite decking costs ~\$2–\$5 more per sq ft than wood.

Total Premium: *Approximately \$0–\$40,000 added*, depending on baseline choices. In many cases the net premium is under 2% of construction cost and can be near zero. For example, a 2,500 sq. ft. wildfire-resistant home studied by Headwaters Economics actually cost 2% less than the same home with typical materials, because the cheaper fiber-cement siding outweighed the added expense of vents, soffits, and other upgrades. Comparatively, a 2020 report for the National Association of home builders estimates an overall increase in cost of \$1800-\$38,00 in total cost for a two story

house.¹² Even if the baseline home used cost-effective materials, the added Chapter 7A features are on the order of only a few dollars per square foot of construction.

ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

Wildfires that transition to a structure-to-structure conflagration have acute and far-reaching consequences, not only for the environment and climate, but also for the stability and well-being of impacted communities. These fires release large amounts of pollutants into the air, including soot and carbon dioxide, which contribute to climate change and degrade air quality. Additionally, toxic byproducts from burning structures, vehicles, and other synthetic material can pose significant health risks to residents and responders.

A commitment to strong fire safety regulations ultimately benefits the entire community—protecting public health, safeguarding financial resources, and ensuring a resilient and sustainable future.

RATIONALE FOR RECOMMENDATION

Adoption of the CALFIRE Local Responsibility Area maps is required by California GC 51178.

ALTERNATIVE ACTIONS CONSIDERED

Recommending that the Very High Fire Hazard Severity Zone be adopted in the area recommended to be adopted as High Fire Hazard Severity Zone. This would more closely align with the current fire zone boundary, and would continue to require that those parcels be in compliance with defensible space regulations. However, the number of parcels in the larger area exceeds 9,000 and the Department would not be able to provide an adequate amount of support to that number of residents. The Department believes it will be more achievable to work towards adequate compliance with defensible space inclusive of Zone 0 and home hardening in smaller, more manageable slivers of the community. Once a sliver has adequate compliance we would move to the next sliver.

CONTACT PERSON

David Sprague, Fire Chief, 510-981-3473

Attachments:

1: Ordinance

- CALFIRE Fire Hazard Severity Zone Map within the Local Responsibility Area
- Additional Area Recommended as a Very High Fire Hazard Severity Zone by the City of Berkeley
- Additional Area Recommended as a High Fire Hazard Severity Zone by the City of Berkeley
- Panoramic Hill Mitigation Area with Fire Pathway Overlay
- Historical Fire Boundaries

¹² Home Innovation Research Labs (2020). *Cost Impact of Building a House In Compliance with IWUIC.*

- Year Built, North Hills. Shows which structures have been built to the new Chapter 7A building standards.
- Year Built, South Hills. Shows which structures have been built to the new Chapter 7A building standards.
- Very High and High FHSZ with Fire Pathway Overlay
- Fire Hazard Severity Zone 2019 to 2025 Comparison

2: Local Responsibility Area - Legislation Factsheet.pdf

ORDINANCE NO. -N.S.

ADOPTION OF CALFIRE MAP DESIGNATING CITY OF BERKELEY FIRE HAZARD SEVERITY ZONES

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

Section 1: Findings

Pursuant to California Government Code 51177-51179, California Department of Forestry and Fire Protection (CALFIRE) has released recommended updates to Fire Hazard Severity Zones in the Local Responsibility Area. This process last occurred in 2007 and is directed by state law. Fire Hazard Severity Zones consist of Very High, High, and Moderate designations. Of note, when the current maps were released in 2007 the High and Moderate designations did not apply to the Local Responsibility Area and only Very High designations were adopted by the City Council. Senate Bill 63 (Stern, 2021) amended Government Code 51178 to add the Moderate and High Fire Hazard Severity Zones in the Local Responsibility Area.

Panoramic Hill and the areas immediately surrounding it are recommended for inclusion in the Very High Fire Hazard Severity Zone due to narrow structure separation distance and high housing density, limited retrofitting of structures to bring them in compliance with Chapter 7A of the Building Standards Code, a single evacuation route that will cause extended evacuation time, proximity to dense vegetation and topographic features capable of supporting fast moving wind driven fire¹³, the benefits to evacuation and wildfire risk reduction associated with long term replacement of existing housing stock with structures that meet wildfire resistive construction standards, and the strategic opportunity that the relatively straight, wide, north-south street selected as the western boundary could provide in terms of stopping or slowing the advance of a fire moving from the hills, west into the City.

The areas recommended for inclusion in the High Fire Hazard Severity Zones are included due to fire history (with major fires occurring in and around this area in 1905, 1923, 1970, 1980, and 1991), the narrow structure separation distance between homes, the limited retrofitting of structures to bring them in compliance with Chapter 7A of the Building Standards Code^{14 15}, the benefits to evacuation and wildfire risk reduction associated with long term replacement of existing housing stock with wildfire resistive construction, limited east to west evacuation routes that will cause extended evacuation time, and the strategic opportunity that the relatively straight, wide, north-south streets selected as western boundaries could provide in terms of stopping or slowing the advance of a fire moving from the hills, west into the City.

¹³ Panoramic Hill Mitigation Area with Fire Pathway Overlay

¹⁴ Year Built, North Hills. Shows which structures have been built to the new Chapter 7A building standards.

¹⁵ Year Built, South Hills. Shows which structures have been built to the new Chapter 7A building standards.

Community members in areas designated as Very High Fire Hazard Severity Zones are required to maintain defensible space within 100 feet of structures, or the property line, whichever is closer and in the case of new construction or major remodels classified by the Building Official as new construction, to meet the wildfire resistant construction requirements included in Chapter 7A of the Building Standards Code.

Community members in areas designated as High Fire Hazard Severity Zones are required to meet the wildfire resistant construction requirements included in Chapter 7A of the Building Standards Code and in the case of new construction or major remodels classified by the Building Official as new construction.

Finally, community members selling property in the Very High and High Fire Hazard Severity Zones must conduct a natural hazard real estate disclosure at time of sale per CA CIV 1102.19 (AB 38, 2019).

Section 2: Adoption of CALFIRE recommended Fire Hazard Severity Zones:

The City hereby designates the Fire Hazard Severity Zones as recommended by the CALFIRE pursuant to Government Code Section 51178, and

Section 3: Designation of Additional Lands as Fire Hazard Severity Zones:

Notwithstanding the minimum fire safety standards required by state law, under the authority included in Government Code 51175 the City has the authority to establish more stringent wildfire safety standards. Further, as part of the Local Responsibility Area map adoption process, the City may designate areas not included in the recommended CALFIRE maps as Moderate, High, or Very High Fire Hazard Severity Zones. The City may not reduce the recommended designations, or boundaries, included on the CALFIRE maps.

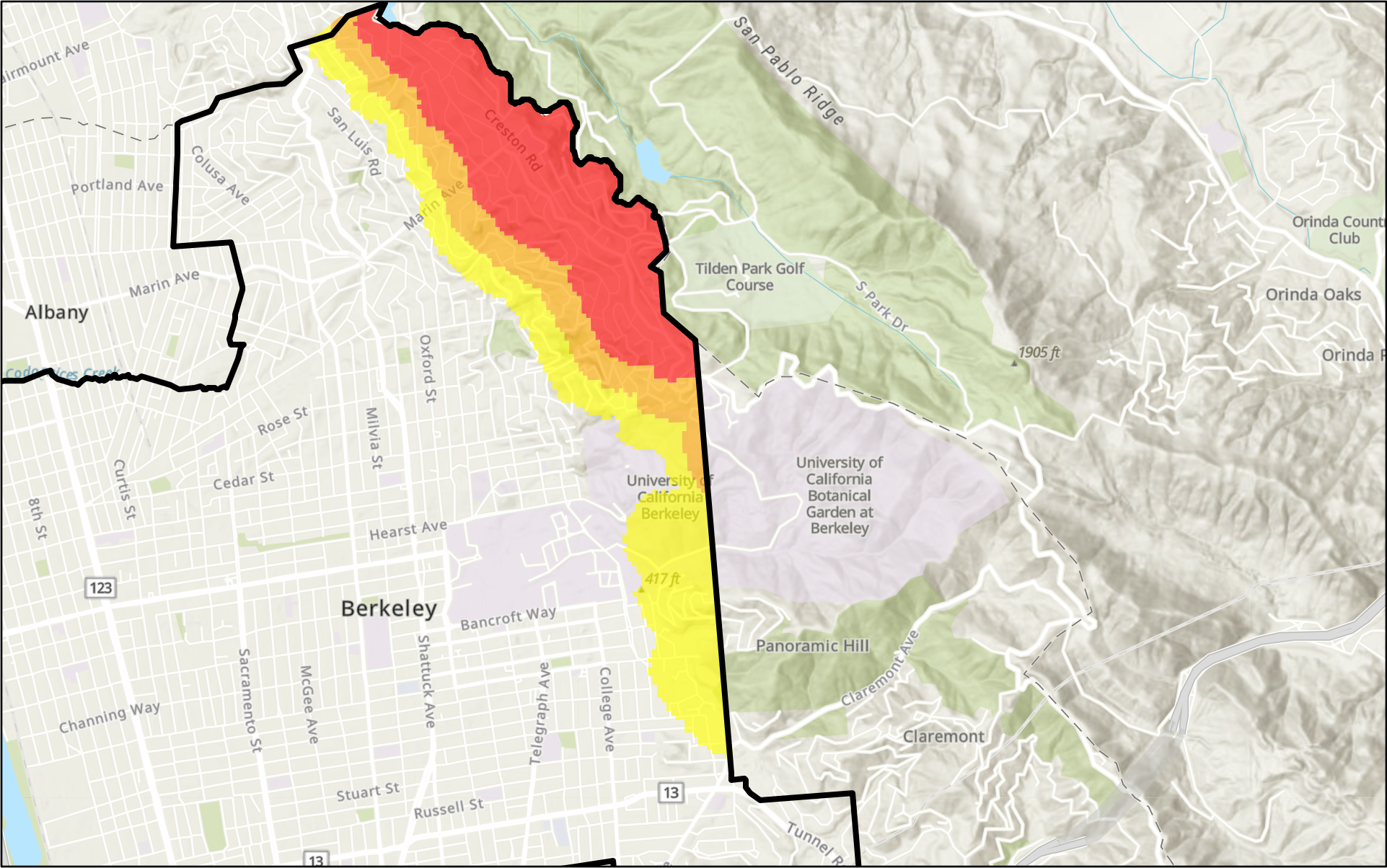
Staff have reviewed the recommended maps and suggest the following changes:

1. Designate as Very High Fire Hazard Severity Zones those areas of the City bounded by 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. 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
 - 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

2. Designate as High Fire Hazard Severity Zones those areas of the City west of the CALFIRE Very High Fire Hazard Severity Zone and 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. Sutter Street from the Southern portal of the Northbrae Tunnel to Eunice Street
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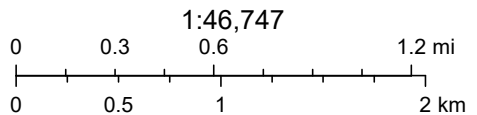
Section 4. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

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CALFIRE FHSZ Recommendations



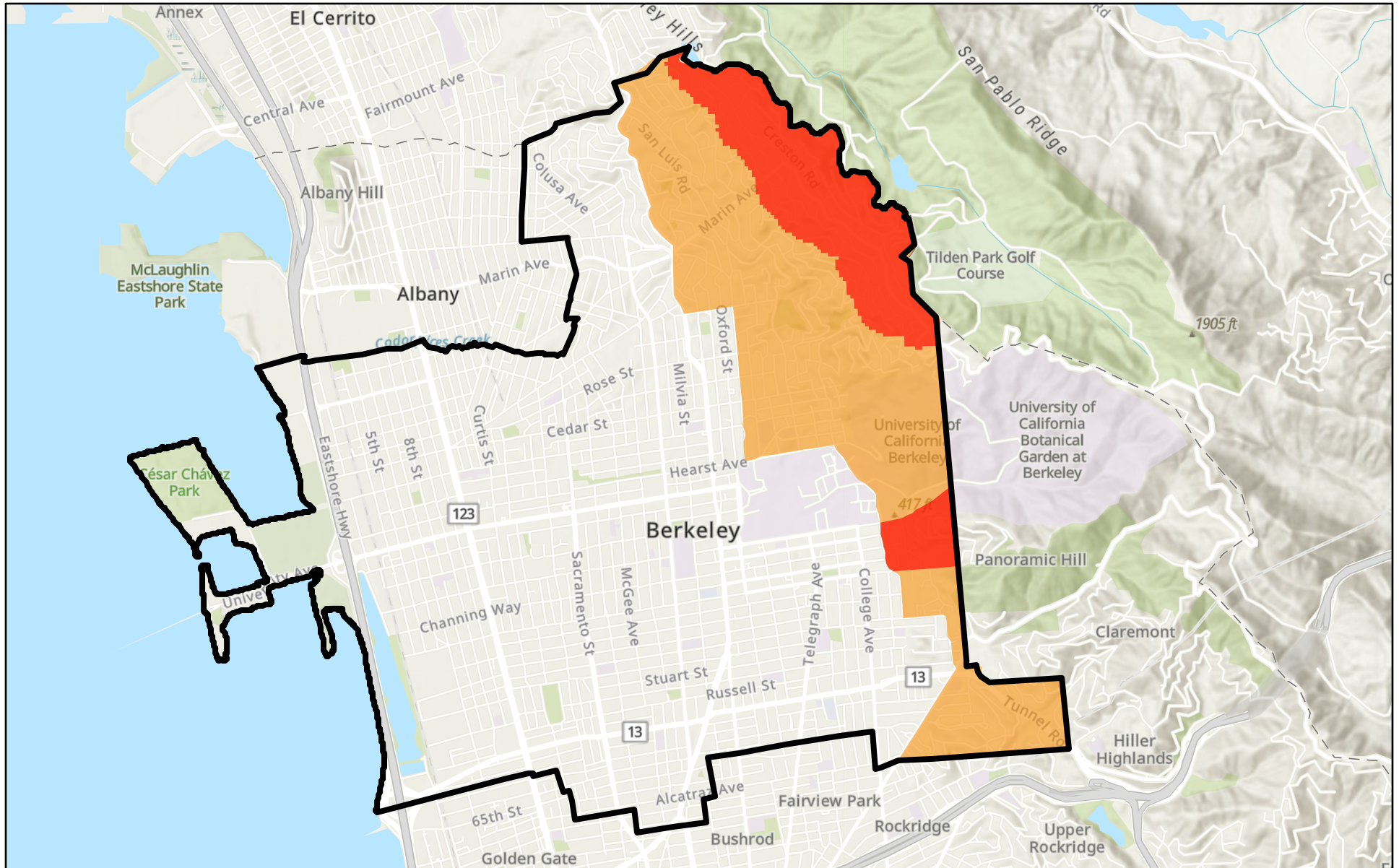
3/12/2025

City_of_Berkeley Very High Moderate
City Boundary High World_Hillshade



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User

Additional Areas Recommended as FHSZ by the COB



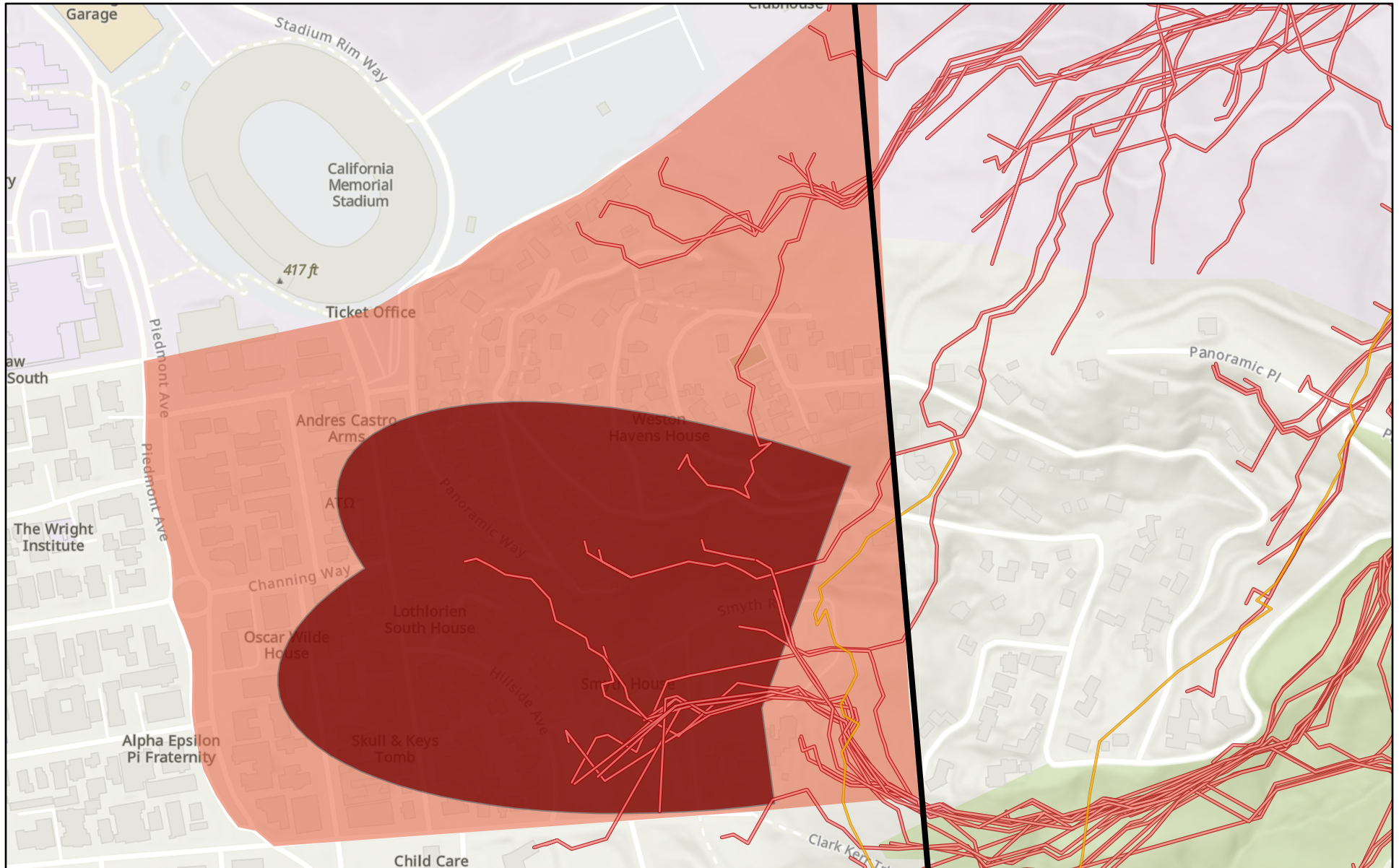
3/18/2025

City Boundary
 CALFIRE Very High
 COB Very High (2025)

COB High (2025)

1:58,718
 0 0.4 0.8 1.6 mi
 0 0.5 1 2 km
 Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User

Panoramic Hill Mitigation Area with Fire Pathway Overlay



3/12/2025

City_of_Berkeley

City Boundary

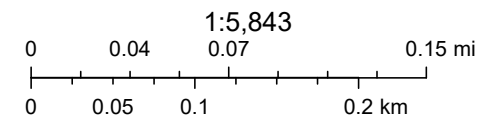
SW Fire Pathways

NE Fire Pathways

NE Entry

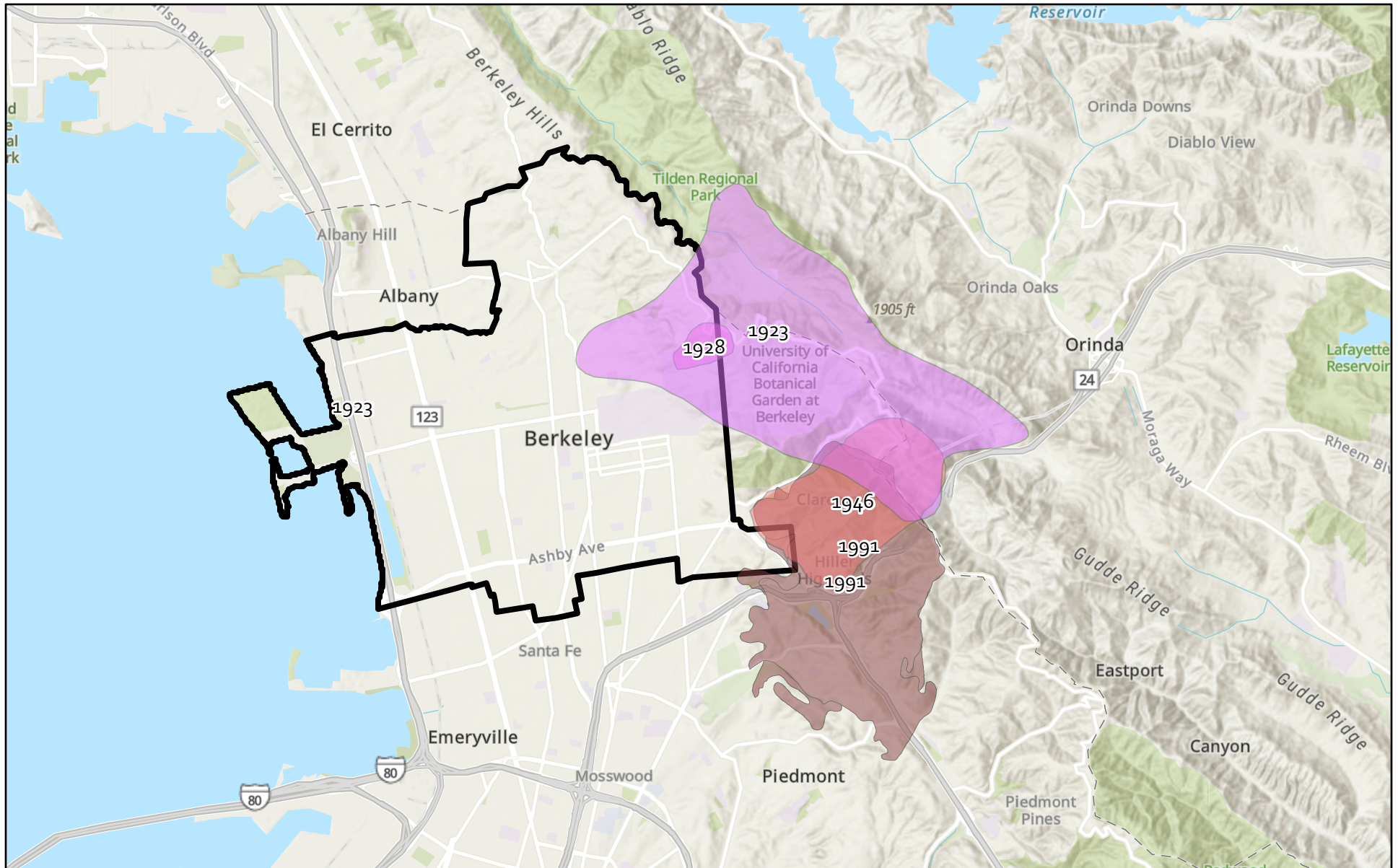
COB Very High FHSZ (2025)

World_Hillshade

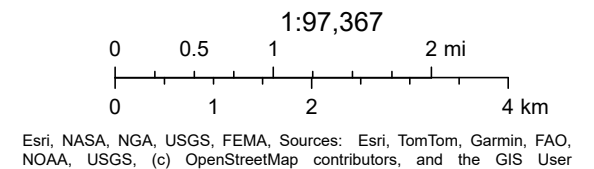
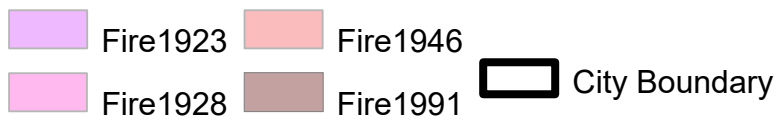


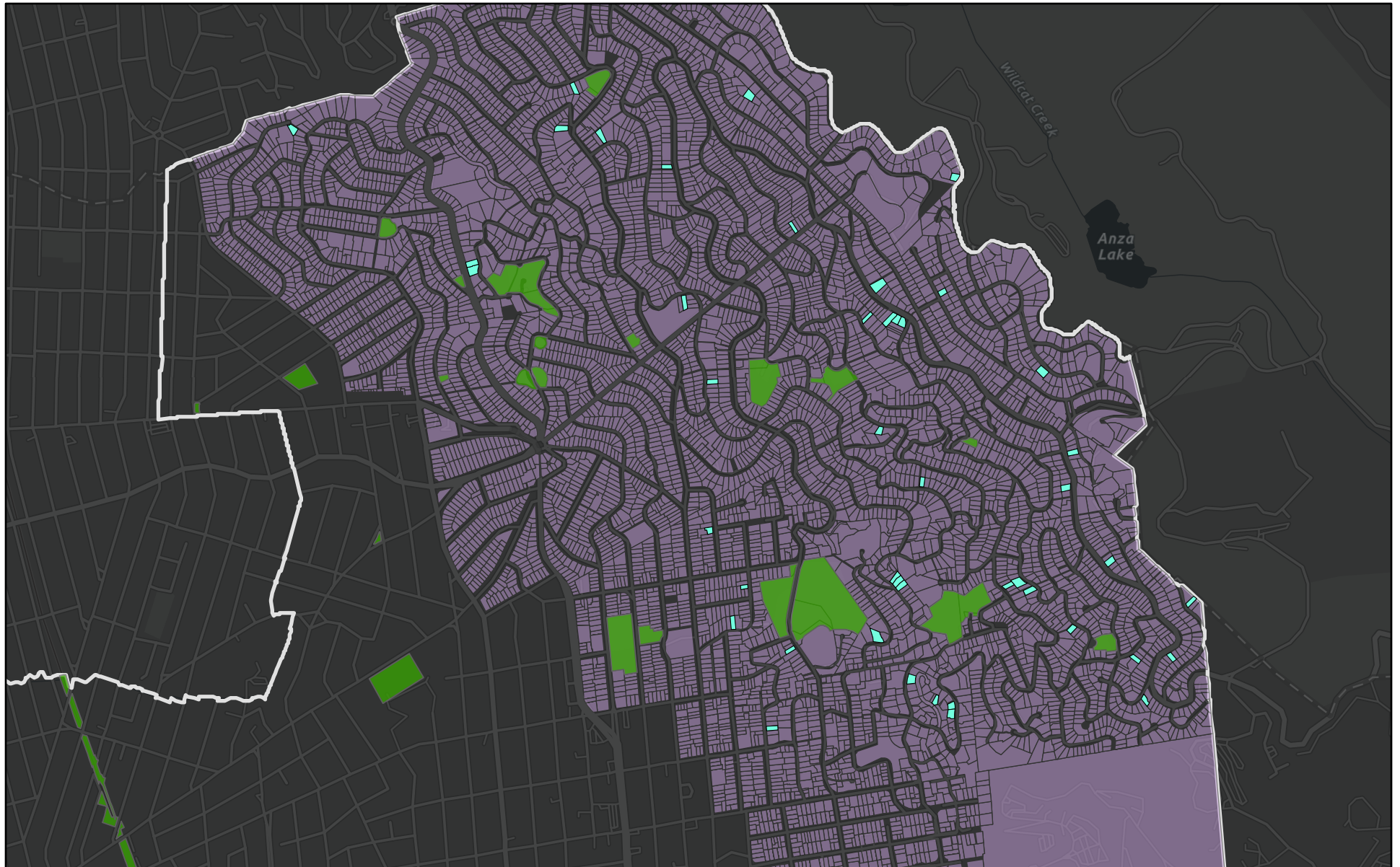
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Maxar, Airbus DS,

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Historical Fire Boundaries

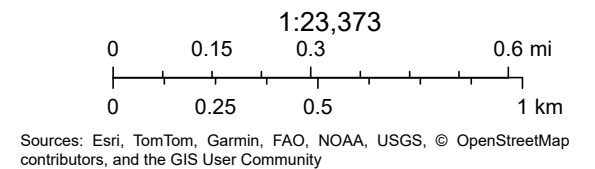
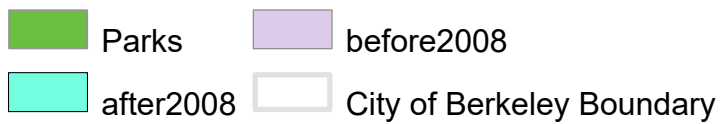


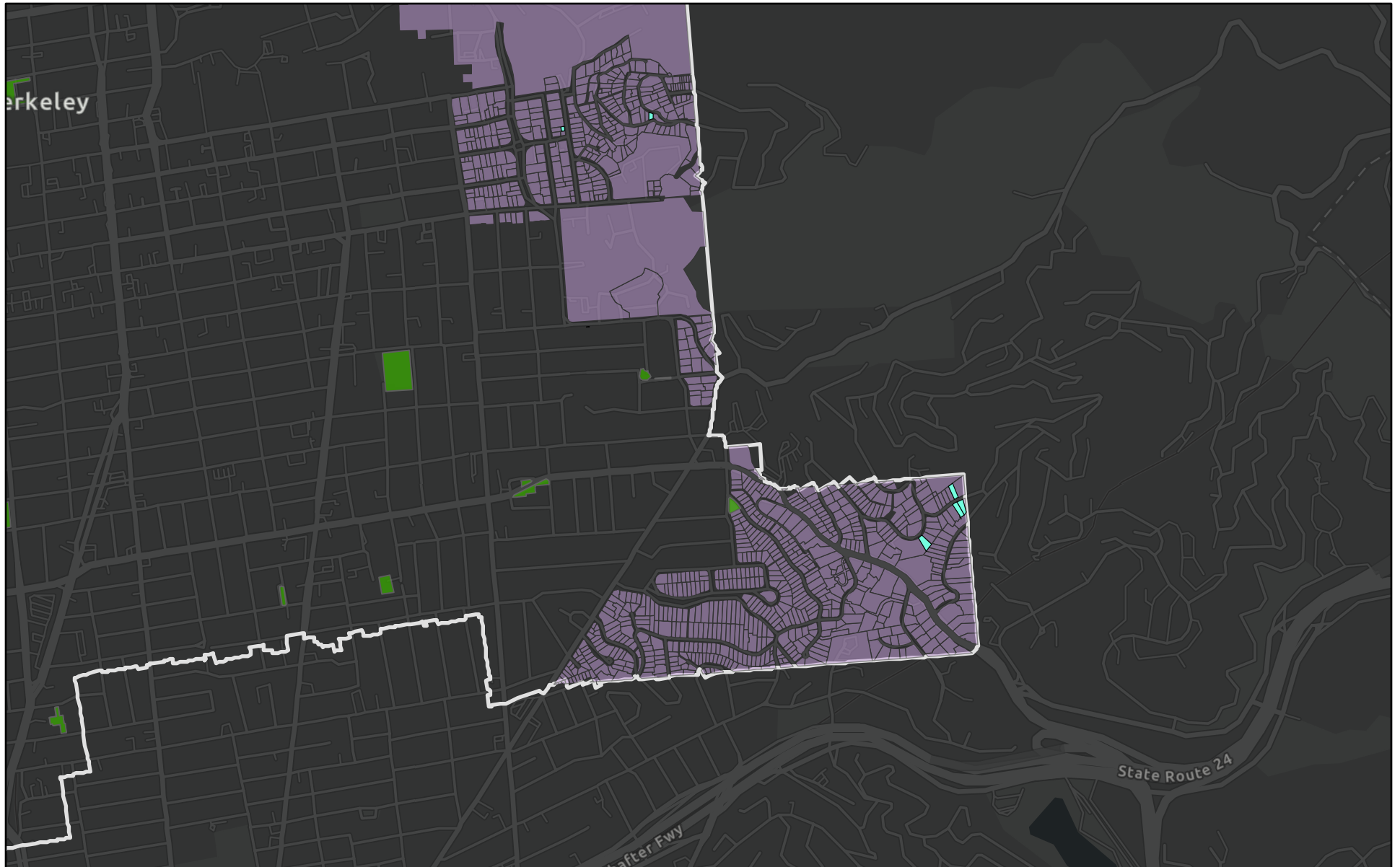
3/14/2025



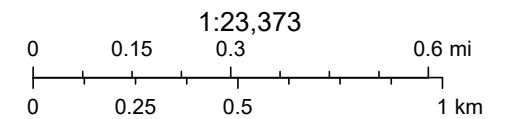
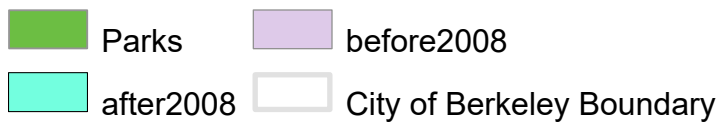


3/12/2025



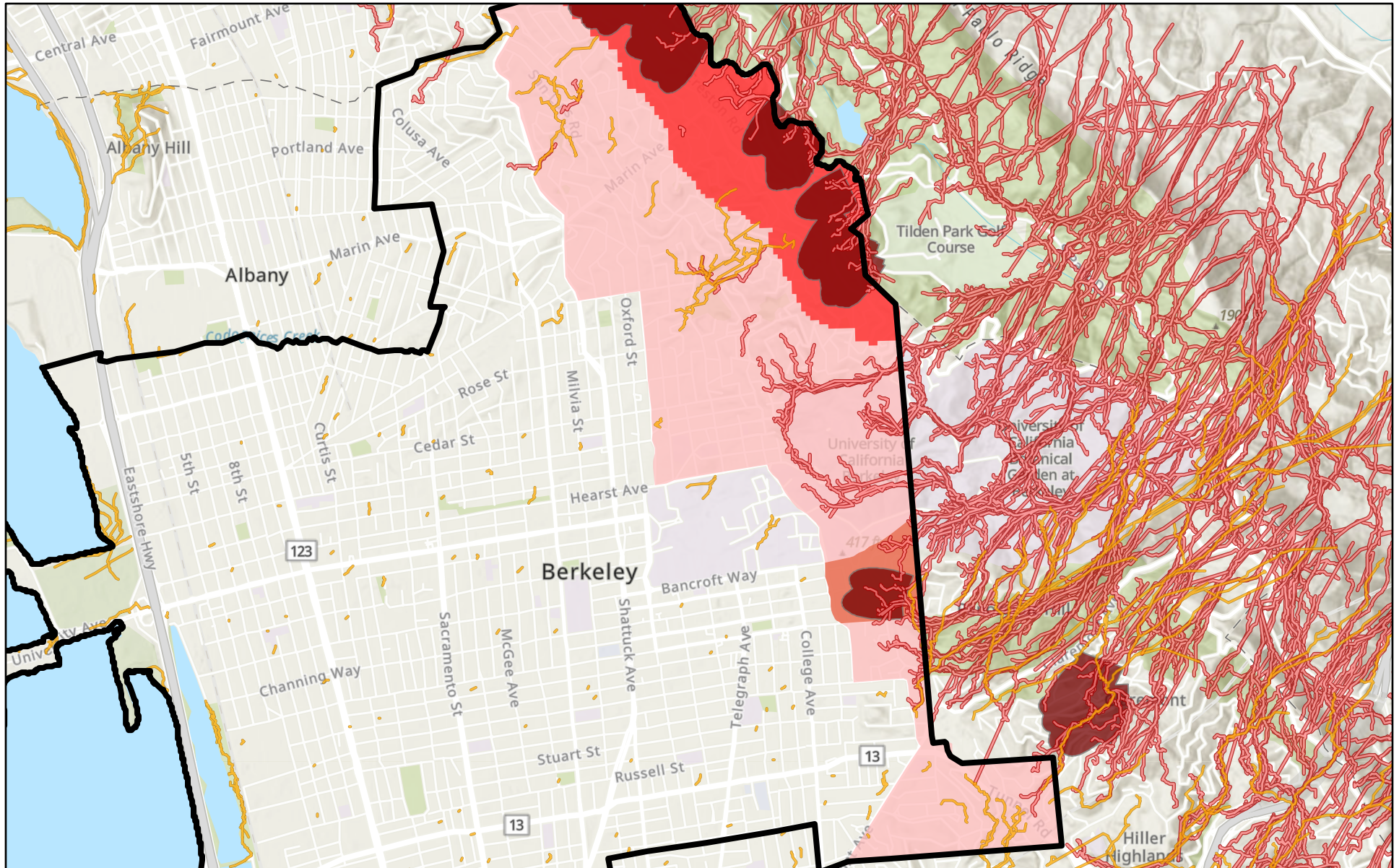


3/12/2025



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Very High & High FHSZs with Fire Pathway Overlay



3/12/2025

City_of_Berkeley

City Boundary

SW Fire Pathways

NE Fire Pathways

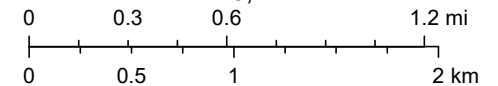
NE Entry

CALFIRE Very High (2025)

COB Very High FHSZ (2025)

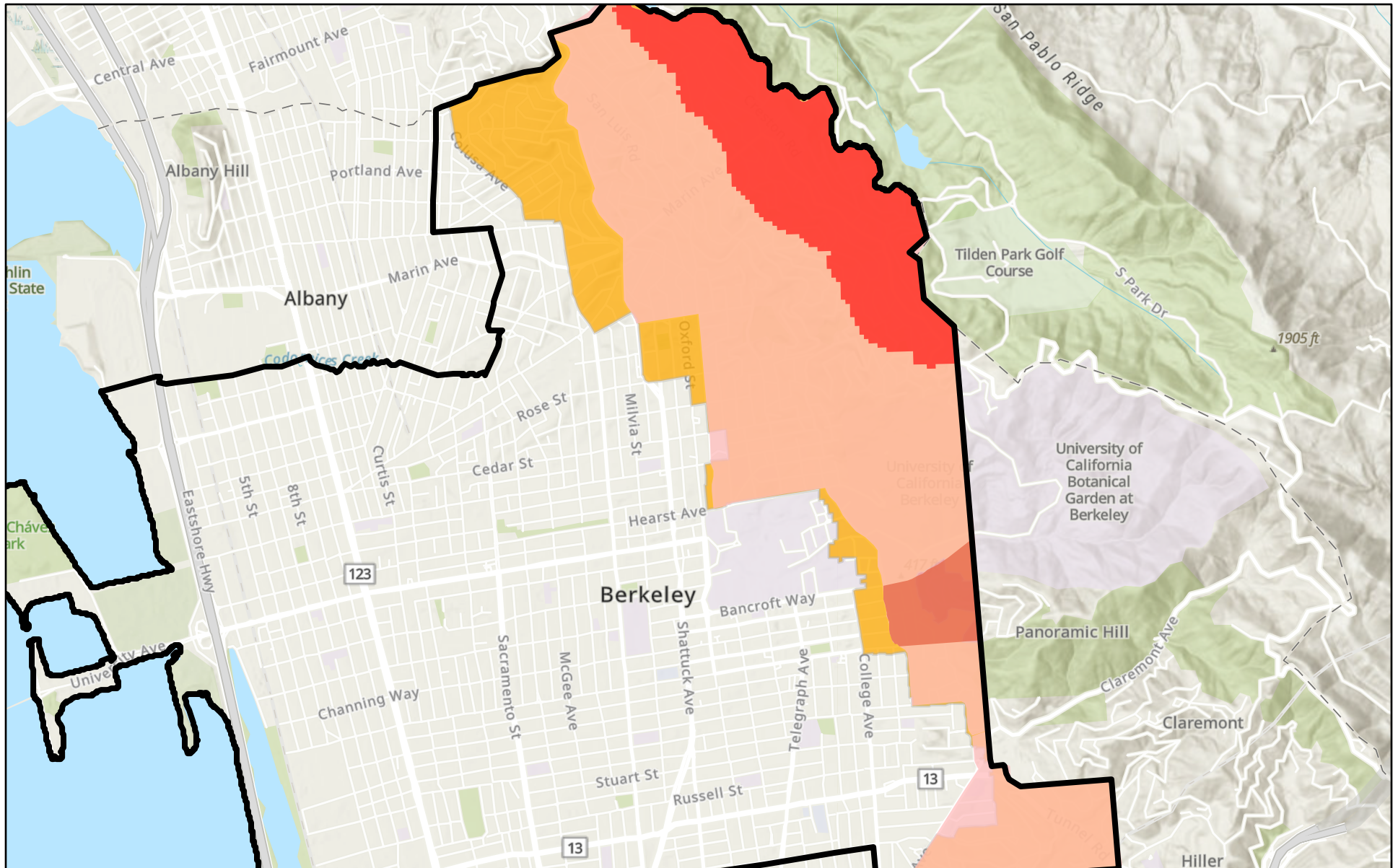
COB High FHSZ (2025)

1:46,747

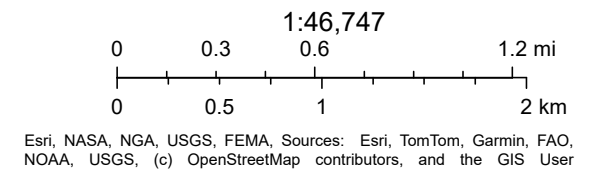


Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User

Page 24 of 44
FHSZ Comparison 2019 to 2025



-  City Boundary
-  CALFIRE Very High (2025)
-  Additional Area Recommended as a **Very High** Fire Hazard Severity Zone by the City of Berkeley(2025)
-  Very High FHSZ (2019)
-  Additional Area Recommended as a **High** Fire Hazard Severity Zone by the City of Berkeley (2025)





Fire Hazard Severity Zones Local Responsibility Area

Fire Hazard Severity Zones

What is a Fire Hazard Severity Zone?

The State Fire Marshal shall identify areas in the State as Moderate, High, and Very High Hazard Severity Zones based on consistent statewide criteria and the severity of fire hazard that is expected to prevail in those areas. – [CA GOV 51178](#)

When did Fire Hazard Severity Zones begin in Local Responsibility Area?

Assembly Bill 337 (Bates 1992), prompted by the devastating Oakland Hills fire of 1991, calls for CAL FIRE to evaluate fire hazard severity in local responsibility area and to make a recommendation to the local jurisdiction where Very High FHSZ exist. – [CA GOV 51175](#)

What do Fire Hazard Severity Zones measure?

The maps evaluate "Hazard", not "Risk". Hazard is based on physical conditions that create expected fire behavior over a 50-year period without considering short-term modifications. Risk is the potential damage a fire can do to the area under existing conditions, including fuel reduction projects, defensible space, and ignition resistant building construction. – osfm.fire.ca.gov/fhsz

Will the new Fire Hazard Severity Zone maps affect my insurance?

Insurance companies use risk models, which differ from hazard models, because they consider the susceptibility of a structure to damage from fire and other short-term factors that are not included in hazard modeling. Insurance risk models incorporate additional factors that change more frequently than those that CAL FIRE includes in its hazard mapping, which is built to remain steady.

– [California Department of Insurance](#)

What are the requirements within Fire Hazard Severity Zones?

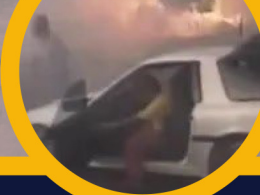
- Materials and Construction Methods for Exterior Wildfire Exposure – [CBC Chapter 7A](#)
- Natural hazard real estate disclosure at the time of sale – [CA CIV 1102.19 \(AB 38 2019\)](#)
- 100-foot defensible space clearance requirements – [CA GOV 51182](#)
- Property development standards such as road widths, water supply, and signage – [CA PRC 4290](#)
- Consideration during future development of Cities and Counties General Plan – [CA GOV 65302](#)

1980



Panorama Fire burns 28,800 acres, destroying 325 structures and resulting in 4 fatalities in San Bernardino.

1991



Tunnel Fire burns 1,600 acres, destroying 2,900 structures and resulting in 25 fatalities in the Oakland Hills.

PRC 4201 mandates that CAL FIRE develop Fire Hazard Severity Zones.

1982

Fire Hazard Severity Zone maps are created.

1985

The "Bates Bill" calls for CAL FIRE to identify Very High Fire Hazard Severity Zones in LRA.

1992

Frequently Asked Questions



Is there an easy way to determine the Fire Hazard Severity Zone of my property?

You can search by address to find your current designation on the website: osfm.fire.ca.gov/fhsz

Why are Fire Hazard Severity Zones being updated?

The hazard maps are being updated to more accurately reflect the zones in California that are susceptible to wildfire. The process will incorporate new science in local climate data and improved fire assessment modeling in determining hazard ratings. – [PRC 4125](#) and [GC 51178](#)

What are the key elements of the Fire Hazard Severity Zone Model?

The model has two key elements: probability of an area burning and expected fire behavior under extreme fuel and weather conditions. The factors considered in determining fire hazard within wildland areas is fire history, flame length, terrain, local weather, and potential fuel over a 50-year period. Outside of wildlands, the model considers factors that might lead to buildings being threatened, including terrain, weather, urban vegetation cover, blowing embers, proximity to wildland, fire history, and fire hazard in nearby wildlands. This is not a structure loss model, as key information regarding structure ignition is not included. – osfm.fire.ca.gov/fhsz

Why does the model place an emphasis on the spread of embers?

Embers spread wildfire because they can travel long distances in the wind and ignite vegetation, roofs, attics (by getting into vents), and decks. – osfm.fire.ca.gov/fhsz

What is the difference between SRA and LRA?

State Responsibility Area (SRA) is a legal term defining the area where the State has financial responsibility for wildland fire protection and prevention. – [CA PRC 4102](#)

Local Responsibility Area (LRA) includes incorporated cities, urban regions, agriculture lands, and portions of the desert where the local government is responsible for wildfire protection. – [CA PRC 4125](#)

How are Fire Hazard Severity Zones determined in Local Responsibility Areas?

CAL FIRE uses an extension of the state responsibility area Fire Hazard Severity Zone model as the basis for evaluating fire hazard in Local Responsibility Area. The Local Responsibility Area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

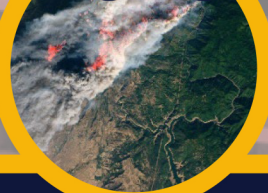
– [PRC 4202](#) and [GC 51178](#)

2017



Tubbs Fire burns 36,810 acres, destroying 5,643 structures and resulting in 22 fatalities in Santa Rosa.

2018



Camp Fire burns 153,336 acres, destroying 18,804 structures and resulting in 85 fatalities in Paradise.

CAL FIRE finalizes the Statewide FHSZ Model to include Very High FHSZ in LRA.

2007

AB 642 and SB 63 require CAL FIRE to identify Moderate and High FHSZ in LRA.

2021

AB 211 requires local agency to designate by ordinance Moderate and High FHSZ in LRA.

2022



General

What is a Fire Hazard Severity Zone or FHSZ?

[Public Resource Code 4202](#); The State Fire Marshal shall classify lands within State Responsibility Areas into Fire Hazard Severity Zones. Each zone shall embrace relatively homogeneous lands and shall be based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread.

[Government Code 51178](#); The State Fire Marshal shall identify areas in the state as Moderate, High, and Very High Fire Hazard Severity Zones based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. Moderate, High, and Very High Fire Hazard Severity Zones shall be based on fuel loading, slope, fire weather, and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread.

Will the new Fire Hazard Severity Zones affect my ability to get or maintain insurance?

Insurance companies use risk models, which differ from hazard models, because they consider the susceptibility of a structure to damage from fire and other short-term factors that are not included in hazard modeling. It is unlikely that insurance risk models would utilize CAL FIRE Fire Hazard Severity Zones as a factor, but much of the same data that is used in the Fire Hazard Severity Zone model are likely included in the insurance companies' risk models. However, insurance risk models incorporate many additional factors and that change more frequently than those that CAL FIRE includes in its hazard mapping, which is built to remain steady for the next 10+ years.

What do Fire Hazard Severity Zones measure?

The Fire Hazard Severity Zone map reflects "hazard," not "risk". The map is like flood zone maps, where lands are described in terms of the probability level of a particular area being inundated by floodwaters, and not specifically prescriptive of impacts.

"Hazard" is based on the physical conditions that create a likelihood and expected fire behavior over a 30 to 50-year period without considering mitigation measures such as home hardening, recent wildfire, or fuel reduction efforts.

"Risk" is the potential damage a fire can do to the area under existing conditions, accounting for any modifications such as fuel reduction projects, defensible space, and ignition resistant building construction.



General

What are the key elements of the Fire Hazard Severity Zone model?

The fire hazard severity model for wildland fire has two key elements: probability of an area burning and expected fire behavior under extreme fuel and weather conditions. The zones reflect areas that have similar burn probabilities and fire behavior characteristics. The factors considered in determining fire hazard within wildland areas are fire history, flame length, terrain, local weather, and potential fuel over a 50-year period. Outside of wildlands, the model considers factors that might lead to buildings being threatened, including terrain, weather, urban vegetation cover, blowing embers, proximity to wildland, fire history, and fire hazard in nearby wildlands. FHSZs are not a structure loss model, as key information regarding structure ignition (such as roof type, etc.) is not included.

Where do Fire Hazard Severity Zones apply?

Fire Hazard Severity Zones are found in areas where the state has financial responsibility for wildfire protection and prevention, called the State Responsibility Area. More than 31 million acres are in this area. Under [Senate Bill 63 \(Stern, 2021\)](#), [Government Code 51178](#) was amended to also identify the Moderate and High Fire Hazard Severity Zones with the Very High in Local Responsibility Area (LRA).

What are the uses of Fire Hazard Severity Zones?

The zones are used for several purposes including to designate areas where California's defensible space standards and wildland urban interface building codes are required. They can be a factor in real estate disclosure, and local governments may consider them in their general plan.

When were the maps last updated?

In 2007, CAL FIRE updated the FHSZs for the entire State Responsibility Area (SRA). Between 2008-2011 the department worked with local governments to make recommendations of the Very High Fire Hazard Severity Zones within Local Responsibility Area (LRA).

Why are fire hazard severity maps being updated?

The hazard maps are being updated to more accurately reflect the zones in California that are susceptible to wildfire. The hazard mapping process will incorporate new science in local climate data and improved fire assessment modeling in determining hazard ratings.



General

How do the Fire Hazard Severity Zone Maps differ from California Public Utilities Commission (CPUC) High Fire Threat District Maps?

The California Public Utilities Commission (CPUC) sponsored map, known as "CPUC High Fire Threat District Map" (HFTD), includes similar factors as those in the FHSZ maps, however the CPUC HFTD Map is designed specifically for identifying areas where there is an increased risk for utility associated wildfires. As such, the CPUC map includes fire hazards associated with historical powerline-caused wildfires, current fuel conditions, and scores areas based on where fires start, as opposed to where potential fires may cause impacts.

How are Fire Hazard Severity Zones determined?

CAL FIRE used the best available science and data to develop, and field test a model that served as the basis of zone assignments. The model evaluated the probability of the area burning and potential fire behavior in the area. Many factors were included such as fire history, vegetation, flame length, blowing embers, proximity to wildland, terrain, and weather.

What new data will be included in the new model, and how does this differ from the previous model?

A 2 km grid of climate data covering the years 2003-2018 is being used in the update. The previous model used stock weather inputs across the state to calculate wildland fire intensity scores. The updated model will adjust fire intensity scores based on the most extreme fire weather at a given location, considering temperature, humidity, and wind speed. In addition, ember transport is being modeled based on local distributions of observed wind speed and direction values instead of using a generic buffer distance for urban areas adjacent to wildlands.

Why is my property in a different zone than the adjacent area, which looks similar?

In wildland areas, zone edges are a result of the way zones are delineated. Specifically, zones represent areas of similar slope and fuel potential. Zone boundaries divide zones based on geographic and vegetation features that align with fire hazard potential; although, at a local scale, it may appear that the immediate area is similar on both sides of the edge. The class value within a zone is based on the average hazard score across the whole zone, so areas that are in the same zone but not immediately adjacent to a local area can have an influence on the final zone classification. Classification outside of wildland areas is based on the fire hazard of the adjacent wildland and the probability of flames and embers threatening buildings.



General

Why does the model place an emphasis on the spread of embers?

Embers spread wildfire because they can travel long distances in the wind and ignite vegetation, roofs, attics (by getting into vents), and decks.

Why do waterbodies have a Fire Hazard Severity Zone Classification?

All areas in State Responsibility Area, including water bodies, require a Fire Hazard Severity Zone designation. The 2007 FHSZ maps zoned all water as Moderate by default. In the 2023 FHSZ model we added a buffer of FHSZ from the surrounding wildland into water bodies to account for potential threat of embers to buildings on docks and house boats, as well as variation in reservoir height that occurs with drought.

How does CAL FIRE assist Local Governments in Fire Hazard Severity Zones?

CAL FIRE's Land Use Planning Program is a specialized unit that provides support to local governments by providing fire safety expertise on the State's wildland urban interface building codes, wildfire safety codes, as well as helping in the development of the safety elements in general plans.

How can I search the Fire Hazard Severity Zone of a property?

You can search by address to find your current designation on the web at: osfm.fire.ca.gov/FHSZ



State Responsibility Area

What is State Responsibility Area or SRA?

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

How is State Responsibility Area determined?

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

What Fire Hazard Severity Zones are in State Responsibility Area?

All of the State Responsibility Area is in a Fire Hazard Severity Zone. Lands are either ranked as Moderate, High or Very High Fire Hazard Severity Zones.

What are the wildland urban interface (WUI) building codes in State Responsibility Area?

The WUI building codes ([California Building Code \(CBC\) Chapter 7A](#)) reduce the risk of embers fanned by wind-blown wildfires from igniting buildings. The codes for roofing, siding, decking, windows, and vents apply throughout all State Responsibility Area regardless of the fire hazard severity ranking. Ember-resistant building materials can be found at: <https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/>



State Responsibility Area

What is the difference between the various Fire Hazard Severity Zones?

Classification of a wildland zone as Moderate, High or Very High Fire Hazard is based on the average hazard across the area included in the zone, which have a minimum size of 200 acres. In wildlands, hazard is a function of modeled flame length under the worst conditions and annual burn probability. Both these factors generally increase with increasing hazard level, but there may be instances where one value is Very High and the other is low, pushing the overall hazard into a more intermediate ranking. On average, both modeled flame length and burn probability increase by roughly 40-60% between hazard classes.

Is the GIS data for Fire Hazard Severity Zones available for download?

The data inputs used to develop the Fire Hazard Severity Zones are identified in the Initial Statement of Reasons (ISOR) Title 19 Development (ca.gov). CAL FIRE has developed an additional data package which consists of sequential modeling steps, including any data inputs that were not already publicly available and referenced in the ISOR. The data package encompasses 34 spatial datasets and 8 tables, provided in raster, polygon, and table format. These datasets are formatted for Esri ArcGIS software, except for four tables provided in Excel. Ten of the datasets are updated versions used to produce an edited SRA FHSZ map following the public comment period that ended April 4, 2023. Upon formal adoption of the FHSZ map, the final SRA FHSZ geospatial data file will become available. The data package is available on the FHSZ website Fire Hazard Severity Zones (ca.gov) under the science and methods banner.



Local Responsibility Area

What is Local Responsibility Area or LRA?

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

When did Fire Hazard Severity Zones begin in Local Responsibility Area?

Assembly Bill 337 (Bates, 1992) prompted by the devastating Oakland Hills Fire of 1991, calls for CAL FIRE to evaluate fire hazard severity in Local Responsibility Area and to make a recommendation to the local jurisdiction where Very High FHSZ exist. [Government Code 51175](#) then provides direction for the local jurisdiction to take appropriate action.

How are Fire Hazard Severity Zones determined in Local Responsibility Areas?

CAL FIRE uses an extension of the State Responsibility Area Fire Hazard Severity Zone model as the basis for evaluating fire hazard in Local Responsibility Area. The Local Responsibility Area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

What are the requirements for landowners in Fire Hazard Severity Zones in Local Responsibility Areas?

California's WUI building codes ([CBC Chapter 7A](#)) apply to the design and construction of new buildings located in High and Very High FHSZs in Local Responsibility Areas. Local ordinances may require ignition resistant construction for remodel projects. Check with your local building department to determine which ignition resistant building codes apply to your project. In addition, Government Code Section 51182 calls for defensible space clearance and other wildland fire safety practices for buildings. Owners are also required to make a natural hazard disclosure as part of a real estate transfer. For information regarding home hardening and defensible space clearance, visit www.readyforwildfire.org.

Does the designation of Very High Fire Hazard Severity Zones in the Local Responsibility Area trigger the 100-foot clearance requirement?

Yes, per [Government Code 51182](#) unless a local government has passed a more stringent requirement, the 100-foot defensible space clearance applies. For information regarding home hardening and defensible space clearance, visit www.readyforwildfire.org.



Local Responsibility Area

What is the process for developing Fire Hazard Severity Zones in the Local Responsibility Area?

CAL FIRE uses the same modeling data that is used to map the State Responsibility Area. The map, along with a model ordinance, are then sent to the governing body for adoption.

How are the new Fire Hazard Severity Zones impacting development?

Many of the changes expanding Fire Hazard Severity Zones in Local Responsibility Areas have been supported by the building industry. CAL FIRE works closely with the building industry when setting various building codes and defensible space requirements, so we are working together to not affect development itself but to make sure development matches the hazards of that area.

When will the Local Responsibility Area Map be released?

The Local Responsibility Area map process will happen after the State Responsibility Area process has been completed, which is estimated to occur in winter of 2025.

Why haven't Moderate and High Fire Hazard Severity Zone classes been classified before in the Local Responsibility Area?

New legislation, [Senate Bill 63 \(Stern, 2021\)](#), now requires the adoption of all three Fire Hazard Severity Zone classes in the Local Responsibility Area. Previously only Very High Fire Hazard Severity Zones were required for adoption in Local Responsibility Areas.

Why is my property in a different zone than the adjacent area, which looks similar?

In non-wildland areas, zone edges occur based on distance to the wildland edge. Because hazard in these areas is largely determined by incoming embers from adjacent wildland, urban areas that are similar in vegetation type and housing density may have a change in FHSZ class as the distance to the wildland edge increases. Areas immediately adjacent to wildland receive the same FHSZ score as that wildland where fire originates, and the model then produces lower scores as the distance to wildland edge increases.

LRA Legislation Factsheet



Assembly Bill No.337

An act to add Chapter 6.8 (commencing with Section 51175) to Part 1 of Division 1 of Title 5 of the Government Code, and to amend Section 13108.5 of the Health and Safety Code, relating to fire protection.

[Enrolled, January 28, 1991]

AB 337, Bates. Very high fire hazard severity zones.

- (1) Under existing law, the State Board of Forestry is required to classify all lands within the state, in accordance with prescribed criteria, for the purpose of determining areas in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the state.

This bill would declare that the prevention of fires is not a municipal affair but is instead, a matter of statewide concern, and would make a finding and declaration of the Legislature that its provisions apply to all local agencies, including, but not limited to, charter cities, charter counties, and charter cities and counties. The bill would prohibit that finding from limiting the authority of a local agency, as defined, from imposing more restrictive fire and panic safety requirements, as otherwise authorized by law.

The bill would state that it is not the intent of the Legislature to limit or restrict the authority of a local agency to impose more restrictive fire and panic safety requirements, as otherwise authorized by law.

This bill would require the Director of Forestry and Fire Protection to identify areas in the state as very high fire hazard severity zones within all counties pursuant to a prescribed schedule. The bill would require local agencies, as defined, to designate, by ordinance, very high fire hazard severity zones in their jurisdiction after receiving recommendations from the director, except as prescribed. The bill would authorize local agencies to include or exclude areas following certain findings and would require changes made by local agencies to be final and not rebuttable by the director. By requiring local agencies to designate very high fire hazard severity zones within their jurisdictions, this bill would impose a state-mandated local program. The bill would require the State Fire Marshal to prepare and adopt a model ordinance that provides for the establishment of any high fire hazard security zones.

LRA Legislation Factsheet



Assembly Bill No.337 (Continued)

- (2) Under existing law, any person who owns, leases, controls, operates, or maintains any building or structure in, upon, or adjoining any mountainous area or forest-covered lands, brush-covered lands, or grass-covered lands, or any land that is covered with flammable material, is required to undertake specified fire protection measures, including the maintenance of specified firebreaks.

The bill would enact requirements of this nature for any person who owns, leases, controls, operates, or maintains, any occupied dwelling or occupied structure in, upon, or adjoining any mountainous area, forest-covered land, brush-covered land, grass-covered land, or land covered with flammable material, which area or land is within a very high fire hazard severity zone, as described in (1).

The bill would authorize local agencies to exempt certain structures and would exempt certain land or water areas.

The bill would make violation of these requirements an infraction or misdemeanor, as specified, thereby imposing a state-mandated local program by creating a new crime, and would specify related matters.

This bill would require local agencies to notify owners of property of violation and would authorize local agencies to correct the conditions and make a lien upon the property, as prescribed. By creating these requirements, this bill would impose a state-mandated local program.

The bill would permit a violation of these requirements to be considered a public nuisance, as specified.

- (3) Existing law requires the State Fire Marshal to adopt, amend, and repeal regulations for roof coverings and openings into the attic areas of buildings in those fire hazard severity zones in state responsibility lands as designated by the director. Existing law requires the director to classify lands within state responsibility areas into fire hazard severity zones.

This bill would instead require the State Fire Marshal to propose, and would require the State Building Standards Commission to adopt, amend, and repeal those regulations. The bill would also require the State Fire Marshal to propose, and would require the State Building Standards Commission to adopt, amend, and repeal, those regulations for buildings in very high fire hazard severity zones in state responsibility lands, designated by the director, and in very high fire hazard severity zones as described in (1). The bill would require roofs on all new buildings and certain existing buildings in both of those zones to be at least a class B roof that complies with Standard 32-7 of the Uniform Building Code, as adopted in the California Building Standards Code. The bill would impose requirements on installers and roofing materials and make other related changes. The bill would exempt historic buildings, as defined, from these provisions.

LRA Legislation Factsheet



Senate Bill No.63

CHAPTER 382

An act to amend Sections 51177, **51178, 51178.5**, 51182, and 51189 of the **Government Code**, to amend Section 13108.5 of the Health and Safety Code, and to amend Sections 4124.5 and 4291 of, and to add and repeal Sections 4123.8, 4291.5, and 4291.6 of, the Public Resources Code, relating to fire prevention.

[Approved by Governor September 28, 2021. Filed with Secretary of State September 28, 2021.]

SB 63, Stern. Fire prevention: vegetation management: public education: grants: defensible space: fire hazard severity zones.

- (1) Existing law requires the Director of Forestry and Fire Protection to identify areas of the state as very high fire hazard severity zones based on specified criteria. Existing law requires a local agency, within 30 days after receiving a transmittal from the director that identifies very high fire hazard severity zones, to make the information available for public review, as provided. This bill, among other things, would also require the director to identify areas of the state as moderate and high fire hazard severity zones. The bill would modify the factors the director is required to use to identify areas into fire hazard severity zones, as provided. The bill would require a local agency to make this information available for public review and comment, as provided. By expanding the responsibility of a local agency, the bill would impose a state-mandated local program.

This bill would also make conforming changes.

- (2) Existing law requires a person who owns, leases, controls, operates, or maintains an occupied dwelling or structure in, upon, or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land, or land that is covered with flammable material that is within a very high fire hazard severity zone, as designated by a local agency, or a building or structure in, upon, or adjoining those areas or lands within a state responsibility area, to maintain a defensible space of 100 feet from each side and from the front and rear of the structure, as specified. Existing law authorizes a greater distance than specified above on the specified land in a very high fire hazard severity zone. Existing law specifies that clearance beyond the property line may only be required if state law, local ordinance, rule, or regulation includes certain findings and specifies that clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

LRA Legislation Factsheet



Amended by Senate Bill No.63

Government Code 51178

The State Fire Marshal shall identify areas in the state as moderate, high, and very high fire hazard severity zones based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. Moderate, high, and very high fire hazard severity zones shall be based on fuel loading, slope, fire weather, and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread.

(Amended by Stats. 2021, Ch. 382, Sec. 2.5. (SB 63) Effective January 1, 2022.)

Government Code 51178.5

Within 30 days after receiving a transmittal from the State Fire Marshal that identifies fire hazard severity zones pursuant to Section 51178, a local agency shall make the information available for public review and comment. The information shall be presented in a format that is understandable and accessible to the general public, including, but not limited to, maps.

(Amended by Stats. 2021, Ch. 382, Sec. 3.5. (SB 63) Effective January 1, 2022.)

LRA Legislation Factsheet



Assembly Bill No. 211

CHAPTER 574

An act to amend Sections 11891, 11893, 12581, 12996, 12998, 12999.4, and 12999.5 of, and to add Sections 12999.6 and 13001 to, the Food and Agricultural Code, **to amend Section 51179 of the Government Code**, to amend Sections 44274.10, 44274.11, 44274.12, 44274.13, and 44274.14 of the Health and Safety Code, to amend Sections 3113, 4799.05, 14503.5.1, 14538, 14549.2, 14581, 42052, and 42060 of, to add Sections 14537.5, 14548, 14555, and 21166.3 to, to add Part 5 (commencing with Section 75250) to Division 44 of, and to repeal Section 75250.1 of, the Public Resources Code, to amend Section 43152.6 of, and to amend and repeal Section 43152.10 of, the Revenue and Taxation Code, to amend Section 13198 of the Water Code, to amend the Budget Act of 2021 (Chapters 21, 69, and 240 of the Statutes of 2021) by amending Item 8570-002-0001 of Section 2.00 of that act, and to amend the Budget Act of 2021 (Chapter 44 of the Statutes of 2022) by amending Items 3540-101-0001 of Section 2.00 of that act, relating to public resources, and making an appropriation therefor, to take effect immediately, bill related to the budget.

[Approved by Governor September 27, 2022. Filed with Secretary of State September 27, 2022.]

AB 211, Committee on Budget. Public resources trailer bill.

- (2) Existing law requires the State Fire Marshal to identify areas of the state as moderate, high, and very high fire hazard severity zones based on specified criteria. Existing law requires a local agency to designate, by ordinance, very high fire hazard severity zones in its jurisdiction within 120 days of receiving recommendations from the State Fire Marshal. Existing law authorizes a local agency, at its discretion, to include areas within the jurisdiction of the local agency, not identified as very high fire hazard severity zones by the State Fire Marshal, as very high fire hazard severity zones following a finding supported by substantial evidence, as provided.

This bill would additionally require a local agency to designate, by ordinance, moderate and high fire hazard severity zones within 120 days of receiving recommendations from the State Fire Marshal. By expanding the responsibility of a local agency, the bill would impose a state-mandated local program. The bill would additionally authorize a local agency, at its discretion, to include areas within the jurisdiction of the local agency, not identified as moderate and high fire hazard severity zones by the State Fire Marshal, as moderate and high fire hazard severity zones, respectively. The bill would prohibit the local agency from decreasing the level of fire hazard severity zone as identified by the State Fire Marshal for any area within the jurisdiction of the local agency, as provided.

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Amended by Assembly Bill No. 211

Government Code 51179

- (a) A local agency shall designate, by ordinance, moderate, high, and very high fire hazard severity zones in its jurisdiction within 120 days of receiving recommendations from the State Fire Marshal pursuant to Section 51178.
- (b) (1) A local agency may, at its discretion, include areas within the jurisdiction of the local agency, not identified as very high fire hazard severity zones by the State Fire Marshal, as very high fire hazard severity zones following a finding supported by substantial evidence in the record that the requirements of Section 51182 are necessary for effective fire protection within the area.

(2) A local agency may, at its discretion, include areas within the jurisdiction of the local agency, not identified as moderate and high fire hazard severity zones by the State Fire Marshal, as moderate and high fire hazard severity zones, respectively.

(3) A local agency shall not decrease the level of fire hazard severity zone as identified by the State Fire Marshal for any area within the jurisdiction of the local agency, and, in exercising its discretion pursuant to paragraph (2), may only increase the level of fire hazard severity zone as identified by the State Fire Marshal for any area within the jurisdiction of the local agency.
- (c) The local agency shall transmit a copy of an ordinance adopted pursuant to subdivision (a) to the State Board of Forestry and Fire Protection within 30 days of adoption.
- (d) Changes made by a local agency to the recommendations made by the State Fire Marshal shall be final and shall not be rebuttable by the State Fire Marshal.
- (e) The State Fire Marshal shall prepare and adopt a model ordinance that provides for the establishment of very high fire hazard severity zones.
- (f) Any ordinance adopted by a local agency pursuant to this section that substantially conforms to the model ordinance of the State Fire Marshal shall be presumed to be in compliance with the requirements of this section.
- (g) A local agency shall post a notice at the office of the county recorder, county assessor, and county planning agency identifying the location of the map provided by the State Fire Marshal pursuant to Section 51178. If the agency amends the map, pursuant to subdivision (b) or (c) of this section, the notice shall instead identify the location of the amended map.

(Amended by Stats. 2022, Ch. 574, Sec. 10. (AB 211) Effective September 27, 2022.)

LRA Legislation Factsheet



Increasing Fire Hazard Severity Zone (FHSZ) Area and Designation

Government Code section 51179 requires a local agency to designate, by ordinance, moderate, high, and very high FHSZ within 120 days of receiving the identified FHSZ's from the State Fire Marshal pursuant to Section 51178.

The law does not allow for a local jurisdiction to request changes or provide comments to the State Fire Marshal on the FHSZ designations. However, a local agency may choose to increase the designation of a FHSZ from the FHSZ identified by the State Fire Marshal, or designate areas as having a FHSZ that were not designated in a FHSZ by the State Fire Marshal. This may occur because FHSZ zone edges in the maps and data from the State Fire Marshal are not aligned with parcel boundaries or roads that some may consider for lines of convenience when adopting ordinances. A local agency is not allowed to reduce the designation of a FHSZ classification from the State Fire Marshal (i.e. a local agency cannot make an area designated as High by the State Fire Marshal, Moderate in its adopted ordinance).

However, a local jurisdiction can increase the designation from the one identified by the State Fire Marshal. If a local agency decides to increase the designation of a FHSZ, it may do so if it does the following:

1. If increasing the designation to Very High, a local agency must make a finding supported by substantial evidence in the record that the requirements of Government Code section 51182 are necessary for effective fire protection.
2. If increasing the designation to Moderate or High, a local agency may do this at its discretion.

If a local agency decides to include areas in its FHSZ adopted ordinance not identified as being in a FHSZ by the State Fire Marshal, it may include those areas if it does the following:

1. If including areas not identified as being in a FHSZ and designating it as Very High, a local agency must make a finding supported by substantial evidence in the record that the requirements of Government Code section 51182 are necessary for effective fire protection.
2. If including areas not identified as being in a FHSZ and designating it as Moderate or High, a local agency may do this at its discretion.

LRA Legislation Factsheet





Land Use Planning Program

CAL FIRE's Land Use Planning Program is a specialized unit that provides support to local governments by providing fire safety expertise on the State's wildland urban interface building codes, as well as collaborating in the development of Safety Elements in General Plans.



For More Information
osfm.fire.ca.gov/fhsz