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# ANNEX 19
# CITY OF MILPITAS

## ORGANIZATION AND JURISDICTION

Milpitas was incorporated January 6, 1954. Residents of Milpitas number to 81,773, and the daytime population is approximately 98,000 people. At 20 feet above sea level, Milpitas' mild climate averages 59 degrees, with gentle winds from the northwest and little more than 13 inches of rain expected in a typical year. Milpitas' neighborhoods are dotted with over 20,000 households and well-placed parks. Thirty-seven city parks are maintained by Milpitas, including one dog park, 21 tennis courts, and the newly opened Delano Manongs Park on McCandless Drive. The city provides a multitude of outstanding recreational opportunities, including aquatics, cultural arts and theater, sports leagues and activities, youth programming, and senior activities and services. Milpitas' median household income is over $150,000.

Milpitas is in Santa Clara County, at the southern tip of San Francisco Bay, between Fremont (north) and San José (south), the City of Milpitas is a progressive community that is an integral part of the high-tech Silicon Valley. Milpitas (incorporated area) is often called the "Crossroads of Silicon Valley" with most of its 13.63 square miles of land situated between two major freeways (I-880 and I-680), State Route 237 and County Expressway. Milpitas' median elevation is 19 feet. Milpitas is home to The Great Mall of the Bay Area, which is the largest enclosed mall in Northern California at approximately 1.1 million square feet of leasable space.

Milpitas is divided into three sections by the freeways. To the west of I-880 is a largely industrial and commercial area. Between I-880 and its eastern counterpart freeway, I-680, is an industrial zone in the south and residential neighborhoods in the north. Other residential neighborhoods and undeveloped mountains lie east of I-680. Milpitas has no concentrated downtown "center," but instead has several small retail centers generally located near residential developments.

## PLANNING TEAM PARTICIPATION

The Milpitas CWPP planning team consists of Fire Suppression staff and Fire Prevention staff, Spring Valley Volunteer Fire, the California Department of Forestry and Fire Protection (CalFire), Pacific Gas & Electric (PG&E), the city Office of Emergency Management Coordinator, and the city GIS Technician. Fire planning within the community includes a myriad of approaches, programs and outreach opportunities. Methods range from Capital Improvement Projects, fire staff wildland

urban interface (WUI) training, public education outreach, and participation at the Santa Clara County Fire Chief Association meetings.

# RISK-HAZARD SUMMARY

All of Milpitas' incorporated area is a state law defined Local Responsibility Area (LRA) and therefore state defensible space laws and other wildfire regulations do not apply. State law requires all WUI areas in California receive an evaluation for wildfire potential and severity. State Responsibility Areas (SRAs) are adopted by the State Board of Forestry and Fire Protection. CalFire forwards LRA evaluation recommendations to the respective city for adoption. The City is required to act upon any area recommended for very high fire hazard severity zone (FHSZ) designation.

The City Council has the choice to adopt the very high FHSZ as recommended, modify the FHSZ boundary, and adopt or decline to adopt. Very high FHSZ's in LRA's require new construction to be compliant with WUI construction regulations of the California Building Code. (CBC Ch. 7A): https://up.codes/viewer/california/ca-building-code-2022/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#7A).

Mitigation activities include:

- Public education to the hillside (FHSZ) communities.
- PG&E Public Safety Power Shutoffs under high-risk fire danger weather.
- Cal Fire prevention activities.
- City Fire Ordinance enforcement and weed abatement program.
- Updated building and fire code adoptions.
- Hillside Ordinance to limit growth within the foothills.

# EMERGENCY RESPONSE CAPACITY

The Milpitas Fire Department (MFD) is an all-risk Fire Department and services the 13.63 square-mile incorporated areas within its boundary. The Milpitas Fire Department maintains Mutual Aid agreements for unincorporated areas beyond its boundary with Santa Clara County Fire Department and Spring Valley Volunteer Fire Department through the Santa Clara County Local Mutual Aid Plan. Master Mutual Aid Agreements throughout the state include working with CAL FIRE for regional requests for mutual aid. It also has mutual aid agreements with Fremont Fire Department located in Alameda County as a shared border between 2 different counties.

The MFD staffs 82 full time personnel and operates four stations with a separate Fire Prevention Division:

**Fire Station 1**
777 S. Main Street
Milpitas, CA 95035

**Fire Station 2**
1263 Yosemite Drive
Milpitas, CA 95035

**Fire Station 3**
45 Midwick Drive
Milpitas, CA 95035

**Fire Station 4**
775 Barber Lane
Milpitas, CA 95035

**Fire Prevention**
455 E. Calaveras Blvd
Milpitas, CA 95035

Additional mutual aid fire resources are available from other Santa Clara County fire agencies. CAL FIRE also provides fire officers, fire engines, air tankers, helicopters, and hand crews because the unincorporated area is State Responsibility Area (SRA).

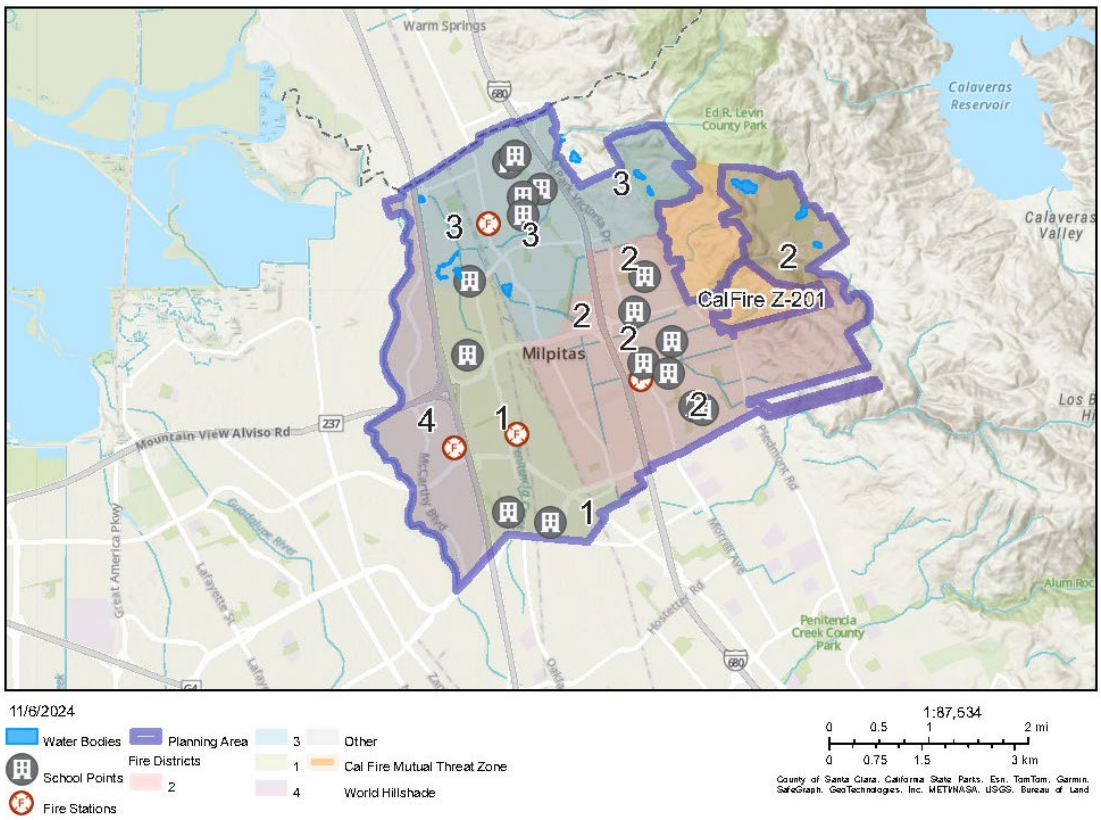


**Figure 1-1. City of Milpitas Boundary Map with Cal Fire Mutual Threat Zone (Source MFD 2024)**

# FIRE RESPONSE

**Federal Responsibility Area (FRA):** A term designating areas where the federal government is responsible for fire response efforts. These areas include land under federal ownership (CA GOPR 2020).

**Local Responsibility Area (LRA):** A term designating areas where the local government is responsible for wildfire protection. The LRA includes incorporated cities, cultivated agricultural land, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government (CA GOPR 2020).

**State Responsibility Area (SRA):** A term designating areas where the state has financial responsibility for wildland fire protection. Incorporated cities and land under federal ownership are not included in the SRA. Land under federal ownership is in the federal responsibility area (CA GOPR 2020).

The Unincorporated areas of Santa Clara County, though technically in SRA, are considered Joint Responsibility Areas. Santa Clara County Fire and CAL FIRE respond to emergencies in these areas.

During summer, and in prolonged periods without rainfall, grasses, trees and other vegetation in the Planning Area become extremely dry and act as potential fuel for fires. The grasses on the hillsides are light fuel vegetation, which in the event of a fire burn quickly. Fire protection for the hillsides is primarily provided by the California Department of Forestry and Fire (CAL FIRE) and the Spring Valley voluntary Fire Department.

The City of Milpitas aids with the hillside as needed because of a mutual aid agreement as the unincorporated areas beyond city boundary's lie within the SRA and Unincorporated Areas of Santa Clara County. Weed Abatement Programs and Defensible Space are enforced by our Fire Prevention Staff. Annually, between May and August, department personnel survey non-developed properties in the City and notify owners of the need to remove vegetation and trash. The MFD also maintains a weed abatement program within its boundary.

# WUI AREA DESCRIPTION

The Wildland Urban Interface (WUI) areas in the unincorporated portions of the area protected by MFD are also designated by state law as State Responsibility Areas (SRAs) for wildland fire purposes. Therefore, the California Department of Forestry and Fire Protection (CAL FIRE) shares jurisdictional responsibility for fire protection in the SRA. CAL FIRE evaluates SRA areas for wildfire potential and designates them as Moderate, High, and Very High Fire Hazard Severity Zones (FHSZs). The majority of WUI in the district is High and Very High FHSZ.

State law excludes areas inside incorporated cities from SRA, therefore WUI areas inside the incorporated areas are designated Local Responsibility Areas (LRAs) and CAL FIRE does not share responsibility.

# WUI AREA DEFINED

The Santa Clara County Fire Safe Council has created a GIS Classified Wildfire Hazard Map which classifies wildfire hazards from lowest risk hazard up to highest risk hazard. The risk ranking is denoted by a numerical value and color coding.

1 (blue) – lowest relative risk
2 (aqua)
3 (green)
4 (yellow)
5 (orange)
6 (red) – highest relative risk

Approximately 67% of the City falls in the lowest/lower relative risk categories (blue and aqua). This area consists of most housing, buildings, schools, etc. The remaining 33% of the City lies in the WUI and is colored coded primarily in high/moderate relative risk categories (yellow, and orange).

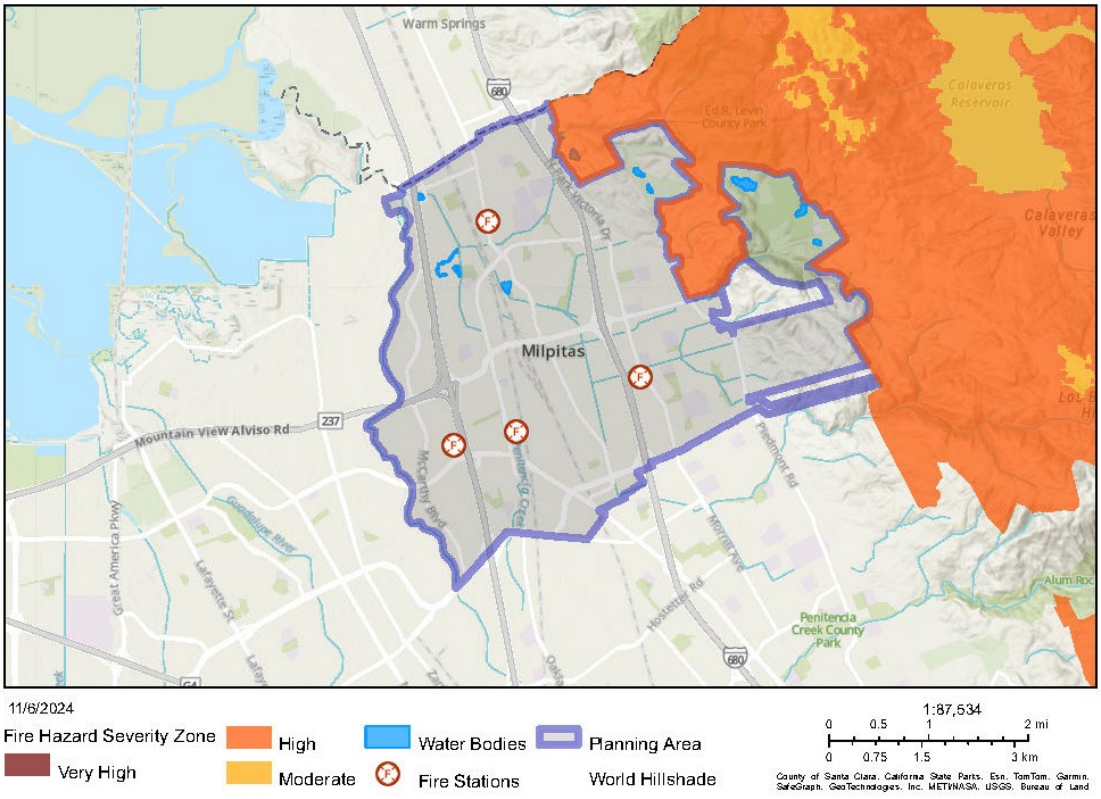


**Figure 1.2 Fire Hazard Severity Zone and City of Milpitas Boundary Map (Source MFD 2024).**

# FIRE HISTORY

In the past 10 years, there has not been significant wildfire activity within the City of Milpitas planning area, however the surrounding area has experienced catastrophic wildfires as recently as 2020. The SCU Lightning Complex burned a total of 396,624 acres in the Diablo Range, just east of the planning area.

# HAZARDOUS FUEL CHARACTERISTICS

The East Foothills area contains a variety of different fuel types consistent with what we tend to see throughout the county. Grasslands, chamise/ chaparral/ coastal sage scrub, oak woodland, mixed conifer, and ponderosa pines can all be found in this area.

- Grasslands, both native and non-native, are usually found at lower elevations on South and West facing slopes. Fire will typically move quickly and burn hot in this fuel type.

- Chamise, chaparral, and coastal sage scrub: While chaparral generally consists of woody evergreen shrubs up to 12 feet tall, coastal sage scrub typically refers to low shrubs up to about 5 feet tall and tend to have a higher moisture content than chaparral. Many species of plants found in these communities are fire adapted, meaning they can survive low intensity fire; however they can contribute to catastrophic spread of wildfire when they become too densely packed.

- Oak Woodland, mixed conifer, Pondarosa Pine: fire carried by understory fuels is typically slow-burning fire with low flame lengths with some coniferous species increasing the likelihood of torching and crowning depending on continuity of fuels between the ground and tree canopy.

For fuel model information, please refer to Section 4.6.3 and Figure 4.3 in Chapter 4 of the main countywide CWPP document.

# AGRICULTURAL PASS PROGRAM

Ranchers, along with local and state fire officials, created the agricultural pass program in response to the CZU fire when many ranchers were unable to reach their livestock to feed and/ or evacuate them during major fire events which resulted in major economic losses. This program provides a uniform way of identifying commercial livestock owner-operators and managers to firefighting personnel, law enforcement officers, and other emergency personnel. Possession of a Livestock Pass during a wildfire or a similar disaster may allow the rancher limited emergency access to restricted areas for the purposes of:

1) Feeding, watering, or caring for livestock sheltering in-place
2) Evacuating livestock

In order to obtain and Agriculture Pass from the County a commercial livestock producer must own at least 20 head of cattle, sheep, goats, honeybee hives, or other Livestock permissible by the Division of Agriculture. The livestock must reside in Santa Clara County for at least part of the year. **In addition, to receive an Ag Pass, eligible livestock owners must attend a 4-hr fire safety workshop lead by California Department of Forestry (CAL FIRE).**

For more information as well as livestock pass applications visit [Santa Clara County Livestock Pass Program - Division of Agriculture - County of Santa Clara (sccgov.org)]

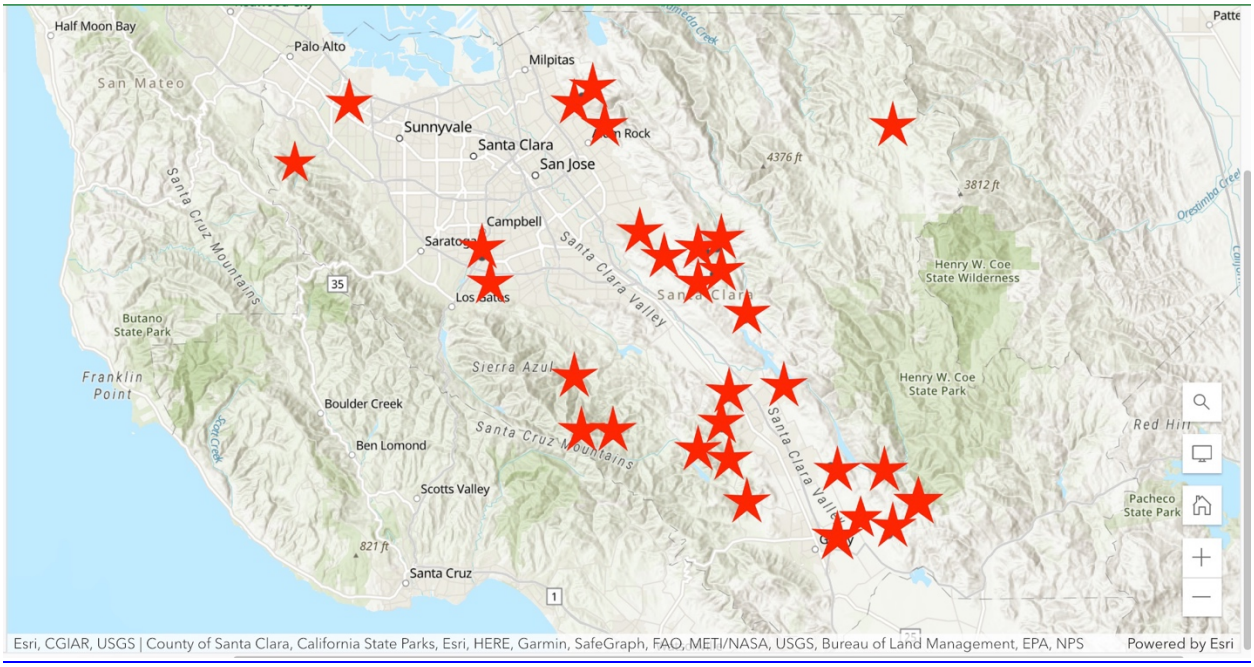


**Figure 1.3 Current Agriculture Pass Holders in Santa Clara County as of 2023.**

# PUBLIC EDUCATION AND OUTREACH PROGRAMS

Milpitas spends a significant amount of time on public education and outreach programs. Education starts at a young age, with the Fire Department, including Suppression, OEM and Prevention all providing education presentations and materials to children in the elementary school system. Additionally, the Milpitas Community Emergency Response Team (CERT) program empowers volunteers to be self-sufficient for 72 in the event of a natural disaster. Milpitas Fire Prevention recognizes Fire Prevention Week every annually in October as an additional opportunity to educate the public. Hands Only CPR training is also offered every Saturday during the month of October. Fire Prevention actively educates and enforces the City's weed abatement program to mitigate fire hazards. OEM and community volunteers educate the public to fire safety at community events, such as National Night Out, festivals, school district events, etc. Recently, Milpitas OEM partnered with the Fire Safe Council and Spring Valley Fire to teach CERT members how to assess for wildfire risk, which included a "walk-around" private property (homes) to point out fire risks in the Wildland Urban Interface area.

# SOCIAL VULNERABILITIES

The Federal Emergency Management Agency (FEMA) defines social vulnerability as the susceptibility of social groups to the negative impacts of natural hazards (e.g., wildfire), which include disproportionate death, injury, loss, or disruption of livelihood (FEMA 2022). A sole hazard occurrence can bring about considerably different impacts for distinct individuals, even if the magnitude of the hazard was the same for the entire community. Specific groups of individuals may be more susceptible to natural hazards because of socioeconomic status, physical state, or other factors. For instance, elderly individuals may have more difficulty in quickly evacuating during wildfire emergencies, which may make them more susceptible to entrapment. In other cases, low-income individuals may be less able to harden and upgrade their homes to reduce structural ignitability, indicating that they can face a higher probability of their home being damaged or destroyed should a wildfire event occur.

As defined by the U.S Forest Service's (USFS's) *Wildfire Risk to Communities* (USFS 2022), socially vulnerable populations include the following: families living in poverty, people with disabilities, people over 65 years of age, people who have difficulty with English, households with no car, and people living in mobile homes. Statistics on socially vulnerable populations with the entirety of Santa Clara County as estimated by the USFS's *Wildfire Risk to Communities* is provided in the countywide CWPP document. Populations particularly at risk from wildfire include people over 65, people with disabilities, and people dwelling in mobile homes. Visitors and non-local property owners may also be at higher risk if they are not familiar with local guidelines regarding property management (defensible space, fire-resistant vegetation, fire- resistant building materials, etc.) and may not be registered or within reach of local emergency

notifications. In addition, renters of these properties may not receive emergency alerts as they are not local residents. Socially vulnerable populations may need additional support with regard to preparing for wildfire, evacuating from wildfire, and returning to their community post-fire.

# POLICIES, REGULATIONS, ORDINANCES, AND CODES

The City of Milpitas has policies, regulations and codes that have been adopted to aid in planning and building within the community. A list of reference codes are provided below in addition to the master county WUI/Fire Code in un-incorporated areas in Santa Clara County.

Milpitas Municipal Code (CFC 112.1.1 as amended by MMC V-300-2.37): https://library.municode.com/ca/milpitas/codes/code_of_ordinances?nodeId=TITVPUHESAWE_CH300FICO_S2AM2022CAFICO_300-2.37

CFC Ch. 49: https://up.codes/viewer/california/ca-fire-code-2022/chapter/49/requirements-for-wildland-urban-interface-fire-areas#49

CBC Ch. 7A: https://up.codes/viewer/california/ca-building-code-2022/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#7A

Santa Clara County WUI Code: https://plandev.sccgov.org/how/research-property/santa-clara-county-wildland-urban-interface

# COUNTY RISK ASSESSMENT

The Tukman Risk Assessment is a third-party risk assessment based on fire behavior modeling derived from fuel mapping classified at a 5m resolution, as well as historic weather, topographic conditions, and ignition history. The risk assessment has been developed as part of a collaborative effort with multi-jurisdictional participation. More information about the Risk to Structures layer can be found in the countywide CWPP.

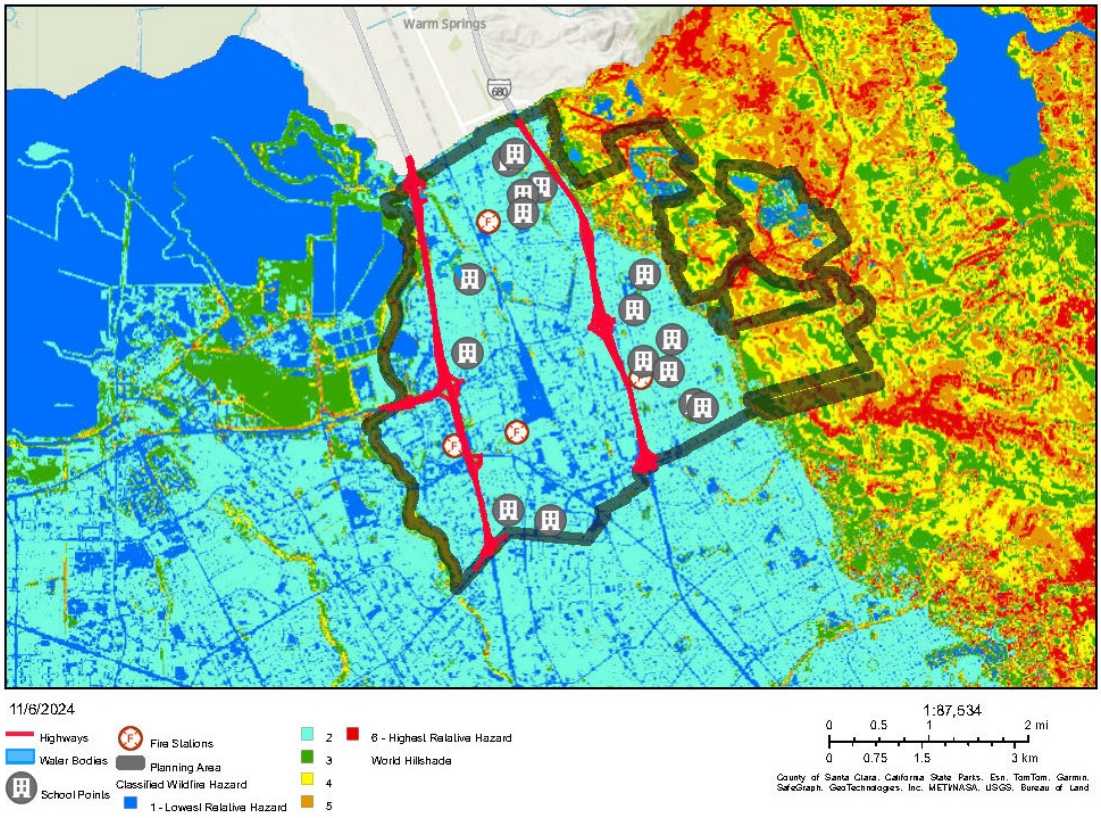


**Figure 1-4. Wildfire Hazard Map (Source MFD 2024)**

# WILDFIRE RISK TO STRUCTURES

The Wildfire Risk to Structures map provides a spatially explicit ranking for 10-acre hexagons, assigning each hexagon with a ranking for wildfire hazard and a ranking for housing density. From a risk to structures perspective, hexagons with high housing density and high wildfire hazard are of greatest concern. This layer integrates risk into the CWPP.

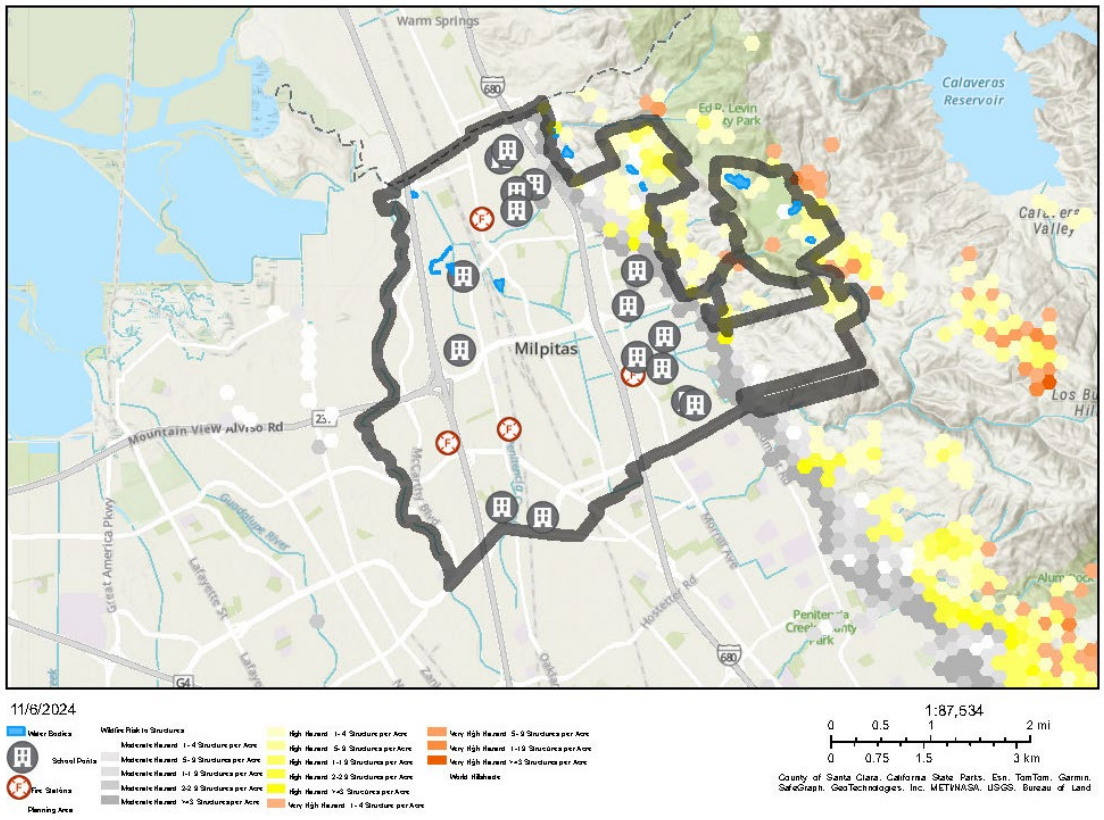


**Figure 1-5. Wildfire Risk to Structures Map (Source MFD 2024)**

# FIRE HAZARD SEVERITY ZONES

The Fire Hazard Severity Zone (FHSZ) system is a science-based system where severity zones are defined based on vegetation, topography, and weather (temperature, humidity, and wind), and represent the likelihood of an area burning over a 30-year to 50-year time period without considering modifications such as fuel reduction efforts. The FHSZ maps present wildfire hazard and not wildfire risk. In California, CAL FIRE maintains fire hazard severity zone (FHSZ) data for the entire state. There are three classes of fire hazard severity ratings within FHSZs: Moderate, High, and Very High (CA GOPR 2020).

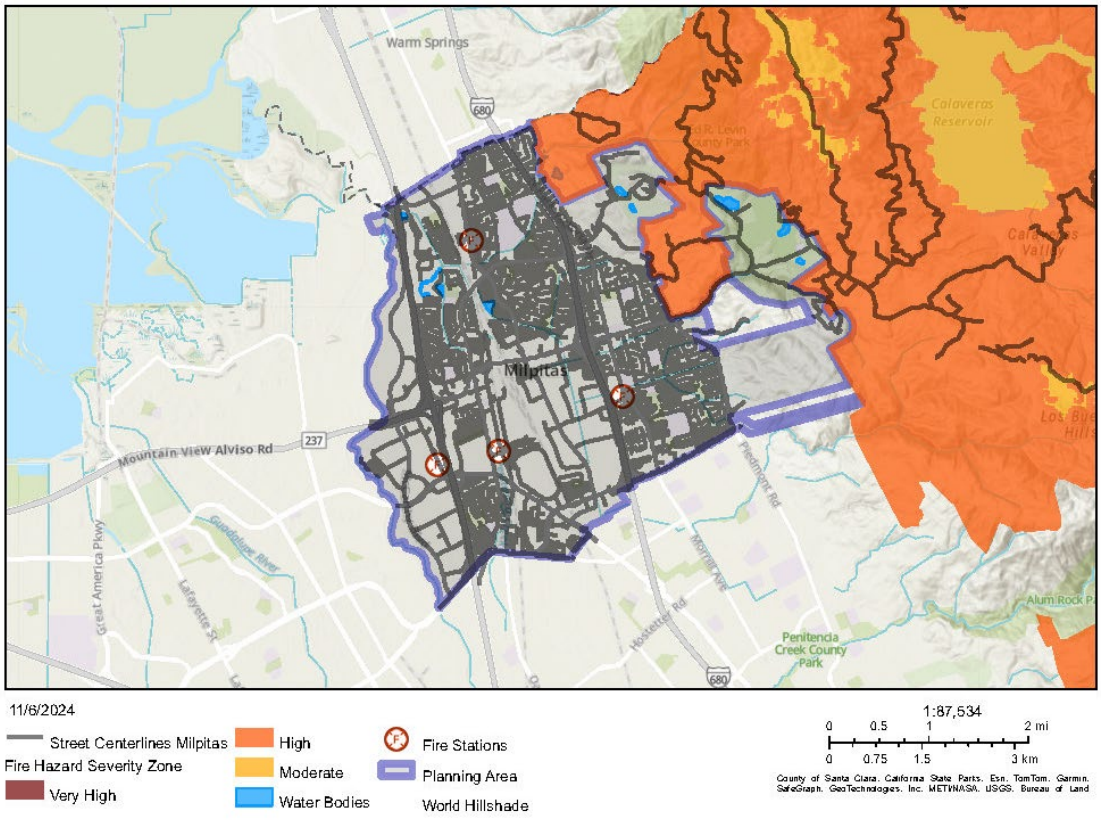


**Figure 1-6. Fire Hazard Severity Map (Source MFD 2024)**

# COMMUNITY LEVEL RISK ASSESSMENT

Community Hazard Assessments were conducted in 2015/16 using the NFPA Wildland Fire Risk and Hazard Severity Form 1144 (see Appendix C and Appendix K of the countywide document). This form is based on the NFPA Standard for Reducing Structure Ignition Hazards from Wildland Fire 2013 Edition. The field assessment results were reviewed by the Planning Team and determined accurate and therefore they were not revisited during the CWPP update.

The purpose of the Community Hazard Assessment and subsequent ratings is to identify fire hazard and risks and prioritize areas requiring mitigation and more detailed planning. These assessments should not be seen as tactical pre-suppression or triage plans. The Community Hazard Assessment helps to drive the recommendations for mitigation of structural ignitability, community preparedness, and public education. The assessment also helps to prioritize areas for fuels treatment based on the hazard rating. Each area was rated based on conditions within the community and immediately surrounding structures, including access, adjacent vegetation (fuels), defensible space, adjacent topography, roof and building characteristics, available fire protection, and placement of utilities. Each score was given a corresponding adjective rating of low, moderate, high, or extreme.

The community hazard ratings from the field assessment are provided in Table 1.4-1. This table also includes a summary of the positive and negative attributes of a community as they relate to wildfire risk.

Communities using ground evaluation include:

- Lee's Orchard HOA
- Country Club Estates
- Calaveras Ridge Estates

# NEIGHBORHOOD AND STRUCTURAL CHARACTERISTICS

## Lees Orchard at Green Rock Road

**Figure 1-7 Aerial Photo of Home in the WUI Area (Source MFD 2024)**

**Figure 1-8 Green Rock Road Entrance off Piedmont Road (Source MFD 2024)**

Lee's Orchard is a private gated community of 13 homes situated in the East Foothills within the Local Response Area for the City of Milpitas. The community has well maintained paved roads, private gate access, and a private hydrant at the base of the circular road. The urban intermix of homes has landscape throughout and Fire Breaks on the perimeter as defensible space. Homes are widely spaced and built with fire resistive exteriors and roofs.

## Country Club Estates at Country Club Drive

**Figure 1-9 Country Club Drive Entrance Road off North Park Victoria Drive (Source MFD 2024)**

**Figure 1-10 Country Club Estates within the Wildland Urban Interface (Source MFD 2024)**

**Figure 1-11 Country Club Estates within the WUI and Landscape (Source MFD 2024)**

Country Club Estates community rests in the east foothills within the City of Milpitas boundary. The neighborhood lies within the Milpitas Fire Department's planning area. Fire Station 3 is the closest approximately 2.1 miles away located at 45 Midwick Drive. Steep access roads to the development are paved with hydrants placed along Country Club Drive. Homes are widely spaced and built with fire resistant exteriors and roofs. Homes are intermixed within the Wildland Urban Interface (WUI) zones.

## Calaveras Ridge Estates and Bayview Estates Neighborhoods


**Figure 1-12 Calaveras Ridge Estates Aerial View within the WUI. (Source MFD 2024)**

The Calaveras Ridge Estates Neighborhood shares a similar interface characteristic and building development profile as Country Club Estates. Calaveras Ridge Estates and Bayview Estates are 2 separate and private gated communities with large homes, on large lots, within the Wildland Urban Interface. Steep paved roads allow access to the community with Fire Hydrants along main access roads. Both developments have similar topographic features and vegetation fuel models.

## East Foothills and Milpitas

The NFPA 1144 risk rating for the East Foothills is moderate with a score of 68.

| Parameter | Condition | Rating |
|---|---|---|
| Access | Two roads in and out but assess still a concern | +/- |
| | Narrow road width | - |
| | Surfaced road with greater than 5% grade | + |
| | Poor fire access, dead end spurs, lack turnaround | - |
| | Street signs are present, some are non-reflective | +/- |
| Vegetation | Adjacent fuels: Light | + |
| | Defensible space: >70 feet, <100 feet around structure | +/- |
| Topography within 300 feet of structure | 10%–20 % | + |
| Topographic features | Moderate to high concern | +/- |
| History of high fire occurrence | Low | + |
| Severe fire weather potential | Low | + |
| Separation of adjacent structures | Good separation | + |
| Roofing assembly* | Class B | +/- |
| Building construction | Non-combustible siding and combustible deck | +/- |
| | Building set back >30 feet to slope | + |
| Available fire protection | Water: hydrants present with variable pressure | + |
| | Response: Station >5 miles from structure | - |
| | Internal sprinklers: none | - |
| Utilities | One above and one below ground | +/- |
| **Risk Rating: Moderate (68)** | | |

## CRITICAL INFRASTRUCTURE AND COMMUNITY VALUES AT RISK

The City of Milpitas has identified 2 Cultural Values at risk within its boundaries. The Milpitas Grammar school is located at 160 N. Main Street and is designated a historical building. The Milpitas Grammar School was built in 1916 and was later developed into Milpitas Library in 2009 and is still in use by the Santa Clara County Library System.

The Jose Maria Alviso Adobe Home was built in 1837 and is designated a historical building. The home is located at 2087 Alviso Adobe Court was recently renovated to capture the historical significance of early California settlers to the Santa Clara Valley. Tours are offered on Saturdays and is an attraction adjacent to a community park.

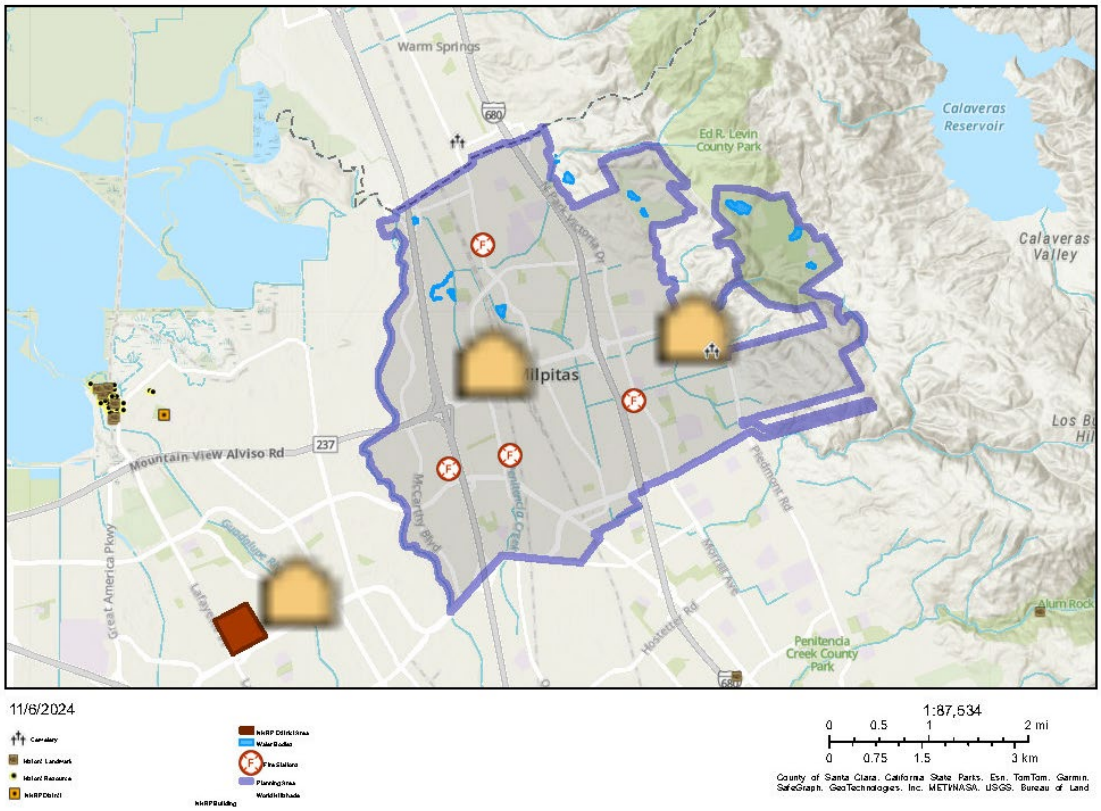


**Figure 1-7. Cultural Values at risk map (Source MFD 2024)**

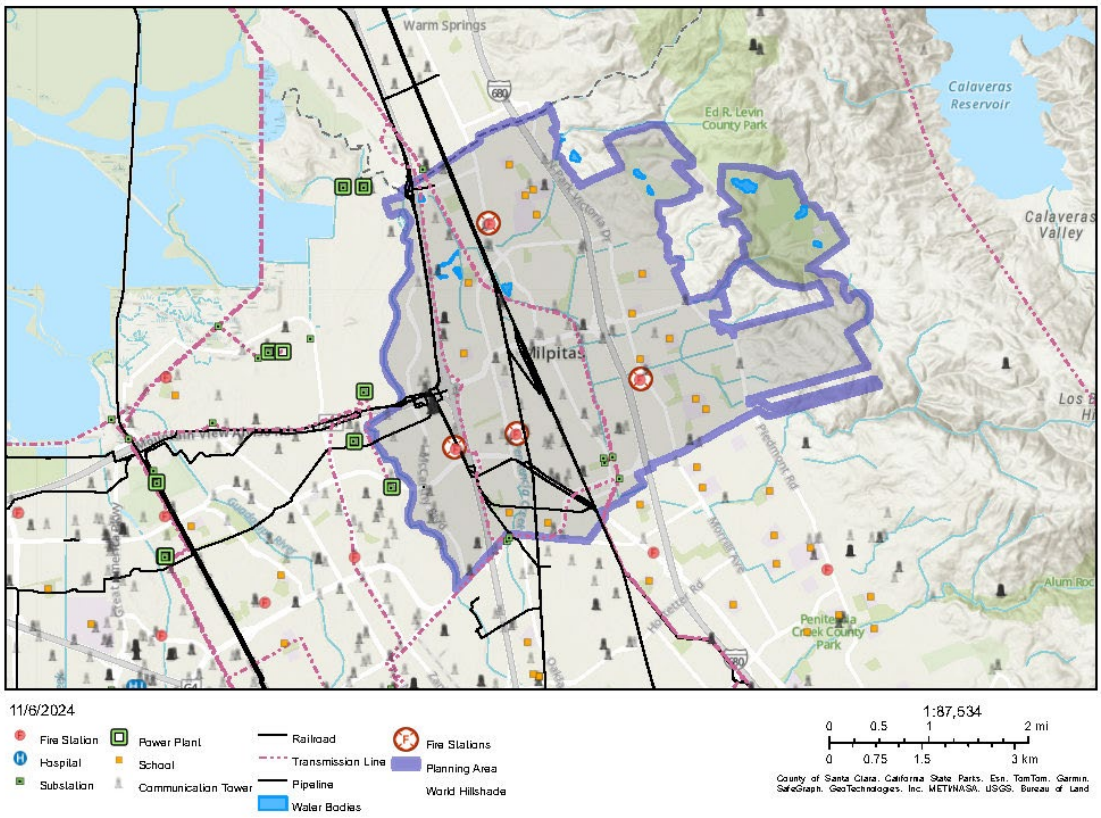


**Figure 1-8. Socioeconomic Values at risk (Source MFD 2024)**

# MITIGATION PROJECTS AND PRIORITIZATIONS

The City of Milpitas Planning Area does not have mitigation projects or prioritizations within its boundaries. The Milpitas Fire Department will defer to East Foothills CWPP referenced below as the fuel models are congruent with the recommendations:

The following project tables have been developed by the community and Advisory Team to direct specific project implementation for communities in the East Foothills. The tables below are tiered to the strategic goals presented in the countywide CWPP document through project IDs in the first column of each table. The tables are categorized by the three goals of the Cohesive Wildland Fire Management Strategy- Table 1-4.1) Resilient Landscapes (vegetation and fuel reduction projects, Table 1-4.2) Fire Adapted Communities (public education/ outreach and structural ignitability projects) and Table 1-4.3) Safe and Effective Wildfire Response (fire suppression resource, evacuation, fire department capacity building projects).

Recommended Fuel Reduction Projects in the East Foothills are included in Table 1-4.1. More detailed descriptions of some of those projects are included in the Project Descriptions section.

In addition, projects for public education and outreach, fire-fighting capabilities and structural ignitability have been developed and are presented in Table 1-4.3.