



Susan Wengraf  
Councilmember District 6

## **REVISED AGENDA MATERIAL for Supplemental Packet 1**

**Meeting Date:** September 28, 2021

**Item Number:** #26

**Item Description:** **Adopt a Resolution Renewing and Re-Affirming Wildfire Prevention and Safety as a Top Priority in the City of Berkeley**

**Submitted by:** Councilmember Wengraf

Added mention of *AP News* analysis reporting Berkeley Hills zip code 94708 in the worst 1% of state for wildfire evacuation, the article and map showing 94708 location.



Susan Wengraf  
Councilmember District 6

CONSENT CALENDAR  
SEPTEMBER 28, 2021

To: Honorable Mayor and Members of the City Council  
From: Councilmember Susan Wengraf  
Subject: Adopt a Resolution Renewing and Re-Affirming Wildfire Prevention and Safety as a Top Priority in the City of Berkeley

RECOMMENDATION

Request that the Berkeley City Council adopt a resolution re-affirming that wildfire prevention and safety is a top priority in the City of Berkeley.

FINANCIAL IMPLICATIONS

None

BACKGROUND

The Berkeley City Council adopted Resolution No. 69,147-N.S. Declaring Wildfire Prevention And Safety As A Top Priority In The City of Berkeley on October 15, 2019. Since then, extreme weather events have increased in California. Wildfires are starting earlier and ending later each year. Climate change is considered a key driver of this trend. Warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt create longer and more intense seasons that increase moisture stress on vegetation and make forests more susceptible to severe wildfire. The length of fire season is estimated to have increased by at least 75 days across the Sierras and seems to correspond with an increase in the extent of forest fires across the state.

Wildfires in 2021 have already exceeded the [2020 season](#), which itself was the largest season in the state's recorded history. As of July 11, more than three times as many acres have burned compared to the previous year through that date, with drought, [extreme heat](#), and reduced snowpack contributing to the severity of the fires. As of August 18, 2021, the state of California was facing unprecedented fire conditions as multiple fires including the [Dixie Fire](#), [McFarland Fire](#), [Caldor Fire](#), and multiple others rage on.

Berkeley's hills are subject to extremely high fire hazards due to proximity to park land where the fuel load is high; narrow, curvy roads, hampering access by first responders and obstructing efficient evacuation routes; steep topography and changing weather conditions. CalFire, has ranked Berkeley at the same risk level of many of the cities that have already been decimated by fire throughout the state<sup>i</sup>. Berkeley's risk to wildfire is designated as the highest in the state.<sup>ii</sup> A 2019 *AP News* analysis of California's wildfire

evacuation routes identified 24 zip codes as the worst 1% in the state regarding population-to-evacuation-route ratios. 94708 in the Berkeley Hills is one of those.

In 1923, a wildfire swept through north Berkeley, ultimately destroying approximately 600 homes, including churches, schools, libraries, and student living quarters. The fire traveled down to the intersection of Shattuck and Hearst. At that time, the population of Berkeley was 52,000, Today, the population density is 122,000.

In 1980, a fire in Berkeley's Wildcat Canyon destroyed 5 homes and then, on October 17, 1991, The Tunnel Fire consumed homes in southeast Berkeley and Oakland, claiming 25 lives and reducing approximately 3,000 structures to ashes. Had the wind direction not shifted, it is possible that many more people would have died and more of Berkeley would have been destroyed.

Berkeley's acknowledgment of the serious risk we face to the threats of wildfire is an essential component to a successful program to raise public awareness, and to educate and prepare our community. Our renewed commitment, by resolution, will allow us to move forward with projects and programs to achieve our shared goals of wildfire prevention and safety.

#### ENVIRONMENTAL SUSTAINABILITY

Wildfires negatively impact the ozone and air quality. Wildfires release large amounts of carbon dioxide, black carbon, brown carbon, and ozone precursors into the atmosphere. These emissions affect radiation, clouds, and climate on regional and even global scales. Wildfires also emit substantial amounts of volatile and semi-volatile organic materials and nitrogen oxides that form ozone and organic particulate matter.<sup>iii</sup>

#### CONTACT PERSON

Councilmember Wengraf

Council District 6

510-981-7160

Attachments:

1: Resolution

2: [Berkeley Very High Fire Hazard Severity Zone Map](#)

3: AP News: How we analyzed California's wildfire evacuation routes

4: 94708 Map

RESOLUTION NO. ##,###-N.S

RESOLUTION REAFFIRMING WILDFIRE PREVENTION AND SAFETY AS A TOP PRIORITY FOR THE CITY OF BERKELEY AND ENCOURAGING A VARIETY OF STRATEGIES TO PREVENT AND ABATE FIRE RISK

WHEREAS, on October 15, 2019, The City Council adopted Resolution NO. 69,147-N.S. declaring "Wildfire Prevention and Safety a Top Priority" for the City of Berkeley; and

WHEREAS, since 2019, wildfires have continued to grow larger and increase in intensity due to drought, climate change, and unmanaged and overgrown vegetation; and

WHEREAS, the East Bay Hills experienced a wildfire in 1991 which burned over 1,600 acres and 2,900 structures, causing 25 deaths and injuring 150 people; and

WHEREAS, the entire City of Berkeley is potentially at risk of wildfire, not only in the hill neighborhoods but in the lower neighborhoods between the hills and the Bay; and

WHEREAS, unhealthy and hazardous air quality is a consequence of wildfires, seriously impacting the health of all, and of particular concern, the health of our children, seniors and other vulnerable populations throughout the city; and

WHEREAS, Cal Fire has designated a large geographical area of Berkeley to be in a Very High Fire Hazard Severity Zone (VHFHSZ) within the Local Responsibility Area (LRA) where the City has the financial responsibility for wildfire protection; and

WHEREAS, when a wildfire destroys neighborhoods, the economic impact is devastating and impacts the City's quality of life, infrastructure, and ability to recover financially, and would adversely impact the City's ability to collect its current level of property and sales taxes and other revenue sources that comprise the City budget; and

WHEREAS, there is a housing shortage in Berkeley and wildfires could exacerbate this situation, in addition to concerns that when wildfires hit, financially disadvantaged people are disproportionately affected.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Berkeley that it reaffirms its commitment to wildfire prevention and safety as a top priority and that discussions and efforts will continue locally and regionally on how best to prevent and abate fire hazards in the City, including but not limited to:

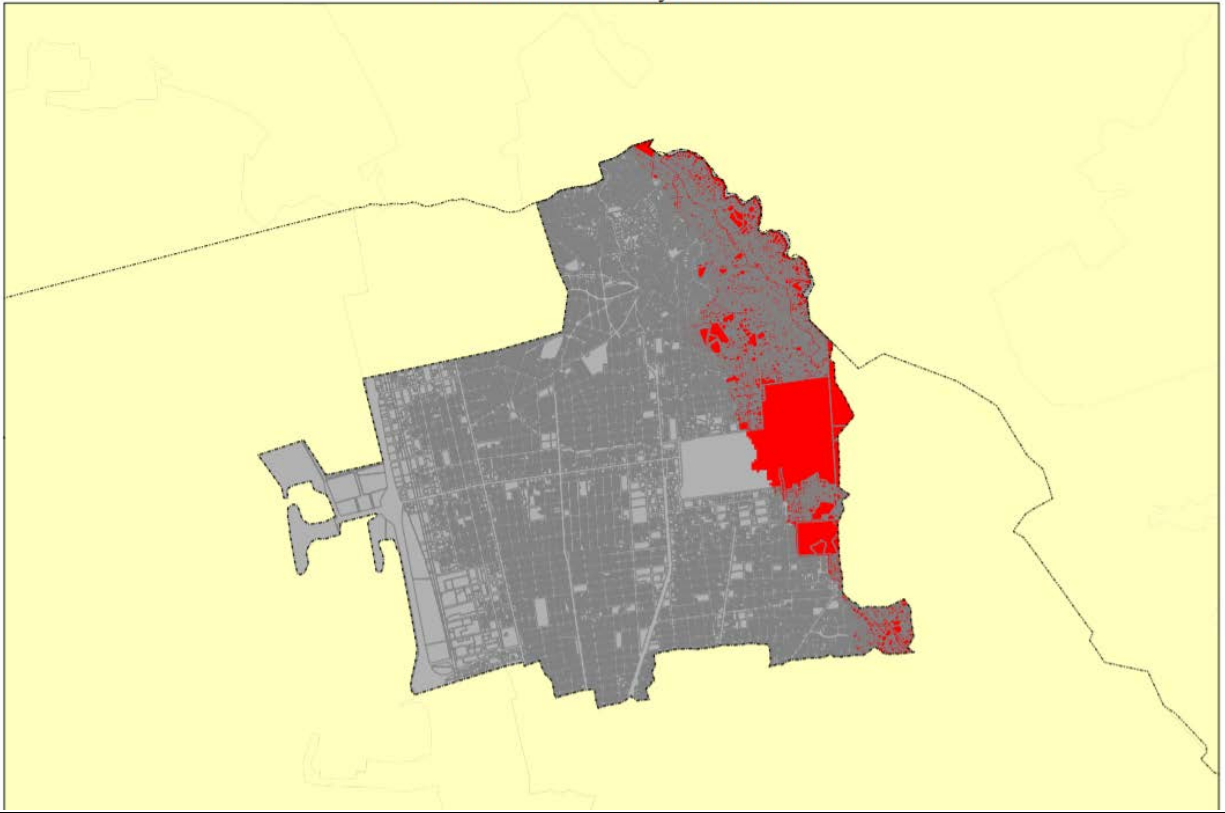
- Working collaboratively with neighboring agencies and jurisdictions on a comprehensive approach to fire prevention
- Seeking grants and other resources for wildfire education, prevention and mitigation
- Planning for and implementing policies for safe evacuation
- Implementing a Vegetation Management Plan to require the removal of flammable vegetation on private properties
- Updating building and fire codes as necessary to make structures more resistant to fire
- Reducing fuel loads in the VHFHSZ in city owned parks and other properties.

BE IT FURTHER RESOLVED that this resolution shall become effective immediately upon passage and adoption.



# Berkeley

## Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE



<sup>i</sup> <https://www.berkeleyside.org/2019/10/17/the-berkeley-hills-are-kindling-city-takes-steps-to-tackle-wildfire-dangers-safety-issues>

<sup>ii</sup> <https://egis.fire.ca.gov/FHSZ/>

<sup>iii</sup> <https://csl.noaa.gov/factsheets/csdWildfiresFIREX.pdf>

## AP NEWS

## How we analyzed California's wildfire evacuation routes

By EVAN WYLOGE

April 27, 2019



In this April 17, 2019, photo, a pedestrian crosses Washington St. one of the few roads leading into and out of the Gold Rush community of Sonora, Calif. Residents of Paradise, Calif., who were forced to flee from the Camp Fire, became caught in a nightmare traffic jam on narrow winding roads as they tried to evacuate the area. Sonora faces the same kind of issues of too few escape lanes for too many people in vehicles. The 2018 catastrophe illuminated the grim reality that road systems throughout the state are not designed to handle a sudden evacuation. (AP Photo/Rich Pedroncelli)

REDDING, Calif. (AP) — How many roads are enough to get out?

That's the question we wondered after watching tragedy unfold in Paradise, California, last year during the Camp Fire.

Paradise had five two-lane roads and one four-lane road leading out of town. But the fire forced officials to close three of those routes, further clogging the remaining roads.

Did Paradise have an unusually high ratio of residents to [escape routes](#) ? Or were other California communities in a similar situation?

A USA Today-California Network analysis of California communities and [evacuation routes](#) shows that some areas in the state are far outside the norm when it comes to the number of lanes of roadway available for the size of the population.

This is a shorthand method of evaluating the efficacy of egress routes, according to emergency planning experts.

To evaluate exit routes for Californians living in areas at risk of a fire-related evacuation, [we combined and analyzed data](#) from the U.S. Census Bureau, Cal Fire and OpenStreetMap.

We took 2010 census block-level populations, combined with Cal Fire's "Fire Hazard Severity Zone" maps, and aggregated those to ZIP codes, then applied more current population estimates. Next, we spatially joined those areas with the fire risk map. That provided a current population risk breakdown for each ZIP code, based on area and estimated population.

We added OpenStreetMap data to each ZIP code, so we could see which roads cross into or out of the area. Combining the ZIP code population and fire risk data with the standard number of lanes for every major roadway allowed us to come up with a set of ZIP codes that have the greatest number of people living in the highest-risk areas and hypothetically trying to use the fewest number of lanes to leave in any direction or to areas at less risk for fire.

What does this tell us?

In short, the analysis gives an estimate of how many people there are for every lane of major road leaving an area.

When we looked at all ZIP codes in California that have people living in a very high fire risk zone, we found, on average, 134 residents living in the riskiest areas for each lane of [traffic going either direction](#) .

Only one out of 20 ZIP codes has more than 313 people living in the [riskiest areas](#) for each lane of traffic. Paradise had more than 1,000, putting it in the worst 1%. But some areas, such as Oak Park in Ventura County, South [Lake Tahoe](#) in El Dorado County or the Palos Verdes Peninsula in Los Angeles County, have two, three or even five times the number of people living in the highest-risk zones, per lane of major roadway out, compared to Paradise.

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Here are the ZIP codes the analysis identified as being roughly within the worst 1% in the state when it comes to population-to-evacuation-route ratios:

SOUTHERN CALIFORNIA:

90042: Highland Park and Eagle Rock in Los Angeles County

90272: Pacific Palisades in Los Angeles County

90274: Rolling Hills in Los Angeles County

90275: Rancho Palos Verdes in Los Angeles County



91935: Jamul and surrounding areas in San Diego County

92065: Ramona and surrounding areas in San Diego County

92131: Scripps Ranch in San Diego County

91320: From Newbury Park to Dos Vientos Ranch in western Thousand Oaks in Ventura County

91377: Oak Park, an unincorporated community in Ventura County

93021: Moorpark in Ventura County

92548: Homeland and areas northwest of Homeland in Riverside County

92584: Menifee in Riverside County

92314: Big Bear, Minnelusa and Sugarloaf (92386) in San Bernardino County

CENTRAL CALIFORNIA:

93924: Carmel Valley and Jamesburg in Monterey County

NORTHERN CALIFORNIA:

95954: Magalia in Butte County

95969: Paradise in Butte County

96150: South Lake Tahoe and surrounding areas in El Dorado County

95634: Georgetown and surrounding areas in El Dorado County

94508: Angwin in Napa County

94708: Cragmont, Kensington and La Loma Park in northeastern Berkeley in Alameda County

95422: Clearlake in Lake County

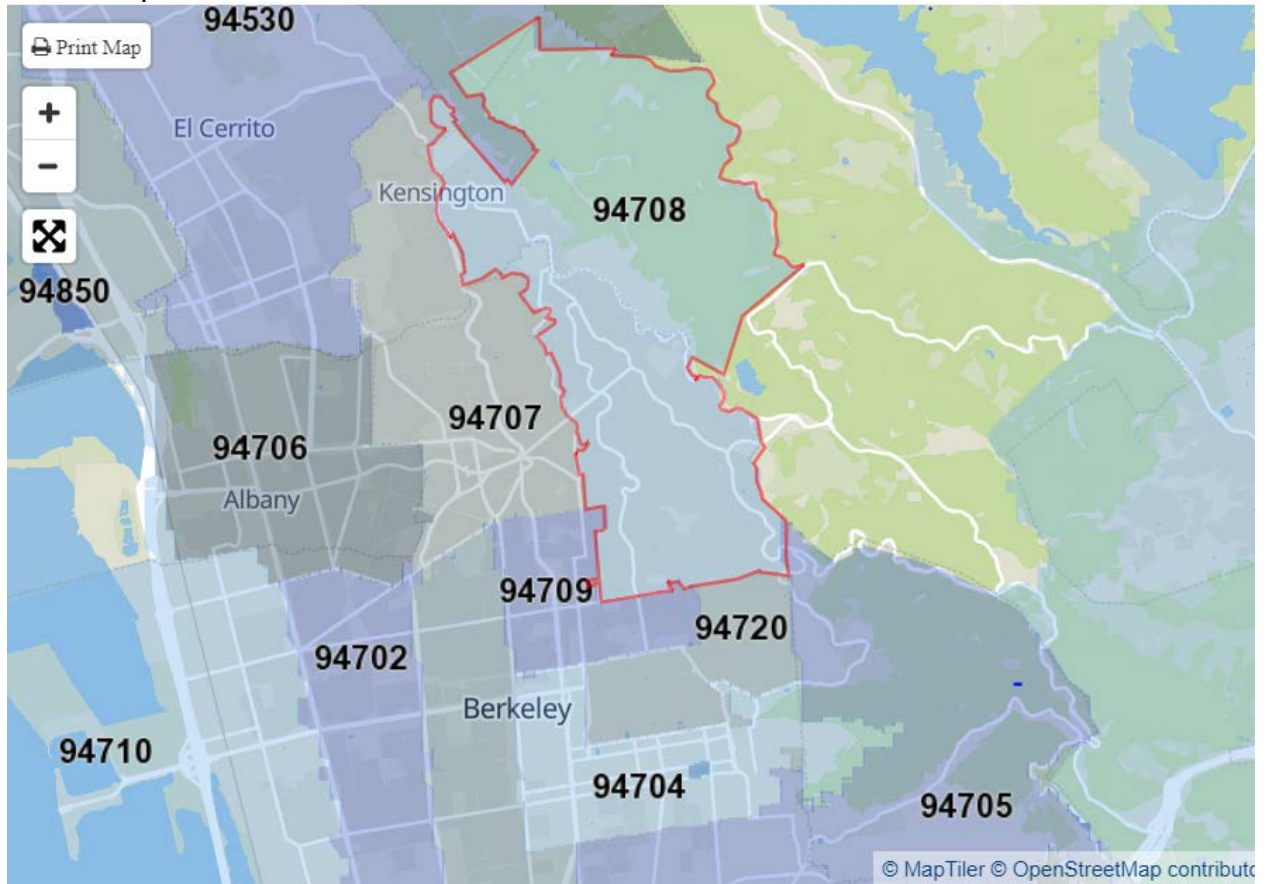
95451: Kelseyville in Lake County

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<https://apnews.com/article/california-wildfires-evacuations-redding-ca-state-wire-6f621c1c54734d0b95d374556c2cf5c0>

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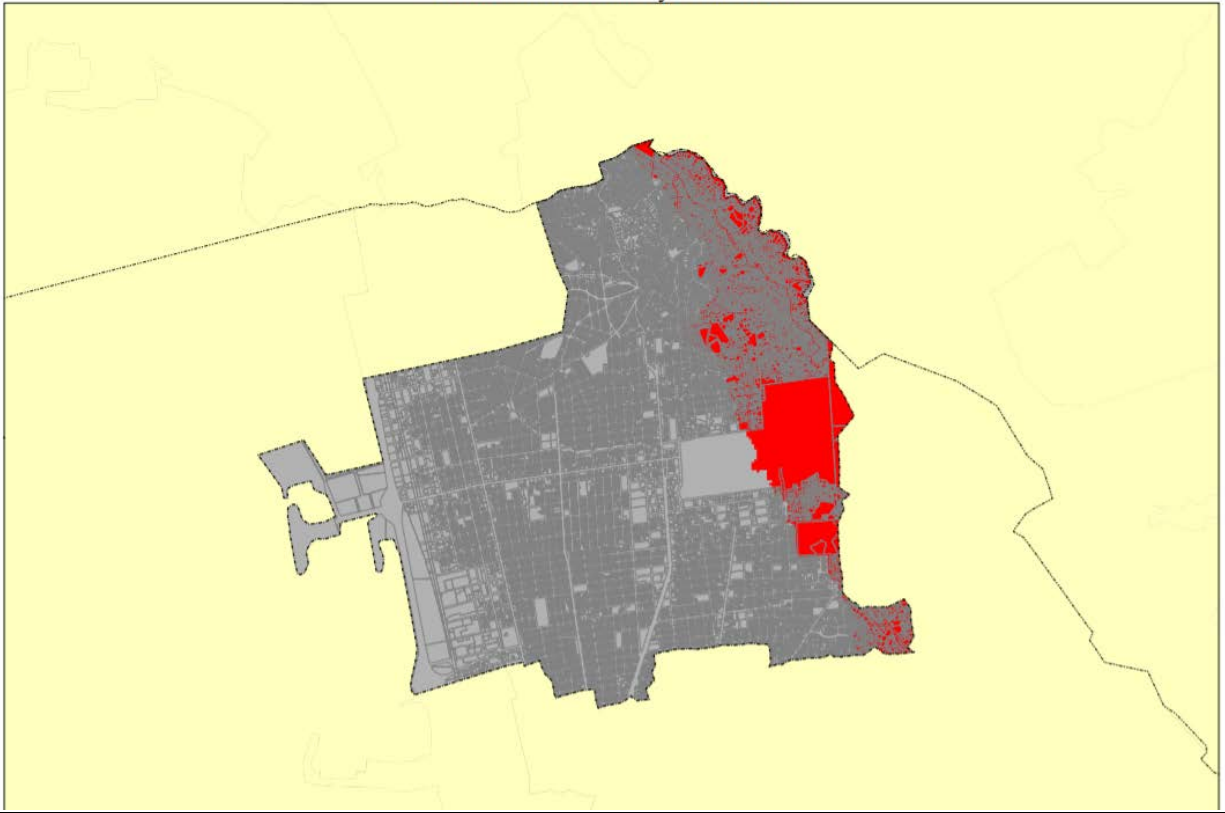
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