



Santa Clara County Multijurisdictional Hazard Mitigation Plan 2023 Update

City of Mountain View Annex

February 21, 2024

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1. City of Mountain View

1.1. Hazard Mitigation Plan Points of Contact

The point of contact during the Santa Clara County Multijurisdictional Hazard Mitigation Plan (MJHMP) planning process for the City of Mountain View was the Fire Department Public Information Officer and Office of Emergency Services Coordinator. This annex within the MJHMP was developed using information provided by the City of Mountain View’s Local Planning Team.

Table 1: City of Mountain View Local Planning Team Members for the 2023 Santa Clara County MJHMP

Name	Position	Organization	Role on Team and in Planning Process
Robert Maitland	Fire Department Public Information Officer and Office of Emergency Services Coordinator	City of Mountain View	General oversight, hazard identification, and plan development
Eric Anderson	Advanced Planning Manager	City of Mountain View	Hazard identification and plan development
Nena Bizjak	Chief Building Official	City of Mountain View	Hazard identification and plan development
Renee Gunn	Associate Civil Engineer and Floodplain Administrator	City of Mountain View	Hazard identification and plan development

The City’s Local Planning Team Members participated in the MJHMP by attending meetings on the Plan Kick-Off, Risk Assessment, Capabilities Assessment, Mitigation Strategy, Wrap-up, and four one-on-one meetings with the planning consultant. In addition, the city filled out the requested forms on each section which were used to develop this annex. The city also shared information regarding public opportunities to participate in the draft plan update utilizing the digital survey and seven in-person and virtual public outreach meetings. Further, the City team was provided the opportunity to review the draft plan prior to submittal to Cal OES and FEMA.

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Table 2: External Stakeholders Invited to Be Involved in Planning Process

Agency or Organization	Stakeholder Type	Description
American Red Cross	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations, among others.	A nonprofit humanitarian organization that provides emergency assistance, disaster relief, and disaster preparedness education in the United States.
Amateur Radio Emergency Service (ARES)	Representatives of businesses, academia, and other private organizations.	A corps of trained amateur radio operator volunteers organized to assist in public service and emergency communications.
California Office of Emergency Services (Cal OES)	Local and regional agencies involved in hazard mitigation activities.	Office responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities within the state.
California Department of Forestry and Fire Protection	Local and regional agencies involved in hazard mitigation activities.	The fire department of the California Natural Resources Agency.
California Department of Transportation	Agencies that have the authority to regulate development.	An executive department of the U.S. state of California.
Cattlemen’s Association	Representatives of businesses, academia, and other private organizations.	A nonprofit trade association that represents California's ranchers and beef producers in political affairs.
City of East Palo Alto	Neighboring communities.	A city in San Mateo County, California, United States.
City of Menlo Park	Neighboring communities.	Menlo Park is a city at the eastern edge of San Mateo County.
Cooper-Garrod Estate Vineyards	Representatives of businesses, academia, and other private organizations.	Garrod Farms is a family-owned and operated estate winery and stables.
Department of Homeland Security	Agencies that have the authority to regulate development.	The U.S. federal executive department responsible for public security, roughly comparable to the interior or home ministries of other countries.
Department of Toxic Substances	Agencies that have the authority to regulate development.	An agency of the government of the state of California that protects public health and the environment from hazardous waste.

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Agency or Organization	Stakeholder Type	Description
Downtown Streets Team	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	Teams that restore dignity, inspire hope, and provide a pathway to recover from homelessness.
Emergency Medical Services	Agencies that have the authority to regulate development.	Provides statewide coordination and leadership for the planning, development, and implementation of local EMS systems.
Emergency Services Volunteer Representative	Local and regional agencies involved in hazard mitigation activities.	Organization that ensures public safety, security, and health by addressing and resolving different emergencies.
Federal Aviation Administration	Agencies that have the authority to regulate development.	Offers civil aviation safety enforcement services.
Google	Representatives of businesses, academia, and other private organizations.	American multinational technology company focusing on artificial intelligence, online advertising, search engine technology, cloud computing, computer software, quantum computing, e-commerce, and consumer electronics.
Hidden Villa Farm	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations, among others.	Nonprofit educational organization teaching programs on environmental and multicultural awareness.
Intel Corporation	Representatives of businesses, academia, and other private organizations.	An American multinational corporation and technology company headquartered in Santa Clara, California.
Kaiser Permanente—Santa Clara	Representatives of businesses, academia, and other private organizations.	An American integrated managed care consortium.
Life Moves	Representatives of businesses, academia, and other private organizations.	Provides interim housing and supportive services for homeless families and individuals to rapidly return to stable housing.

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Agency or Organization	Stakeholder Type	Description
Los Altos School District	Representatives of businesses, academia, and other private organizations.	Los Altos School District serves the elementary and intermediate educational needs of Los Altos, Los Altos Hills, Mountain View and Palo Alto, United States.
Moffett Field Ames Research Center, National Aeronautics and Space Administration (NASA)	Representatives of businesses, academia, and other private organizations.	Major NASA research center at Moffett Federal Airfield in California's Silicon Valley.
National Weather Service, National Oceanic and Atmospheric Administration (NOAA)	Agencies that have the authority to regulate development.	Scientific and regulatory agency within the U.S. Department of Commerce.
Pacheco Pass Water District	Neighboring communities.	Independent special water district.
Pacific Gas and Electric (PG&E)	Representatives of businesses, academia, and other private organizations, and neighboring communities.	One of the largest combination natural gas and electric utilities in the United States.
Regional Water Quality Control Board	Agencies that have the authority to regulate development.	Provides government regulatory services related to water pollution and control.
Rotating Safe Car Park	Local and regional agencies involved in hazard mitigation activities, and neighboring communities.	Allows for temporary overnight parking for homeless individuals or families living out of their cars as a safe alternative to sleeping on the streets or in a homeless shelter.
San Francisquito Creek Joint Powers Authority	Local and regional agencies involved in hazard mitigation activities, and neighboring communities.	The agency works to address the cities' flooding, environmental and recreational concerns.
San José Water	Agencies that have the authority to regulate development.	An investor-owned public utility.
Santa Clara County CERT	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	Trains residents to prepare for and respond to life-threatening events in their community.
Santa Clara County FireSafe Council	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	A nonprofit, grassroots organization that provides education and project assistance for homeowners.

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Agency or Organization	Stakeholder Type	Description
Santa Clara County Local Oversight Program	Local and regional agencies involved in hazard mitigation activities.	Program to oversee assessment and mitigation of contaminated sites to protect groundwater resources, human health, safety, and the environment.
Santa Clara County Parks	Agencies that have the authority to regulate development, and neighboring communities.	Provide, protect, and preserve regional parklands for the enjoyment and education.
Santa Clara County Planning & Development	Agencies that have the authority to regulate development, and neighboring communities.	Plays a key role in supporting economic development and ensuring opportunities for the public to participate in land development.
Santa Clara County Sheriff's Office	Agencies that have the authority to regulate development, and neighboring communities.	A local law enforcement agency that serves Santa Clara County, California.
Santa Clara University	Representatives of businesses, academia, and other private organizations.	A private Jesuit university in Santa Clara, California.
Santa Clara Valley Open Space Authority	Neighboring communities.	An independent special district in Santa Clara County.
Santa Cruz County	Neighboring communities.	A county on the Pacific coast of the U.S. state of California.
St. Louise Hospital (Santa Clara County Hospital System)	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	Community hospital.
Stanford Healthcare	Representatives of businesses, academia, and other private organizations, and neighboring communities.	Multispecialty clinic that provides convenient access to advanced, specialty care in the South Bay.
Vista Center for the Blind and Visually Impaired	Representatives of businesses, academia, and other private organizations.	Empowers individuals who are blind or visually impaired to embrace life to the fullest through evaluation, counseling, education, and training.
Westwind Barn	Representatives of businesses, academia, and other private organizations.	State-of-the-art horse boarding and training facility.
County of Santa Clara	Neighboring jurisdiction, local agency involved in hazard mitigation.	Response for engaging the whole community in assessing needs and developing strategies to achieve stronger mitigation capabilities within the Santa Clara County Operational Area.
City of Campbell	Neighboring communities.	A city in Santa Clara County.

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Agency or Organization	Stakeholder Type	Description
City of Cupertino	Neighboring communities.	Located in Silicon Valley.
City of Gilroy	Neighboring communities.	A city in Santa Clara County.
City of Los Altos	Neighboring communities.	A city in Santa Clara County.
Town of Los Altos Hills	Neighboring communities.	A city in Santa Clara County.
Town of Los Gatos	Neighboring communities.	A city in Santa Clara County.
City of Milpitas	Neighboring communities.	A city in Santa Clara County.
City of Morgan Hill	Neighboring communities.	A city in Santa Clara County.
City of Palo Alto	Neighboring communities.	Located in Silicon Valley.
City of San José	Neighboring communities.	Located in Silicon Valley.
City of Santa Clara	Neighboring communities.	A city near San Jose, in California's Silicon Valley.
City of Saratoga	Neighboring communities.	Located in Silicon Valley.
City of Sunnyvale	Neighboring communities.	Located in the Santa Clara Valley
Santa Clara County Fire Department	Local and regional agencies involved in hazard mitigation activities, and neighboring communities.	A California Fire Protection District serving Santa Clara County.
Santa Clara Valley Water District	Representatives of businesses, academia, and other private organizations, and neighboring communities.	Provides stream stewardship, wholesale water supply, and flood protection for Santa Clara County, California.

The City supported a “whole community” approach to this plan update. Neighboring communities, local and regional agencies involved in mitigation activities, agencies that have the authority to regulate development as well as businesses, academia, and other private and nonprofit interests were invited to be involved in the planning process by participating in planning meetings, public meetings, or reviewing the draft plan. In addition to the wide variety of stakeholders identified by the County, other stakeholders the City of Mountain View recommended including included the American Red Cross, City of Palo Alto, City of Sunnyvale, City of Los Altos, Google, Moffett Park AMES/NASA, Google, and Santa Clara Valley Water. Additional stakeholders that were able to participate are included in Volume 1 of this plan.

1.1.1. Public Outreach and Engagement

In addition to inviting a wide range of stakeholders, the City supported public outreach and engagement through distributing a digital survey utilizing social media. This survey reached members of underserved populations, including primarily non-English speaking households. In addition, the MJHMP was discussed at two virtual and five in-person public meetings across Santa Clara County. These in-person meetings were targeted towards areas with socially vulnerably populations. These meetings were also designed to be accessible for AFN (access and functional needs) populations. The public was also provided the opportunity to comment on the draft plan. Comments from the public survey were reviewed, evaluated for alignment with planning priorities, and incorporated as appropriate. Overall, the public identified similar hazards of concern as the plan participants including flooding, which Mountain View ranked as one of the city’s highest hazards of concern and discussed in the risk assessment portion of the plan update. Further, the public expressed additional needs for public outreach, including targeted outreach to vulnerable populations like populations in high-risk areas. This feedback informed the plan participant meetings and is reflected in the mitigation actions the City of Mountain View selected.

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The participation of the City of Mountain View and its stakeholders helped inform the development of the MJHMP and this annex in accordance with current priorities. The new plan continues to expand upon the work of the prior plan including emphasizing partnerships both within jurisdictions and special districts as well as with external stakeholders. Further, there is an increased emphasis on climate change, reflecting the increased understanding of the risk this hazard poses to the OA. The City did not identify additional changes priorities to be highlighted in their annex.



Figure 1: Mountain View Social Media Notice of Public Meeting



Figure 2: Mountain View Social Media Post link to Public Survey

1.2. Jurisdiction Profile

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation:** November 7, 1902
- **Current Population:** 83,863 as of January 1, 2022
- **Population Growth:** According to the California Department of Finance, the City of Mountain View has experienced a 0.9 per cent increase in population from 2017 (79,966) to 2022 (83,863).
- **Location and Description:** Mountain View is located north of the Santa Cruz Mountains and south of the southern end of San Francisco Bay. It is located 10 miles north of San Jose and 35 miles south of San Francisco and is just over 12 square miles. There are four major commercial and employment centers in the City: Downtown, which is located on and around Castro Street, the City's historic main street; San Antonio Center, a regional shopping hub located near the intersection of El Camino Real and San Antonio Road; North Bayshore, a major employment area with many office parks located north of U.S.-101; and East Whisman, another major employment area with a mix of office parks and industrial uses near SR-237. Most of the rest of the City is made up of diverse residential neighborhoods with a mix of single family and multifamily developments. Mountain View is majority renter and has among the highest proportion of renters in the Bay Area. NASA Ames, one of the nation's leading research laboratories, and El Camino Hospital, a major regional hospital, are also located in Mountain View.
- **Brief History:** When Mission Santa Clara de Asís was founded in 1777, Mission Indians used the land that is now Mountain View as pasture for sheep and cattle. Following the secularization of the missions by the Mexican government in the 1830s, the land was subdivided by Mexican land grants. In 1854, the land grant Rancho Pastoria de las Borregas (sheep pasture ranch) was awarded to Mariano Castro.

Mountain View began as a stagecoach stop between the two growing centers of population—the port of San Francisco and the new State Capitol in San Jose. By the late 1800s, Mountain View had become an agricultural boomtown. The large land holdings of the earlier settlers had been divided many times over. Soon, the pasture lands and forests were cultivated in grain and hay. By 1880, many farmers had turned their lands into profitable orchards and vineyards.

At the outset of the 20th century, a continual increase in population brought social complexities that led to the creation of a formalized government. On November 7, 1902, the City of Mountain View was incorporated.

Throughout the 1920s, commercial and industrial growth continued to accelerate. By the 1950s, Mountain View had transformed from a sleepy little farm town to a bustling city with a vibrant downtown. To further support the growing community, the City of Mountain View was chartered on January 15, 1952. Throughout the latter half of the 20th century, the City was the location of significant technological innovations and the birthplace of many new technology-related companies.

- **Climate:** Mountain View has a Mediterranean climate. Summers are warm and dry, while winters are mild and wet. However, both summers and winters are somewhat moderated due to its relative proximity to the Pacific, although it has a lesser maritime influence than San Francisco further north on the peninsula. The temperature typically ranges from the mid-50s to the low 80s-degree Fahrenheit (°F). Mountain View receives an average of 15 inches of rainfall a year, well below the nation's average.
- **Governing Body Format:** Mountain View's City Charter established a council and manager form of government. The Council is the legislative body of the City. It sets policy and establishes the City's overall priorities and direction. The seven Councilmembers are elected at large for four-year terms that are staggered so that three or four Council seats are filled at the general municipal election in November of every even-numbered year. Service on Council is limited to two consecutive full terms. In January of each year, Council elects one of its members as Mayor and another as Vice Mayor. The City Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.

1.3. Development Trends

Mountain View's diverse mix of land uses includes neighborhoods with single-family and multifamily residences, a vibrant Downtown, commercial streets, and shopping districts as well as industrial districts. Most of the land in Mountain View is occupied by residential, public, institutional, and open space uses. There are smaller areas of commercial use and vacant land.

On July 10, 2012, the City Council adopted the 2030 General Plan, a comprehensive update to the City's 1992 General Plan. The 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The General Plan is the foundation for zoning regulations, subdivisions, and public works plans. It also addresses other issues related to the City's physical environment, such as safety.

Approximately 6,000 net new units and 3 million net new square feet of office space have been built or started construction since 2017.

The City of Mountain View has increased its population since the previous plan was developed, thereby increasing its vulnerability to earthquakes, climate change, drought, heavy rain, high wind, extreme heat, flooding, and liquefaction. Due to their limited extent, no significant change in vulnerability has occurred for wildfire or landslide. Mountain View has and will continue to monitor the vulnerability of its population through updating the current City Code to address inconsistencies with California Building Codes, enforcement of floodplain management requirements and review and development in the SFHA, and issuance of Floodplain Development permits and participation in the CRD program as a class 7 city.

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The City has adopted two new area plans (“Precise Plans”) allowing significant new housing in former office and industrial areas, both with long-term groundwater contamination:

- The North Bayshore Precise Plan allows about 10,000 new units north of highway 101, an area close to the bay and separated from the rest of the City by the freeway.
- The East Whisman Precise Plan allows about 5,000 new units along the light rail line near highway 237 and Middlefield Road, this area is also near Moffett Park.
- Google (with their residential partner, Lendlease) has already proposed major Master Plans in these areas, building out a significant portion of these units in the next 20-30 years. In addition, other developers have proposed major projects in these areas, adding thousands of units in the next 5-10 years.

The City enacted rent-stabilization in 2017. However, high housing costs and tenant displacement continue to be major development-related issues, and the City is developing strategies to address them, including allowing higher residential densities, rent-stabilized unit replacement requirements, and tenant relocation assistance.

Table 3: Recent and Expected Future Development Trends

Criterion	Response
<p>Has your jurisdiction annexed any land since the development of the previous hazard mitigation plan?</p> <ul style="list-style-type: none"> • If yes, give the estimated area annexed and estimated number of parcels or structures. 	<p>No</p>
<p>Is your jurisdiction expected to annex any areas during the performance period of this plan?</p> <ul style="list-style-type: none"> • If yes, please describe land areas and dominant uses. • If yes, who currently has permitting authority over these areas? 	<p>It is possible that the Shenandoah Square property at Middlefield and Moffat may be annexed over the next decade. However, this is not a certainty. It currently contains 126 dwelling units.</p>
<p>Are any areas targeted for development or major redevelopment in the next five years?</p> <ul style="list-style-type: none"> • If yes, please briefly describe, including whether any of the areas are in known hazard risk areas. 	<p>Yes. The City has adopted two new area plans (“Precise Plans”) allowing significant new housing in formerly office and industrial areas, both with long-term groundwater contamination.</p> <p>The North Bayshore Precise Plan allows about 10,000 new units north of highway 101, an area close to the bay and separated from the rest of the City by the freeway.</p> <p>The East Whisman Precise Plan allows about 5,000 new units along the light rail line near highway 237 and Middlefield Road This area is also near Moffett Park.</p>

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Criterion	Response							
	<p>Google (with their residential partner, Lendlease) has already proposed major Master Plans in these areas, building out a significant portion of these units in the next 20-30 years. In addition, other developers have proposed major projects in these areas, adding thousands of units in the next 5-10 years.</p> <p>Outside of North Bayshore and East Whisman, residential developments with more than 50 units are proposed along El Camino Real, San Antonio Road, and Middlefield Road. Office buildings are proposed along San Antonio Road and in Downtown. In general, the “Change Areas” of the City are North Bayshore, East Whisman, the San Antonio Shopping Center area, El Camino Real, and Moffett Boulevard.</p> <p>All development is at some risk to earthquakes (though the northern third of the City is at greatest risk to liquefaction), climate change, drought, and inclement weather.</p> <p>No proposed residential developments with more than 100 units are in Flood Hazard zones, but several smaller residential developments are. Several major office developments are in Flood Hazard zones, including major Google buildings at Charleston East and Landings Drive as well as Inuit buildings on Marine Way.</p>							
<p>How many building permits were issued in your jurisdiction since the development of the previous hazard mitigation plan?</p>		2017	2018	2019	2020	2021	2022	
	Total Number of Permits	9,784	8,360	7,706	5,980	4,438	6,102	
<p>Please provide the number of permits for each hazard area or provide a qualitative description of where development has occurred.</p>	<p>Development in the northern third of the City is at risk of liquefaction. Development in this area includes several office buildings and several hundred new dwelling units (mostly attached single-family residences). A similar number of office buildings and housing units have been built in flood zones, which are located along creeks throughout the City and in the northern part of the City.</p>							
<p>Please describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.</p>	<p>Mountain View is built out.</p>							

1.4. Capability Assessment

1.4.1. Resources for the 2023 Planning Initiative

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for inclusion into the 2023 Multijurisdictional Hazard Mitigation Plan for both Volume 1 and Volume 2 (City of Mountain View Annex). All the below items were additionally reviewed as part of the full capability assessment for the City of Mountain View.

- **Mountain View General Plan** - The General Plan, including the Economic Development Housing, Land Use, and Safety Elements, were reviewed for information regarding the jurisdiction profile, and the goals and policies consistent with hazard mitigation for carry over as goals and objectives.
- **Capital Improvement Plan** - The Capital Improvement Plan was reviewed to identify cross-planning initiatives for inclusion as mitigation projects.
- **Emergency Operations Plan** –The EOP was reviewed for identify potential integrative initiatives for mitigation strategies and planning.
- **Additional Plans** – Additional plans such as the Transportation plan, Stormwater Management Plan, Climate Action Plan, Forest Management Plan, and Parks and Recreation Plan were reviewed to assess existing and potential mitigation strategies.
- **Technical Reports and Local Information** - Additional resources such as maps, existing local documentation, and other resources were used to complete the City of Mountain View - Unincorporated Annex.
- **Mountain View Municipal Code** - The Municipal Code was reviewed for the jurisdiction profile, the full capability assessment, and for identifying opportunities for action plan integration.
- **Ordinances** - The Floodplain Management, Zoning, Subdivision, Stormwater, Flood Damage Prevention, and Environmental Protection Ordinances were reviewed for alignment with natural hazard mitigation planning efforts.

1.4.2. Full Capability Assessment

An assessment of legal and regulatory capabilities is presented in Table 111 and Table 112. An assessment of fiscal capabilities is presented in Table 113. An assessment of staffing capabilities is presented in Table 114. An assessment of administrative and technical capabilities is presented in Table 115. Information on National Flood Insurance Program (NFIP) compliance is presented in Table 116. An assessment of education and outreach capabilities is presented in Table 117. Classifications under various community mitigation programs are presented in Table 118. Development and permitting capabilities are presented in Table 119, and the community’s adaptive capacity for the impacts of climate change is presented in Table 120.

Table 4: Legal and Regulatory Capabilities: Codes, Ordinances, and Requirements

Legal and Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Building Code	Yes	No	Yes	No
Comment: <i>The City has adopted the California Building Code (2019).</i>				

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Legal and Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Zoning Ordinance	Yes	No	No	No
<i>Comment: City Code, Chapter 36</i>				
Subdivision Ordinance	Yes	No	No	No
<i>Comment: City Code, Chapter 28</i>				
Stormwater Management Ordinance	Yes	No	Yes	Yes
<i>Comment: City Code, Chapter 35</i>				
Other Natural Hazard-Specific Ordinances	No	No	No	No
<i>Comment: None Identified.</i>				
Post-Disaster Recovery	No	No	No	No
<i>Comment: None Identified.</i>				
Real Estate Disclosure	No	Yes	Yes	No
<i>Comment: CA. State Civil Code 1102</i>				
Growth Management	No	No	Yes	No
<i>Comment: The State of California requires every city and county to have a general plan to guide community growth (CA State Government Code §65300 et seq.) The City's General Plan addresses land uses and projections for growth and change.</i>				
Site Plan Review	Yes	No	No	No
<i>Comment: City Code, Chapter 36</i>				
Environmental Protection	Yes	Yes	Yes	Yes
<i>Comment: City Code, Chapter 2, Article 7</i>				
Flood Damage Prevention	Yes	Yes	Yes	Yes
<i>Comment: City Code, Chapter 8</i>				
Emergency Management	Yes	Yes	No	Yes
<i>Comment: City Code, Chapter 11</i>				
Climate Change	No	No	No	No
<i>Comment: None Identified.</i>				

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Legal and Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Acquisition of land for open space and public recreation uses	Yes	No	No	No
<i>Comment: City Code, Chapter 41</i>				

Table 5: Planning, Legal, and Regulatory Capabilities

Planning, Legal, or Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
General Plan	Yes	No	Yes	Yes
<i>Is the plan compliant with Assembly Bill 2140? Yes</i>				
<i>Comment: Mountain View General Plan 2030</i>				
Capital Improvement Plan	Yes	No	No	Yes
<i>How often is the plan updated? Annually</i>				
<i>Comment: 2022-23 Capital Improvement Program</i>				
Floodplain or Watershed Plan	Yes	Yes	No	Yes
<i>Comment: Santa Clara Valley Water District</i>				
Stormwater Management Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Urban Water Management Plan	Yes	Yes	Yes	Yes
<i>Comment: 2020 Urban Water Management Plan and Water Shortage Contingency Plan</i>				
Habitat Conservation Plan	Yes	Yes	Yes	Yes
<i>Comment: Burrowing Owl Management Plan, the City is currently working to create a new Burrowing Owl Preservation Plan, and current draft of Shoreline Wildlife Management Plan</i>				
Green Infrastructure Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Parks or Open Space Plan	Yes	No	No	Yes
<i>Comment: Parks and Open Space Plan 2014</i>				
Economic Development Plan	Yes	No	No	Yes
<i>Comment: The City of Mountain View is looking to develop an Economic Vitality Strategy.</i>				
Transportation Plan	Yes	No	Yes	Yes
<i>Comment: The General Plan 2030 includes a mobility element, the City has also adopted the Pedestrian Master Plan, Bicycle Transportation Plan, Multimodal Improvement Plan, and the Active Transportation Plan.</i>				
Shoreline Management Plan	No	No	No	No

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Planning, Legal, or Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
<i>Comment: The City has a comprehensive Sea Level Rise study which includes projects to mitigate the effects of sea level rise. Projects are incorporated into the annual CIP.</i>				
Community Wildfire Protection Plan	No	No	No	No
<i>Comment: None Identified; Mountain View is not included in the Santa Clara County Wildfire Protection Plan.</i>				
Forest Management Plan	Yes	Yes	Yes	No
<i>Comment: City has adopted a Community Tree Master Plan</i>				
Climate Action Plan	Yes	No	No	Yes
<i>Comment: 2015 Municipal Operations Climate Action Plan</i>				
Local Emergency Operations Plan	Yes	No	No	Yes
<i>Comment: Emergency Operations Plan</i>				
Threat and Hazard Identification and Risk Assessment (THIRA)	No	No	No	No
<i>Comment: None Identified.</i>				
Post-Disaster Recovery Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Continuity of Operations Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Public Health Plan	No	Yes	No	No
<i>Comment: Santa Clara County Public Health Department Strategic Plan</i>				

Table 6: Financial Capabilities

Financial Capability	Could the resource be used to fund future mitigation activities?	Has the funding resource been used in the past for mitigation activities? If yes, for what type of mitigation activities?
Community Development Block Grants	Yes, if the mitigation activities fit under an eligible CDBG activity and meet a National Objective.	No
Other Federal Funding Programs	N/A	N/A
Capital Improvements Project Funding	Yes	The development of a Comprehensive Plan for addressing Sea Level Rise and proposing projects to mitigate.
Authority to Levy Taxes for Specific Purposes	Yes	No
User Fees for Water, Sewer, Gas or Electric Services	Yes	No
Stormwater Utility Fee	Yes	No

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Financial Capability	Could the resource be used to fund future mitigation activities?	Has the funding resource been used in the past for mitigation activities? If yes, for what type of mitigation activities?
Incur Debt through General Obligation Bonds	Yes	No
Incur Debt through Special Tax Bonds	Yes	No
Incur Debt through Private Activity Bonds	Yes	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes	No
State Funding Programs	Yes	No
Development Impact Fees for Homebuyers or Developers	Yes	No
Public or Private Partnership Funding Sources	Yes	No
Other Funding Sources	Yes	No

Table 7: Staffing Capabilities

Staffing Capability	Have Capability?	Is staffing adequate to enforce regulations?	Is staff trained on natural hazards and mitigation?
Chief Building Official	<ul style="list-style-type: none"> • Yes • Full Time • Community Development Department 	Yes	Yes
Parks and Recreation Director	No	N/A	N/A
Emergency Manager	<ul style="list-style-type: none"> • Yes • Full Time • Office of Emergency Services 	Yes	Yes
Community Planner	<ul style="list-style-type: none"> • Yes • Full Time • Community Development Department 	Yes	No
Civil Engineer	<ul style="list-style-type: none"> • Yes • Full Time • Public Works Department 	Yes	Yes

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Staffing Capability	Have Capability?	Is staffing adequate to enforce regulations?	Is staff trained on natural hazards and mitigation?
Engineers or professionals trained in building or infrastructure construction practices	<ul style="list-style-type: none"> • Yes • Full Time • Public Works Department 	Yes	Yes
Planners or engineers with knowledge of land development and land management practices	<ul style="list-style-type: none"> • Yes • Full Time • Public Works Department 	Yes	Yes
Planners or engineers with an understanding of natural hazards	<ul style="list-style-type: none"> • Yes • Full Time • Public Works Department 	Yes	Yes
Surveyors	No	N/A	N/A
GIS Coordinator or personnel skilled or trained in GIS applications	<ul style="list-style-type: none"> • Yes • Full Time • Information Technology Department 	Yes	No
Public Works Director	<ul style="list-style-type: none"> • Yes • Full Time • Public Works Department 	Yes	Yes
Fire Chief	<ul style="list-style-type: none"> • Yes • Full Time • Fire Department 	Yes	Yes
Environmental Director	No	N/A	N/A
Staff with training in benefit/cost analysis	<ul style="list-style-type: none"> • Yes • Full Time • Finance 	Yes	Yes
Scientist familiar with natural hazards in local area	No	N/A	N/A

Table 8: Administrative and Technical Capabilities

Administrative or Technical Capability	Have Capability?	Has the capability been used to assess or mitigate risk in the past? If yes, what type of hazard event?
Maintenance programs to reduce risk	Yes	The Forestry and Roadway Landscape Division is responsible for the maintenance of roadway and median landscaping and management of the urban forest including maintenance of inventoried street trees (including those in parks) and enforcement of the City's Heritage Tree Ordinance. The Division is also responsible for maintenance of the downtown Castro Street and Civic Center area and administration of the City's Integrated Pest Management Program.
Mutual aid agreements	Yes	The Mountain View Fire Department has the ability to deploy as a single resource or as a crew when requests for mutual aid are received.
Hazard data and information	Yes	The Office of Emergency Services keeps records of extreme weather and pandemics on the City's share drive.
Hazus analysis or GIS software	Yes	No
Grant writing	Yes	No
Does your jurisdiction have any established warning systems or services for hazard events?	Yes	AlertSCC. Alerts are sent directly to your mobile device, landline, and or email. Alerts for fire, earthquake, Heavy rain, heavy winds, extreme temperature, crime, and instructions during a disaster.

Table 9: National Flood Insurance Program (NFIP) Compliance

Topic	Response
What department in your jurisdiction is responsible for floodplain management?	Department of Public Works
Who acts as your jurisdiction's floodplain administrator?	Public Works Director
Is the floodplain administrator or NFIP Coordinator certified?	Yes
Is floodplain management an auxiliary function in your jurisdiction?	Yes
What is the date of adoption of your flood damage prevention ordinance?	4/25/23

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Topic	Response
Do floodplain development regulations meet or exceed FEMA or state minimum requirements? If regulations exceed requirements, in what ways?	Yes
How are the substantial improvement/substantial damage provisions implemented?	The Floodplain Administrator or his/her designee is responsible for making substantial improvement/substantial damage determination for the City in accordance with FEMA-213 "Answers to Questions About Substantially Damaged Buildings." Other departments/departments and city staff may help support the implementation of this provision if necessary. In addition to the standard definition, substantial damage is defined as flood-related damages sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such event, on the average, equals or exceeds twenty-five percent of the market value of the structure before the damage occurred. Substantial improvement means any combination of repairs, reconstruction, rehabilitation, addition, or other proposed new development of a structure taking place during a five-year period, the cumulative cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement. For each structure, the five-year period begins on the date of the first improvement or repair of that structure subsequent to the effective date of the Floodplain Management Ordinance. The Floodplain Administrator is required to review all permits, including making substantial improvement/substantial damage determinations for existing structures.
Provide an explanation of the permitting process for development within the floodplain.	See City Code Chapter 8, Article VII,
When did your jurisdiction enter the NFIP?	August 15, 1980
Is your jurisdiction in good standing with the NFIP?	Yes
Are the jurisdiction's Flood Insurance Rate Maps (FIRMs) digital, paper, or both?	Digital
Explanation of NFIP administration services within your jurisdiction.	Code compliance, permit review and issuance, inspections, public information outreach, engineering design.
Barriers to running an effective NFIP program in your jurisdiction.	The City has a relatively small SFHA and does not have dedicated staff and therefore staff have multiple responsibilities.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	November 10, 2010

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Topic	Response
Is a CAV or CAC scheduled or needed?	Yes, it is scheduled for 2023.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes Continuing Education
Does your jurisdiction participate in the Community Rating System (CRS)?	Yes, Class Ranking 7
How many structures are exposed to flood risk within your jurisdiction?	Approximately 1200 structures in the SFHZ.
How many flood insurance policies are in force in your jurisdiction? <ul style="list-style-type: none"> • What is the insurance in force? • What is the premium in force? 	<ul style="list-style-type: none"> • 344 policies in force • \$263,363 premium in force • \$117,867,000 total coverage
Areas of flood risk with limited NFIP policy coverage.	None, there is minimal flooding outside of the SFHZ.
How many total loss claims have been filed in your jurisdiction? <ul style="list-style-type: none"> • How many claims were closed without payment or are still open? • What is the total amount of paid claims? • How many claims were for substantial damage? 	<ul style="list-style-type: none"> • 5 total loss claims have been filed • \$10,919 total payments for losses • No claims for substantial damage
How NFIP compliance will be continued during the next 5 years.	<ul style="list-style-type: none"> • Updating of the current City Code to address inconsistencies with California Building Code • Continued enforcement of floodplain management requirements and review of new development in the SFHA and issuance of Flood Development Permits • Participation in the CRS program as a Class 7 city

Table 10: Education and Outreach Capabilities

Education or Outreach Capability	Response	How does the personnel, program, or organization relate to disaster resilience and mitigation?	Could the personnel, program, or organization help implement future mitigation activities?
Does your jurisdiction have a Public Information Officer or Communications Office?	Yes	The PIO can communicate hazard and disaster related information with the public.	Yes

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Education or Outreach Capability	Response	How does the personnel, program, or organization relate to disaster resilience and mitigation?	Could the personnel, program, or organization help implement future mitigation activities?
Does your jurisdiction have personnel skilled or trained in website development?	Yes	Websites can be developed to provide hazard and disaster related information or education.	Yes
Does your jurisdiction have hazard mitigation information available on your website?	Yes	The hazard mitigation plan is available on the City website.	Yes
Does your jurisdiction utilize social media for hazard mitigation education and outreach?	Yes	The City uses Facebook, Twitter, and other social media to provide education and outreach.	Yes
Does your jurisdiction have any citizen boards or commissions that address issues related to hazard mitigation?	No	N/A	N/A
Does your jurisdiction have any ongoing public education or information programs that could be used to communicate hazard-related information?	Yes	The Fire Department's Environmental Protection Division educates the public about preparedness, recovery, and resilience in the face of all types of emergencies. Public education is provided via presentations, social media outreach, and reading materials handed out at fairs and events.	Yes
Does your jurisdiction have local citizen groups or nonprofit organizations focused on environmental protection, emergency preparedness, and/or underserved populations?	Yes	The CERT team is a local preparedness group for citizens. There are also many local advocacy groups and organizations that address environmental protection and underserved populations.	Yes
Does your jurisdiction have natural disaster or safety related school programs?	Yes	The School Resources Officer and Fire TEMS Team, provide training videos to the schools on how to handle trauma care.	Yes

Education or Outreach Capability	Response	How does the personnel, program, or organization relate to disaster resilience and mitigation?	Could the personnel, program, or organization help implement future mitigation activities?
Does your jurisdiction have public/private partnership initiatives addressing disaster-related issues	No	N/A	N/A

Table 11: Community Classifications

	Participating?	Classification	Date Classified
Community Rating System	Yes	7	5/01/2002
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Insurance Services Office (ISO) Fire Rating	Yes	1	2014
National Weather Service StormReady Program®	No	N/A	N/A
Firewise USA® Program	No	N/A	N/A

Table 12: Development and Permitting Capabilities

Development or Permitting Capability	Response
Does your jurisdiction issue development permits? • If no, who does? If yes, which department?	Yes, the Community Development Department.
Does your jurisdiction have the ability to track permits by hazard area?	Yes, but only the flood hazard zones.
Does your jurisdiction have a buildable lands inventory?	The City of Mountain View identifies underdeveloped areas that could be redeveloped.

Table 13: Adaptive Capacity for Climate Change

Adaptive Capacity Assessment Question	Jurisdiction Rating
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts	High
<i>Comment: A Sea Level Rise study was conducted in 2012 and updated in 2022. A county-wide climate change preparedness tool was recently launched by the County of Santa Clara, and the City of Mountain View will begin the process of developing a climate change vulnerability assessment.</i>	
Jurisdiction-level monitoring of climate change impacts	Low

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Adaptive Capacity Assessment Question	Jurisdiction Rating
Comment: The City has an active Sea Level Rise program and is embarking on a citywide vulnerability analysis.	
Technical resources to assess proposed strategies for feasibility and externalities	Medium
Comment: Very limited staffing resources familiar with climate change externalities. A technical analysis could require contractor support.	
Jurisdiction-level capacity for development of greenhouse gas emissions inventory	High
Comment: The City completes a GHG inventory annually and completes a municipal operations GHG inventory every 3-5 years.	
Capital planning and land use decisions informed by potential climate impacts	High
Comment: The City has completed a Sea Level Rise study, updated in 2022, and has plans to implement the recommended measures. Some of the projects are under construction and others are included in the City's 5-year CIP. The City has also invested heavily in using recycled water where feasible. The City has given significant attention to land use impacts, particularly in its North Bayshore area, which is the most susceptible to these impacts. Additionally, the City is preparing for a comprehensive climate vulnerability analysis, the information from which can inform future capital planning and land use decisions.	
Participation in regional groups addressing climate risks	Medium
Comment: The City is a long-standing and regular participant in Joint Venture Silicon Valley's climate workgroup. Additionally, the City has recently joined the leadership team of the countywide Climate Collaborative and is co-chairing the Seal Level Rise working group.	
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes	Medium
Comment: As required through the California Environmental Quality Act and through implementation of the Greenhouse Gas Reduction Program.	
Identified strategies for greenhouse gas mitigation efforts	High
Comment: The City has developed Climate Action Plans for both City operations and the community as a whole, with both plans identifying strategies, policies, and programs that will reduce the City's carbon emissions 80% below 2005 levels by 2050. Included in the Greenhouse Gas Reduction Program. Additionally, the City has an ambitious Climate Neutrality goal for 2045 and a robustly funded Sustainability Action Plan to make significant progress on the City's greenhouse gas mitigation efforts.	
Identified strategies for adaptation to impacts	Medium
Comment: This will be developed upon completion of the climate vulnerability assessment.	
Champions for climate action in local government departments	Medium
Comment: The City has a Sustainability Working Group with members from City departments. Additionally, the Chief Sustainability and Resiliency Officer sits on the Executive Team and periodically briefs department heads on sustainability efforts.	
Political support for implementing climate change adaptation strategies	Medium
Comment: The City has strong political support for climate mitigation and climate change adaptation strategy implementation.	

Adaptive Capacity Assessment Question	Jurisdiction Rating
Financial resources devoted to climate change adaptation	Low
<i>Comment: The City's Sea Level Rise program is actively engaged in projects along the Bayshore. Additionally, the Sustainability Action Fund has significant financial resources devoted to climate mitigation and adaptation planning.</i>	
Local authority over sectors likely to be negative impacted	Low
<i>Comment:</i>	
Public Capacity	
Local residents knowledge of and understanding of climate risk	High
<i>Comment: Some awareness of Sea Level Rise through project implementation; lived experience of extreme heat, wildfire (secondary impacts) and extreme precipitation.</i>	
Local residents support of adaptation efforts	High
<i>Comment: Strong community support of sustainability and adaptation efforts.</i>	
Local residents' capacity to adapt to climate impacts	Medium
<i>Comment: Moderate capacity; vulnerable populations likely have reduced capacity.</i>	
Local economy current capacity to adapt to climate impacts	High
<i>Comment: Some learned resilience from the pandemic; however economically more fragile currently.</i>	
Local ecosystems capacity to adapt to climate impacts	Medium
<i>Comment: The City is currently developing a Biodiversity strategy that will incorporate assessment of ecosystem capacity to adapt to climate impacts.</i>	

1.4.3. Opportunities to Expand Upon and Improve Existing Capabilities

The hazard mitigation planning process presented the opportunity for the community to discuss and evaluate their current capabilities however, building mitigation capabilities is an ongoing process. New capabilities can be added which will support mitigation. Current capabilities can also be enhanced to actively support mitigation and reduce risk. Significant efforts have been made to increase the capabilities of jurisdictions across the OA. By participating in this plan update, each community is reinforcing their support for mitigation and understanding of the capabilities they need to successfully implement mitigation measures. Actions that can expand and improve existing authorities, plans, policies, and resources for mitigation include:

- Developing a Climate Action Plan which incorporates hazard data and actions to adapt to a changing climate.
- Budgeting and passing policies and procedures for mitigation actions.
- Adopting and implementing stricter mitigation regulations.
- Approving the training of staff for mitigation activities.
- Approving mitigation updates to existing plans as new needs are recognized.
- Continuing to update plans as necessary to ensure they are current and reflect the needs of the community or special district.
- Further developing warning systems and messaging.

- Creating and implementing additional public education and outreach offerings and increasing the volume of translated materials.
- Ensuring grant opportunities are capitalized upon to meet mitigation goals.

Each type of the four FEMA-identified capabilities were evaluated, in addition to OA-priority capabilities like adaptive capacity. Gaps and limitations, if any, are discussed in the tables above. Additional jurisdiction-specific opportunities to expand on and improve capabilities for reducing risk include:

- Continue to participate in the Community Rating System and identify additional actions to both reduce flood risk and reduce flood insurance premiums.
- Support vulnerable populations' ability to adapt to climate change.
- Identify opportunities for staff to increase their familiarity with climate change impacts and externalities.
- Update the current City Code to reflect the California Building Code.
- Incorporate mitigation considerations into a new Economic Vitality Strategy.
- Conduct a comprehensive climate vulnerability analysis and incorporate the results into planning mechanisms and land use decisions.
- Expand grant writing capabilities to include mitigation grants such as BRIC.

1.5. Integration with Other Planning Initiatives

This section describes the process for integrating the hazard mitigation plan into local planning mechanisms.

1.5.1. Existing Integration

The following plans and programs currently integrate the goals, risk assessment and/or recommendations of the 2017 hazard mitigation plan:

- **2030 General Plan:** Protecting overall community health, welfare and safety remains the key focus of the General Plan. Mitigation is outlined in each element and will be integrated into future updates to ensure risk reduction and improved safety.
- **Emergency Operations Plan:** Mitigation is incorporated into the Emergency Plan with a focus on not only responding to emergencies and disasters but also planning for future events to reduce the risks of hazards.
- **2020 Urban Water Management Plan:** The Urban Water Management Plan (UWMP) addresses mitigation actions regarding water rates and capital improvement project expenditures. It also directly considers seismic risk and references the Santa Clara County OA HMP (Appendix L).
- **Capital Improvement Program:** The adopted FY 2022-23 Capital Improvement Program accounts for and outlines a wide range of projects that address mitigation actions and concerns for the City.
- **Ordinances:** The Zoning, Subdivision, and Stormwater Management Ordinances are just a few of the regulations that address mitigation and disaster resilience within the City.

1.5.2. Opportunities for Future Integration

The following plans and programs do not currently integrate the goals, risk assessment and/or recommendations of the hazard mitigation plan, but provide an opportunity for future integration with the 2023 Hazard Mitigation Plan:

- **Climate Action Plan:** The CAP provides the City with an opportunity to directly reference the LHMP during subsequent updates of the plan and integrate hazard mitigation with existing goals and objectives. The City’s Climate Action Plan is the primary document that addresses the programs and mitigation actions for climate adaptation.
- **Parks and Open Space Plan:** Future updates of the Parks and Open Space Plan provide a prime opportunity to integrate land use planning and related strategies from the mitigation plan.
- **Continuity of Operations Plan:** Mountain View does not have a Continuity of Operations Plan and intends to develop one as a mitigation planning action during the next five years. Information on the risks to the city can be incorporated into this plan.
- **Flood Damage Prevention:** The City will continue efforts to reduce the CRS rating with the purpose of reducing flood risks in FEMA designated flood zones.

In Mountain View, the Environmental Planning Commission and Community Development Department’s Planning Division work on long-range plans, including the General Plan, for the physical development of the City and also establish and maintain the environmental planning process. The Local Planning Team will be responsible for getting the MJHMP to the relevant parties for future integration into other planning mechanisms. The City’s Advanced Planning Manager and Floodplain Administrator both participated in this plan update.

1.6. Jurisdiction-Specific Natural Hazard Event History

Table 121 lists all past occurrences of natural hazards within the jurisdiction.

Table 14: Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Stevens Creek Trail Flood	N/A	1/3/2017 - 1/12/2017	The trail was undermined; the 5-foot shoulder was gone, along with the 4-foot-high safety fencing.

1.7. Jurisdiction-Specific Vulnerabilities

Following are jurisdiction-specific vulnerabilities:

- Of the five Hazus earthquake scenarios, Mountain View showed a range of potential structural losses from \$670 million to \$4.3 billion. Most of Mountain View is at moderate risk to liquefaction, with some areas of higher liquefaction potential closer to the bay and along creeks.
- The greatest vulnerability to the City from an earthquake is the loss of life, extensive property and environmental damage, and economic slowdown. Buildings that have not been seismically retrofitted have the potential for extensive damage or collapse. There are a number of structures in the City built with soft-story construction. Public warning systems may not be activated quickly enough to relay information to the public.

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- Wildfire risk in Mountain View is low, with only 1.15% of the population and 0.88% of the building value exposed to high wildfire potential. Areas with wildfire risk classification are limited to riparian areas. Wildfires in the region could contribute to poor air quality in Mountain View, which can be harmful to health, particularly for those with respiratory or other underlying health conditions. Public information regarding these health risks should be provided regularly. Climate change may increase the intensity and/or frequency of drought and extreme heat, which contribute to greater wildfire risk.
- A total of 17,931 people from 7,215 households are within potential dam inundation boundaries. \$4.8 billion worth of structures are within potential inundation zone from Stevens Creek Dam. The failure of a dam or levee could cause casualties and cause extensive property and environmental damage. Roadways could be closed or blocked, businesses could be closed, and schools could be closed. Public warning systems may not be activated quickly enough to relay information to the public.
- A total of 4,063 people (4.95% of the total population) are within a 1% floodplain, and 6,526 (7.95% of the total population) are within the 0.2% floodplain. Structural values within the 1% floodplain are over \$400 million, and almost \$670 million in the 0.2% floodplain. The Mountain View 2022 Water Master Plan identifies capital improvement projects to maintain the water infrastructure and reduce risk of failure.
- Mountain View is at lower risk to landslides than other cities in the OA. Only 337 people, or .41% of the total city population, are exposed to potential landslide hazards. Limited landslide risk may be present along creek banks and could be addressed as part of channel stabilization or flood mitigation efforts. The Stevens Creek and Permanente trails are at risk of flooding and mudslides during and after storms. This closes the trails to public and creates an additional hazard to public safety crews if they must perform rescue operations.
- Ongoing climate change is anticipated to change the frequency and intensity of drought and severe weather events. Concerns related to climate change include reduced air quality and its effects on health, coastal flooding impacts on traffic and property damage, extreme hot and cold temperatures, and the toll it takes on health, and extreme high temperatures causing lost labor hours by laborers exposed to the heat. Sea level rise could also impact the city, due to its proximity to the coastline. Feasibility studies have identified potential issues for Sailing Lake Access Road and South Bay Salt Pond Restoration. Improvements along the coastline may also reduce risk from tsunamis.
- Drought would be felt by the members of the jurisdiction with economic slowdown, it could cause an increase in wildfires, an increase in food costs, and the degradation of the environment. The Urban Water Management Plan is developed to evaluate land use planning and water supply planning to ensure sufficient water supply for the City. It includes a Water Shortage Contingency Plan.
- The Community Center, which is used for shelter operations, does not have its own standalone generator. The City has two portable generators but requires three separate facilities to remain operational for the network to function. The City has fewer portable generators than facilities that may require power generation during stormwater flooding, heavy rain, or high wind events.
- Impacts from inclement weather such as heavy rain, hail, and wind are likely to be very similar across the OA. Individual events may impact only limited areas, but the entire OA is at risk to similar conditions. Heavy rain may cause localized flooding on roadways and low-lying areas which may disrupt transportation for the general public and can also delay emergency response. Heavy rain can also have cascading impacts on landslide potential or strain the capacity of dams. High winds can disrupt power, communication and other services and cause damage to structures. Extreme heat or cold can be harmful to health, particularly those with inadequate housing with adequate warming and cooling systems, those over 65, and those with underlying medical conditions. Unhoused populations are particularly vulnerable to severe weather events such as heavy rain, high wind, and extreme heat. Climate change is expected to impact the

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frequency and intensity of severe weather events, including both precipitation and temperature changes.

- A tsunami in the North Bayshore could lead to a mass evacuation of commercial businesses inundating the two exits from the City to the freeway. Traffic would become impassible, and flooding may overcome vehicles stuck in traffic.
- Communication is critical to warn people of quick onset severe weather events, including heavy rain, high wind, and extreme temperature, for people to take proper precautions, seek shelter, or take other safety actions to reduce their risk. Public education of all hazards is useful for residents to take measures to reduce their own vulnerability. A variety of methods may be needed to reach various vulnerable communities. Coordination of these efforts between multiple stakeholder groups helps reach a variety of individuals and vulnerable populations.
- Public education can be an effective means to inform residents of other hazard risks and actions they can take to protect themselves and their property from earthquake, flooding, dam failure, wildfire, and tsunami. CERT programs or similar volunteer efforts can engage community members in promoting awareness of risk and mitigation actions.
- Increased understanding of areas at risk to hazards is needed and could be enhanced with the use of Geographic Information Systems (GIS).

Climate Change considerations:

Anticipated changes in climate may increase the number of occurrences, length or intensity in hazards such as extreme heat or drought, as indicated by the CMRA tool. Both drought and extreme heat conditions contribute to increased risk of wildfire, as lack of precipitation and high temperatures both contribute to vegetation becoming dry and more susceptible to quick ignition and faster fire spread. Changes in temperature and precipitation patterns can also reduce snowpack, and changes in runoff from snowpack may result in changes to water supplies throughout the region.

Climate change may also impact the future frequency or severity of severe weather such as heavy rain and associate risk of flooding. Although CMRA does not indicate a significant change in the number of precipitation events or overall annual rainfall, it is anticipated that those events may become more extreme, with significant amounts of precipitation occurring during an extreme precipitation event. Climate change may lead to frequent fluctuation of water levels retained by dams, and may result increased discharges and flooding downstream and possibly overtopping or other design failures following extreme precipitation events. An in-depth assessment of the possibility of increasing numbers and intensities of windstorms is not available for the OA. Changes in temperature and extreme weather events may also be accompanied with increases in high wind, which contribute to damaged utility lines resulting in power outages and can also contribute to extreme wildfire risk conditions. Intense rainstorms can result in increased risk of landslides occurrences. Loss of vegetation from wildfire reduces slope stability, and if wildfires increase with climate change an increase in post-fire debris flows may follow.

Mountain View will likely experience effects of climate change in relation to drought, extreme heat, heavy rain, high wind, flooding, and dam failure. Wildfire and landslide risk are confined to a relatively small area in Mountain View. Climate change may impact those conditions but may not significantly increase the potential impacts to the city. Climate impacts to earthquake hazards are not well understood and not currently believed to have an effect in Mountain View. Additional details on potential impacts to population, property, critical facilities, the environment, and the economy can be found in Volume 1, Section 12.

Repetitive loss records are as follows:

- Number of Federal Emergency Management Agency (FEMA)-identified Repetitive-Loss Properties (RL): 0
- Number of FEMA-identified Severe-Repetitive-Loss (SRL) Properties: 0
- Number of RL Properties or SRL Properties that have been mitigated: 0

1.7.1. Social Vulnerability

Figure 76 represents the social vulnerability of Mountain View and the surrounding area. Some of the area has low to moderate social vulnerability, but there are several census tract areas within Mountain View that have moderately high social vulnerability. People in those areas may need additional resources or attention to address their specific vulnerabilities following the impact from any of these natural hazards. These areas have higher proportions of minority populations, including Hispanic or Asian. Socioeconomic factors contributing to higher scores in them include the percentage of persons below the 150% poverty level, persons with housing cost burdens, and persons without a high school diploma. There are also areas with higher percentages of persons who speak English “less than well.” There is also a high percentage of housing in structures with more than 10 units and households with no personal vehicle.

Other vulnerabilities not identified in the SVI include people with access and functional needs and other disabilities. Age, underlying health conditions, and other factors can also contribute to an individual’s resilience in a disaster.

Vulnerable populations are aggregated at the census tract level, and it can be difficult to determine where they are located in reference to specific hazard risk areas. Additional study is needed to understand the impact these vulnerabilities have in relation to the hazards within Mountain View. With the high risk of flooding and earthquake in this community, additional resources would be needed to address these vulnerabilities for those people displaced or otherwise impacted by these hazards.

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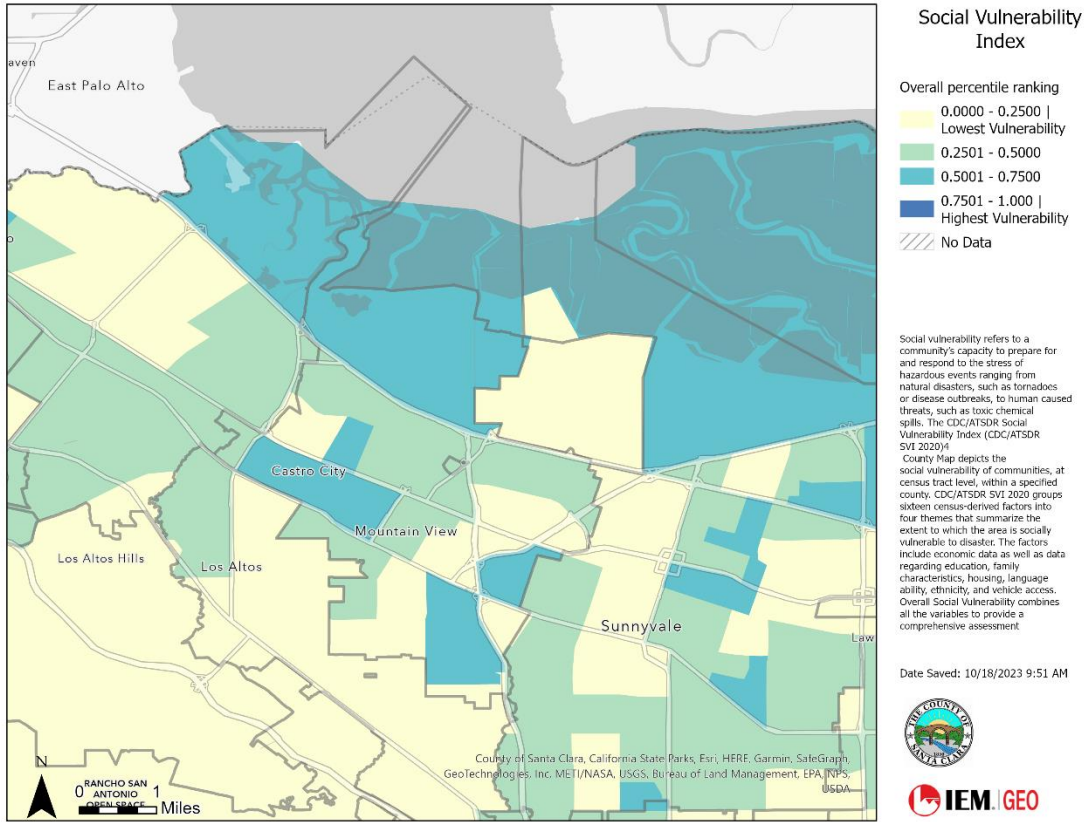


Figure 3: Mountain View Social Vulnerability

The Climate and Economic Justice Screening Tool (CEJST) in Figure 77 identifies census tracts that are overburdened and underserved. Three tracts in Mountain View meet the thresholds for disadvantaged communities. Linguistic isolation, percentage of individuals with less than a high school diploma, high flood risk, exposure to air pollutants, lack of green space, and proximity to superfund sites are among the factors contributing to Mountain View’s disadvantaged status.

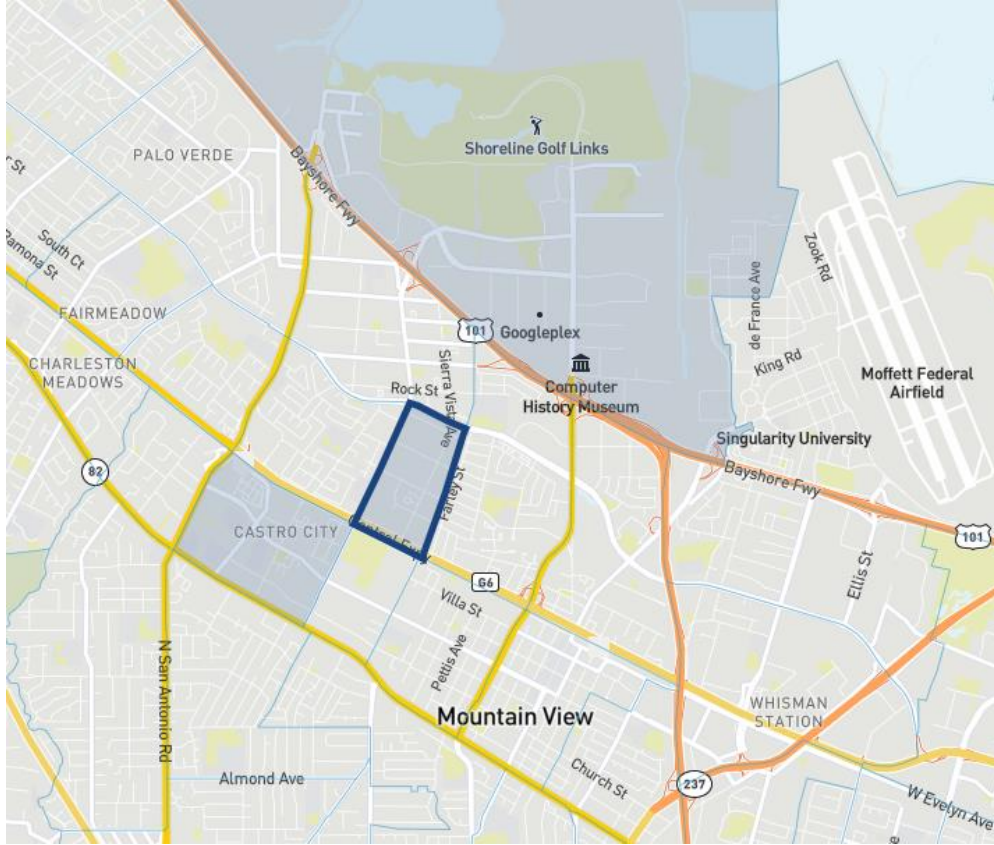


Figure 4: CEJST Disadvantaged Communities in Mountain View

1.8. Hazard Risk Index

Table 122 presents the hazards of concern from highest risk index number to lowest, as assigned by the City of Mountain View.

Table 15: Hazard Risk Index

Hazard	Probability	Life Impact	Property Impact	Percentage of Area Impacted	Maximum Probable Extent
Drought	Likely	Critical	Critical	Significant	Moderate
Earthquake	Likely	Critical	Critical	Significant	Moderate
Heavy Rain	Likely	Limited	Limited	Significant	Moderate
High Wind	Likely	Limited	Limited	Significant	Moderate
Extreme Heat	Likely	Limited	Limited	Significant	Moderate
Climate Change	Likely	Limited	Limited	Minimal	Moderate
Flood	Occasional	Limited	Limited	Minimal	Moderate

Hazard	Probability	Life Impact	Property Impact	Percentage of Area Impacted	Maximum Probable Extent
Wildfire/Smoke/Air Quality	Occasional	Limited	Minor	Negligible	Weak
Dam/Levee Failure	Unlikely	Minor	Minor	Negligible	Weak
Landslide/Mass Movement	Unlikely	Minor	Minor	Negligible	Weak
Tsunami	Unlikely	Minor	Minor	Negligible	Weak

Table 16: Comparison of Mountain View Hazard Risk Score to Operational Area (OA)

Risk Score	Earthquake	Dam/Levee Failure	Heavy Rain	High Wind	Extreme Heat	Wildfire	Drought	Flood	Landslide	Tsunami	Climate Change
Mountain View	2.0	0	1.4	1.4	1.4	0.65	2.0	2.0	0	0	1.3
OA	2.24	1.19	1.44	1.44	1.44	1.68	1.21	0.90	0.36	0.02	1.13

1.9. Future Needs to Better Understand Risk/Vulnerability

Access to seismic and vibration sensors used to monitor for earthquakes and tsunamis would help the City understand the risk and vulnerability to natural hazards in the future. Awareness, education, and preparedness for the community would help inform visitors, guests, and residents of the need for vulnerability assessment, and provide a pathway to sharing their concerns and opinions with local government.

1.10. Status of Previous Plan Actions

Participants were asked to report the status of their mitigation actions listed in the previous plan as a part of this plan update. Where further information isn't provided, the answers are defined as follows:

- *Completed* – work on this action is totally complete.
- *Completed and ongoing* – work on this action is complete; however, it is an ongoing project that will continue to be implemented. An example is a public outreach campaign that was created and will continue to be implemented.
- *In progress* – work on this action has begun and is in progress, but the action is not yet complete.
- *Retain* – work on this action has not begun yet, the action is still relevant, and it should be in the 2023 MJHMP.
- *No longer relevant* – Action item is no longer relevant due to reduce or eliminated risk, it no longer being feasible, there has been a change in jurisdictional or organizational priorities, or another reason as stated.

Unless specifically requested otherwise, only those actions listed as “retain” are incorporated into the 2023 action plan.

Table 17: Status of Action Items from the 2017 MJHMP

Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
MTV-1	Create Continuity of Operations Plan	All Hazards	Retain
MTV-2	Create Disaster Recovery Plan	All Hazards	Retain
MTV-3	Complete soft-story study: scoping of process to address issues related to potentially hazardous buildings containing soft, weak or open front stories	Earthquake	Retain
MTV-4	Coordinate disaster preparation and mitigation practices with private sector, public institutions, and public agencies	All Hazards	Retain
MTV-5	Continue to maintain ISO class one rating for Fire Department	All Hazards	Retain
MTV-6	Continue to maintain good standing and compliance under the National Flood Insurance Program (NFIP). This will be accomplished through the implementation of floodplain management programs that will, at a minimum, meet the requirements of the NFIP: Enforcement of the flood damage prevention ordinance Participate in floodplain identification and mapping updates Provide public assistance/information on floodplain requirements and impacts	Flooding	Retain
MTV-7	Enhance public education and awareness of natural hazards and disaster preparation	All Hazards	Retain
MTV-8	Develop GIS based maps for emergency incidents	All Hazards	Completed and ongoing
MTV-9	Continue offering Community Emergency Response Team (CERT) activities to educate the public how to prepare and recover from disasters that may impact the area.	All Hazards	Retain
MTV-10	Implement projects from storm water master plan	Flooding	Retain
MTV-11	Implement projects from sea level rise study	Flooding	Retain
MTV-12	Where appropriate, support retrofitting, purchase or relocation of structures located in high hazard areas and prioritize those structures that have been experienced repetitive losses	All Hazards	No longer relevant
MTV-13	Continue to integrate the hazard mitigation plan into other plans, ordinances and programs such as the Climate Action Plan, Stormwater Management, Urban Water Management Plan, Floodplain Management Program, etc.	All Hazards	Retain

Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
MTV-14	Actively participate in the plan maintenance protocols outlined in Volume 1 of the hazard mitigation plan	All Hazards	Retain

* Number given to action item in 2017 Santa Clara County Operational Area Hazard Mitigation Plan

1.11. Hazard Mitigation Action Plan and Evaluation of Recommended Actions

Table 125 lists the actions that make up the City of Mountain View hazard mitigation action plan. The maps in Figure 78 through Figure 85 present the City of Mountain View critical infrastructure, facilities, and identified hazard areas.

Descriptions of the expected time frames for actions are provided below:

- Short term: 1–5 years
- Medium term: 5–10 years
- Long term: Over 10 years
- Ongoing: Currently being funded and implemented under existing programs

The planning partners utilized the following criteria to prioritize action items into the categories of high, medium, or low.

- High Priority— A project that:
 - Meets multiple goals and objectives (i.e., multiple hazards);
 - Addresses multiple hazards;
 - Has benefits that exceed cost;
 - Has funding secured or is an ongoing project;
 - Meets eligibility requirements for Hazard Mitigation Assistance grants;
 - Can be completed in the short term (1 to 5 years);
 - Addresses immediate short-term impacts of climate change;
 - Benefits underserved and/or socially vulnerable populations; AND
 - Considers the Multi-Benefit Criteria utilized by the Santa Clara County Climate Collaborative, including equity, long-term value, ecosystem benefit, community benefit, and cross-jurisdictional alignment.
- Medium Priority— A project that:
 - Meets multiple goals and objectives;
 - Addresses multiple hazards;
 - Has benefits that exceed costs;
 - Has funding has not been secured, but that is grant eligible under Hazard Mitigation Assistance grants or other grant programs;

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- Project can be completed in the short term (1-5 years), once funding is secured. Medium priority projects will become high priority projects once funding is secured;
 - Addresses immediate short-term impacts of climate change;
 - Benefits underserved and/or socially vulnerable populations; AND
 - Considers the Multi-Benefit Criteria utilized by the Santa Clara County Climate Collaborative, including equity, long-term value, ecosystem benefit, community benefit, and cross-jurisdictional alignment.
- Low Priority— A project that:
 - Will mitigate the risk of at least one hazard;
 - Has benefits that do not exceed the costs or are difficult to quantify;
 - Does not have secured funding;
 - Is not eligible for Hazard Mitigation Assistance grant funding;
 - Has a timeline for completion that is long term (greater than 5 years). Low priority projects may be eligible for other sources of grant funding from other programs;
 - May address impacts of climate change;
 - May benefit underserved and/or socially vulnerable populations; AND
 - Considers the Multi-Benefit Criteria utilized by the Santa Clara County Climate Collaborative, including equity, long-term value, ecosystem benefit, community benefit, and cross-jurisdictional alignment.

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Table 18: City of Mountain View 2023 Action Items

Action Item Number	Action Item Description	Hazard(s) Mitigated	Lead Position, Office, Department, or Division Responsible for Implementation	Potential Funding Sources	Expected Timeline for Completion	Priority
MTV-1*	Create Continuity of Operations Plan.	All Hazards	Fire Department/ Office of Emergency Services	Staff Time, General Fund	Ongoing	Medium
MTV-2*	Create Disaster Recovery Plan.	All Hazards	Fire Department/ Office of Emergency Services	Staff Time, General Fund	Ongoing	Medium
MTV-3*	Complete soft-story study: scoping of process to address issues related to potentially hazardous buildings containing soft, weak or open front stories.	Earthquake	Community Development	Staff Time, General Fund	Short term	Medium
MTV-4*	Coordinate disaster preparation and mitigation practices with private sector, public institutions, and public agencies. ¹	All Hazards, including Earthquake, Flood, Dam Failure, Wildfire, Tsunami, Heavy Rain, High Wind, Extreme Heat, Landslide	Fire Department/ Office of Emergency Services	Staff Time, General Fund	Ongoing	Medium
MTV-5*	Continue to maintain ISO Class 1 rating for the Fire Department.	All Hazards, including Wildfire	Fire Department/ Office of Emergency Services	Staff Time, General Fund	Ongoing	Medium

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Action Item Number	Action Item Description	Hazard(s) Mitigated	Lead Position, Office, Department, or Division Responsible for Implementation	Potential Funding Sources	Expected Timeline for Completion	Priority
MTV-6*	<p>Continue to maintain good standing and compliance under the National Flood Insurance Program (NFIP). This will be accomplished through the implementation of floodplain management programs that will, at a minimum, meet the requirements of the NFIP:</p> <ul style="list-style-type: none"> • Enforcement of the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. 	Flooding	Public Works	Staff Time, General Fund	Ongoing	Medium
MTV-7*	Enhance public education and awareness of natural hazards and disaster preparation. ¹	All Hazards, including Heavy Rain, High Wind, Extreme Heat, Drought, Earthquake, Flood, Dam Failure, Landslide, Wildfire	Fire Department/ Office of Emergency Services	Staff Time, General Fund	Ongoing	Medium

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Action Item Number	Action Item Description	Hazard(s) Mitigated	Lead Position, Office, Department, or Division Responsible for Implementation	Potential Funding Sources	Expected Timeline for Completion	Priority
MTV-8	Develop GIS-based maps for understanding hazard risk and for use in emergency incidents.	All Hazards, including Earthquake, Flood, Wildfire, Dam Failure, Landslide, Heavy Rain, High Wind, Extreme Heat	Information Technology	Staff Time, General Fund	Ongoing	Medium
MTV-9*	Continue offering Community Emergency Response Team (CERT) activities to educate the public how to prepare and recover from disasters that may impact the area.	All Hazards, including Heavy Rain, High Wind, Extreme Heat, Drought, Earthquake, Flood, Dam Failure, Landslide, Wildfire	Fire Department/ Office of Emergency Services	Staff Time, General Fund	Ongoing	Medium
MTV-10*	Implement projects from storm water master plan.	Flooding, Heavy Precipitation	Public Works	Capital Improvement Fund	Short term	Medium
MTV-11*	Implement projects from sea level rise study.	Flooding, Climate Change	Public Works	Capital Improvement Fund, Grants	Short term	Medium

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Action Item Number	Action Item Description	Hazard(s) Mitigated	Lead Position, Office, Department, or Division Responsible for Implementation	Potential Funding Sources	Expected Timeline for Completion	Priority
MTV-13*	Continue to integrate the hazard mitigation plan into other plans, ordinances, and programs such as the Climate Action Plan, Stormwater Management, Urban Water Management Plan, Floodplain Management Program, etc.	All Hazards, including Flood, Dam Failure, Tsunami, Heavy Rain, Drought, Extreme Heat	Community Development/ Public Works	Staff Time, General Fund	Ongoing	Medium
MTV-14*	Actively participate in the plan maintenance protocols outlined in Volume 1 of the hazard mitigation plan.	All Hazards	Office of Emergency Services	Staff Time, General Fund	Short term	Medium
1	Implement projects from the sea level rise study (2022) such as Feasibility Studies, Sailing Lake Access Road, and South Bay Salt Pond Restoration.	Climate Change, Dam Failure, Flooding, Tsunami	Public Works	Capital Improvements Funds, California Coastal Conservancy (proposed), Bay Restoration Authority, NOAA Fishery	Ongoing	High

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Action Item Number	Action Item Description	Hazard(s) Mitigated	Lead Position, Office, Department, or Division Responsible for Implementation	Potential Funding Sources	Expected Timeline for Completion	Priority
2	Continue partnering with the County of Santa Clara Office of Supportive Housing (OSH), the City's main service provider for the unhoused and unstably housed vulnerable populations. In addition to the City requiring emergency plans, the Human Services Division's role is to connect vulnerable populations to services and/or information in times of crisis. The City will also develop a Homeless Response Strategy and Expenditure Plan in FY 2023-24 to further align priorities and resources.	Climate Change, Drought, Flood, Heavy Rain, High Wind, Extreme Heat, Wildfire	City Manager's Office - Human Services	Philanthropic, State and/or County grants, Variety of Housing and Urban Development (HUD)-funded resources	Ongoing	High
3	Implement the Urban Water Management Plan and Water Shortage Contingency Plan including water restrictions during droughts.	Drought	Public Works	Staff Time, General Fund	Ongoing	Medium
4	Retrofit Smart Meters and upgrade software (AMI, Automated Metering Infrastructure).	Drought, Heavy Precipitation, Extreme Heat, High Wind	Public Works	Valley Water	Short term	High
5	Survey and stabilize city-owned creek corridor bank.	Flood, Heavy Precipitation, High Wind, Landslide	Public Works	Capital Improvements Funds and State Water Project via Valley Water	Short term	High

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Action Item Number	Action Item Description	Hazard(s) Mitigated	Lead Position, Office, Department, or Division Responsible for Implementation	Potential Funding Sources	Expected Timeline for Completion	Priority
6	Maintain a CRS Community Ranking of 8 or higher.	Flooding	Public Works	General Fund	Ongoing	Medium

* Number given to action item in 2017 Santa Clara County Operational Area Hazard Mitigation Plan.

¹ This type of public education and awareness mitigation action reflects a whole community approach to hazard mitigation. The whole community approach acknowledges the fact that one agency or entity cannot be responsible for emergency management alone but that everyone can play a role in reducing risk and creating a resilient community. By empowering residents, including underserved and vulnerable populations, and private sector partners with the information they need to make risk-based mitigation decisions, the community will help reduce to new and existing structures and infrastructure.

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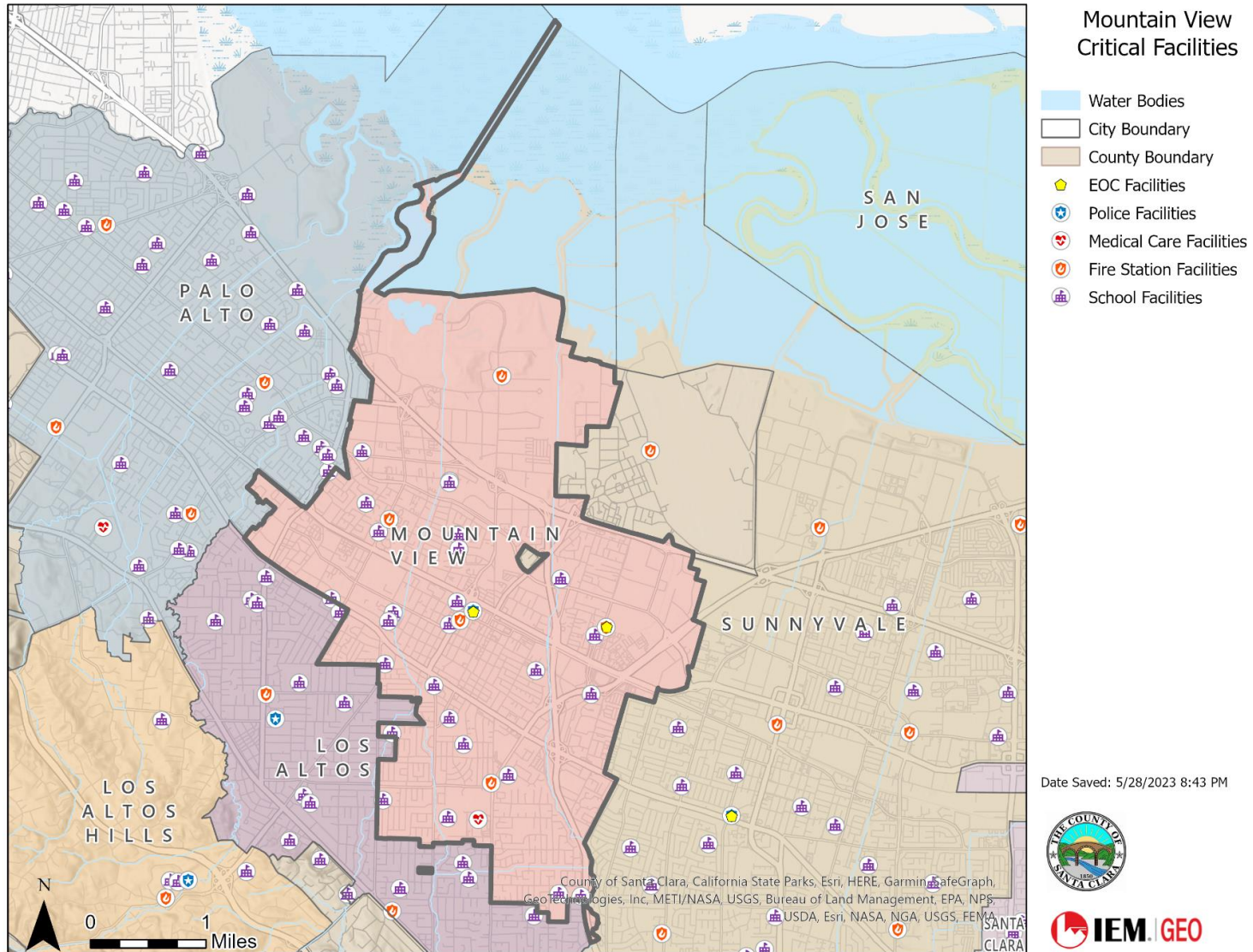


Figure 5: City of Mountain View Critical Facilities

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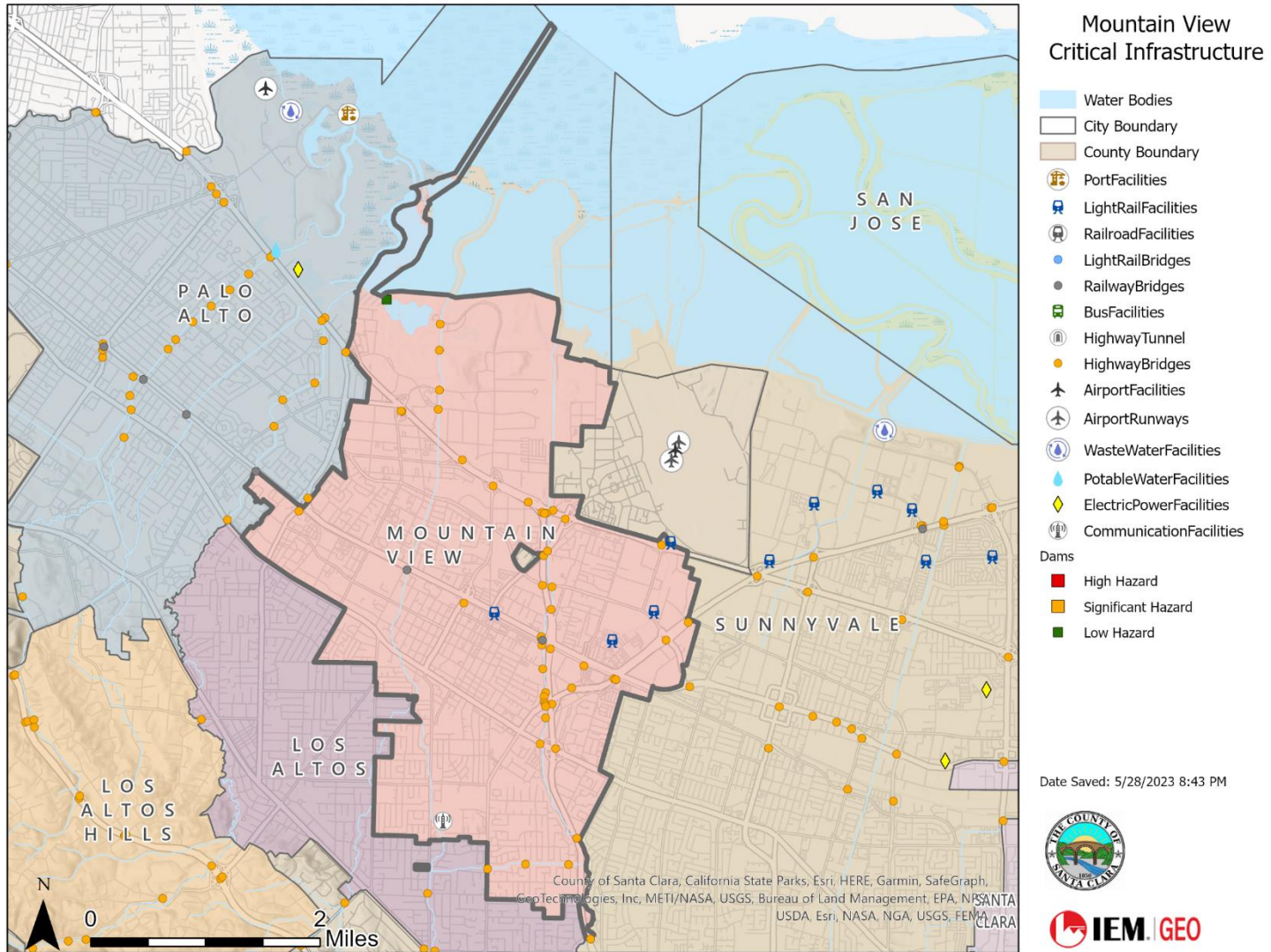


Figure 6: City of Mountain View Critical Infrastructure

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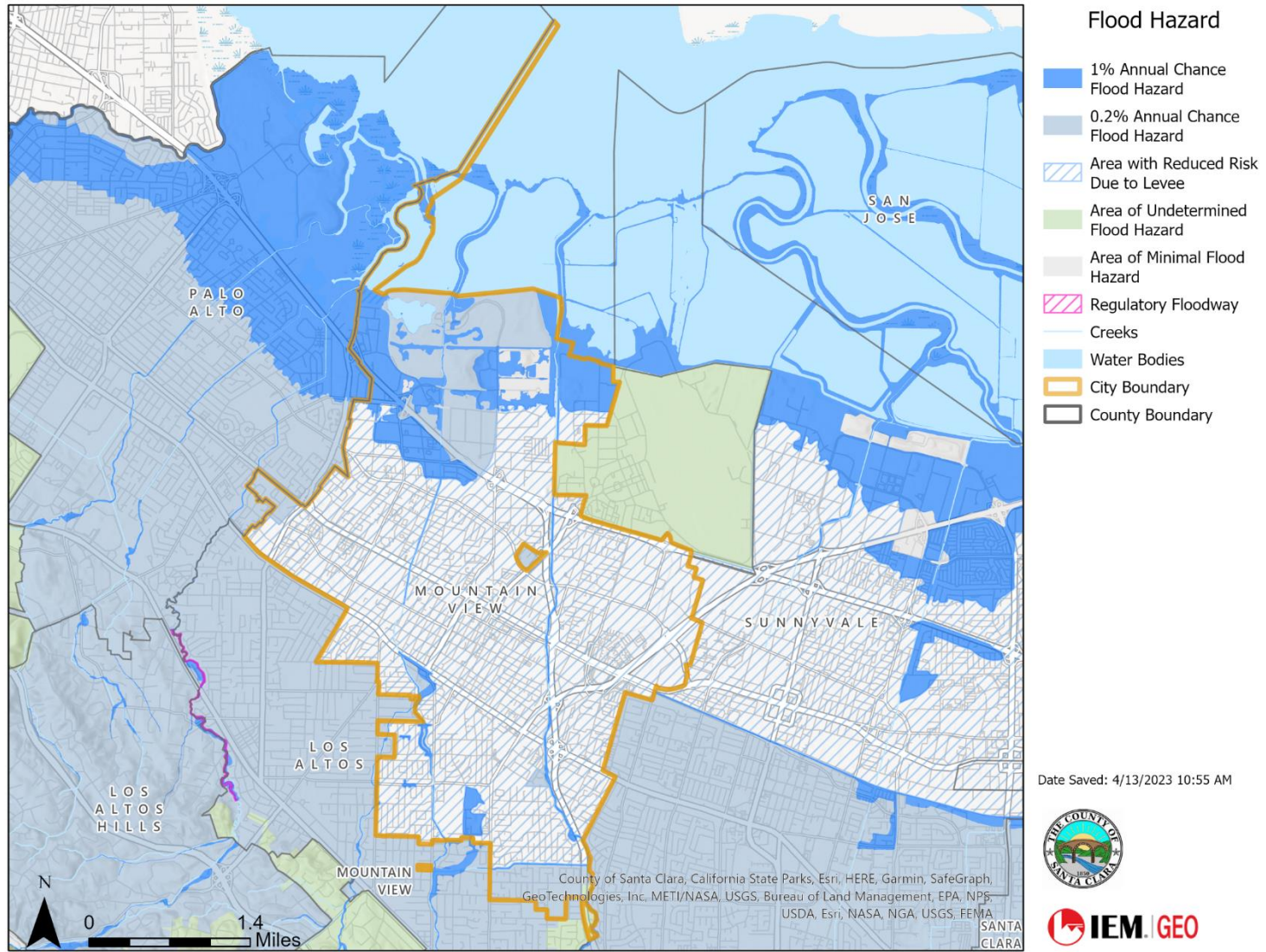


Figure 7: City of Mountain View Flood Hazard Area Map

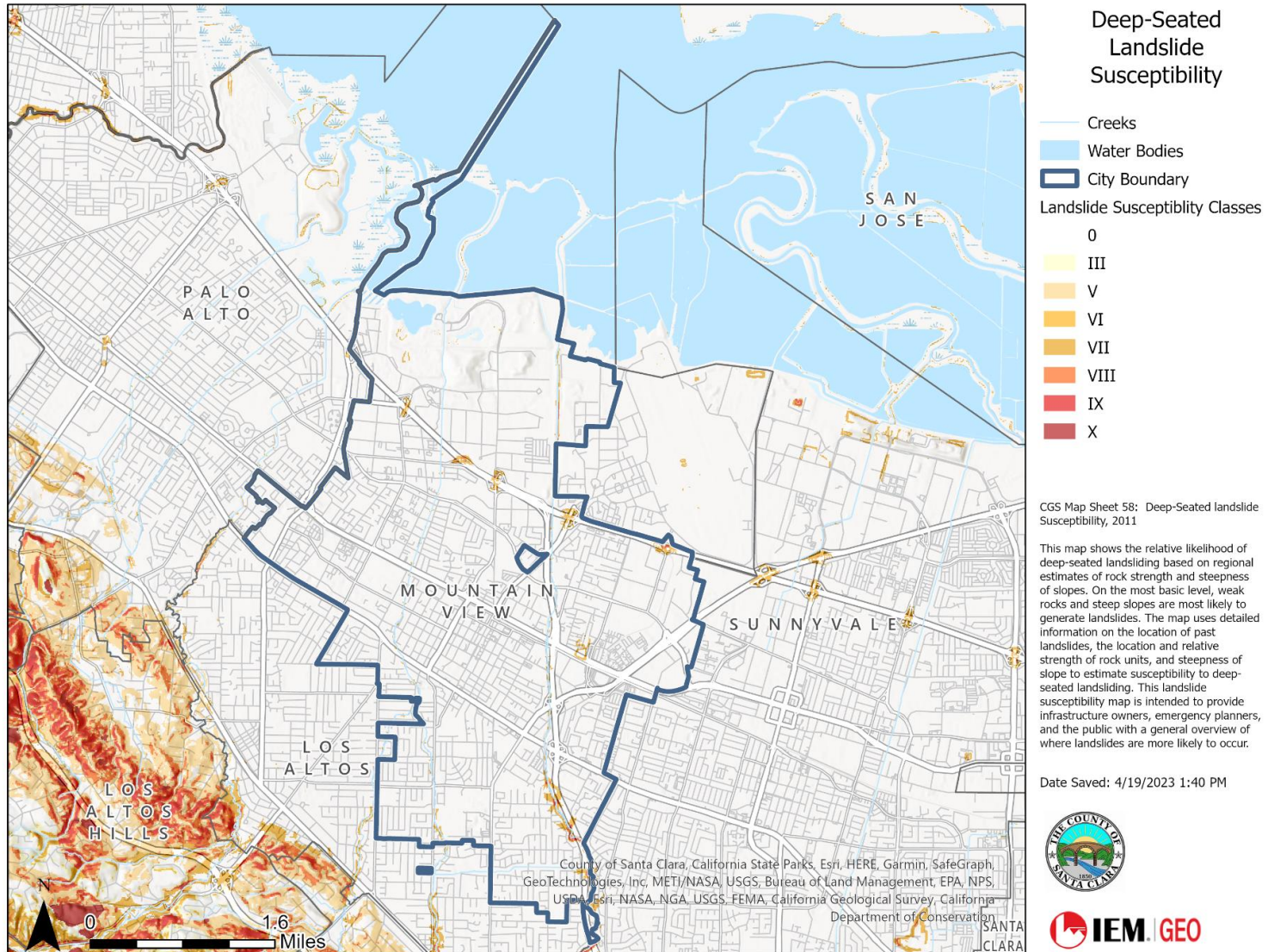


Figure 8: City of Mountain View Deep-Seated Landslide Susceptibility

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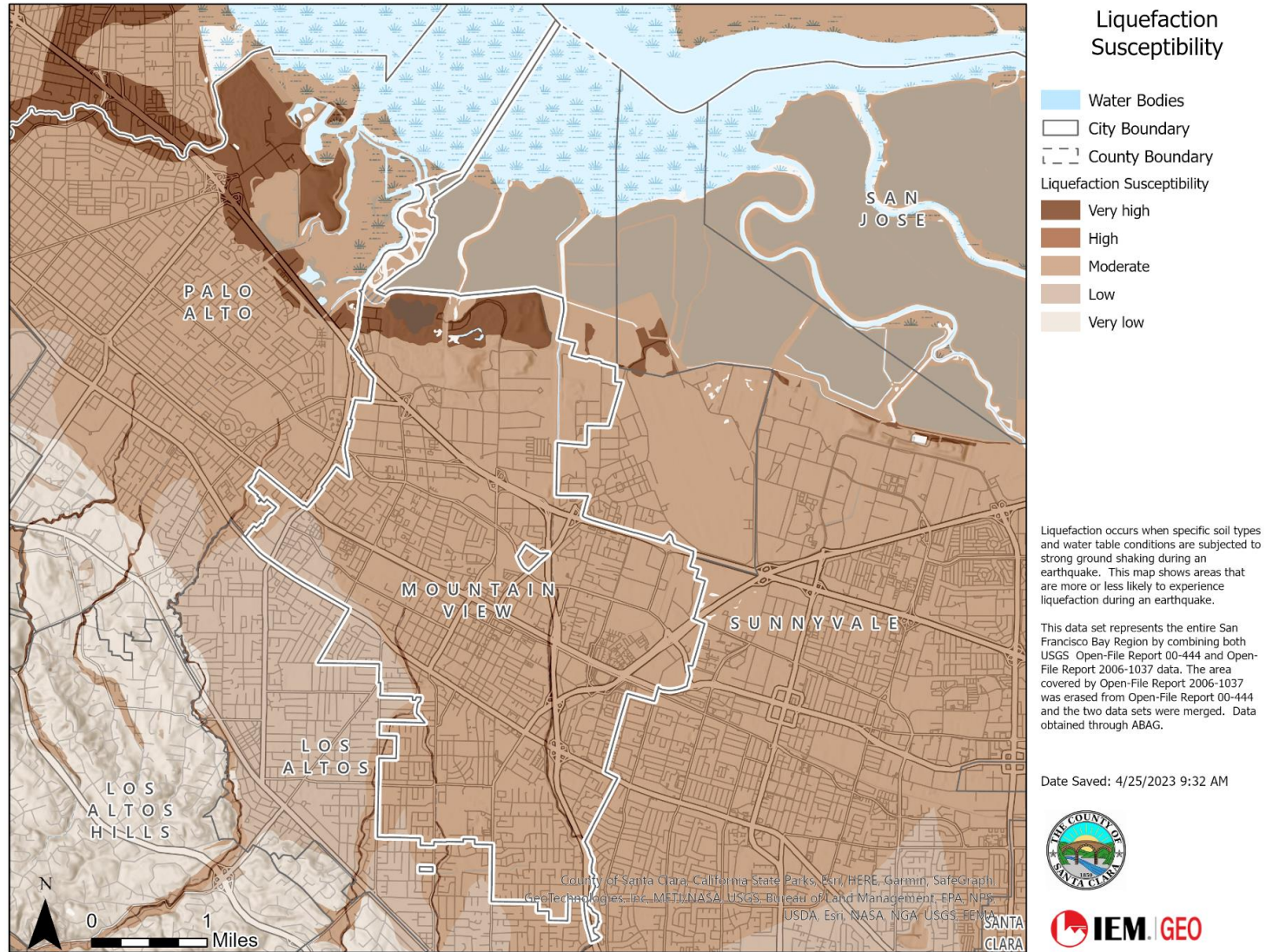


Figure 9: City of Mountain View Liquefaction Susceptibility

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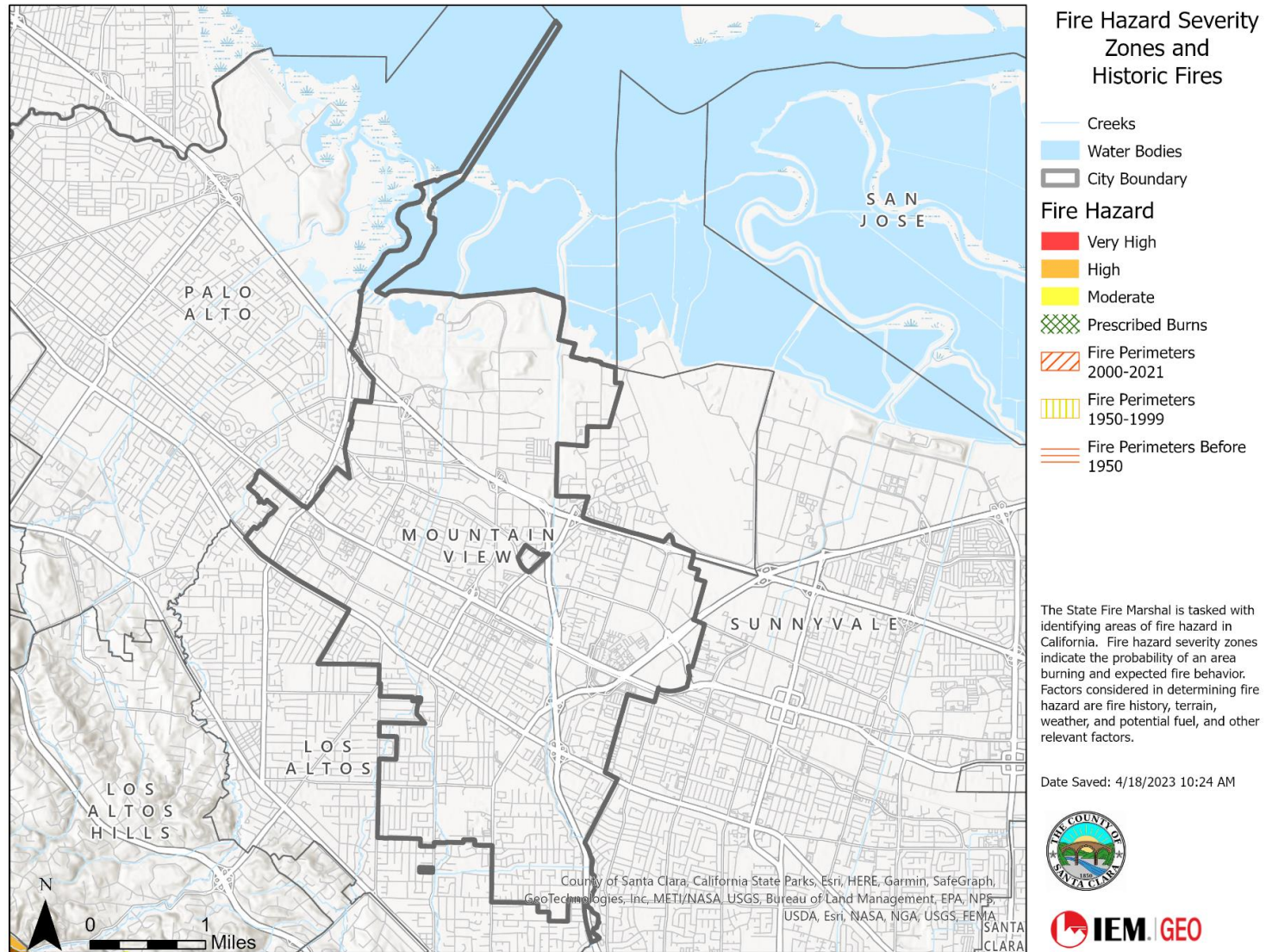


Figure 10: City of Mountain View Fire Hazard Severity Zones

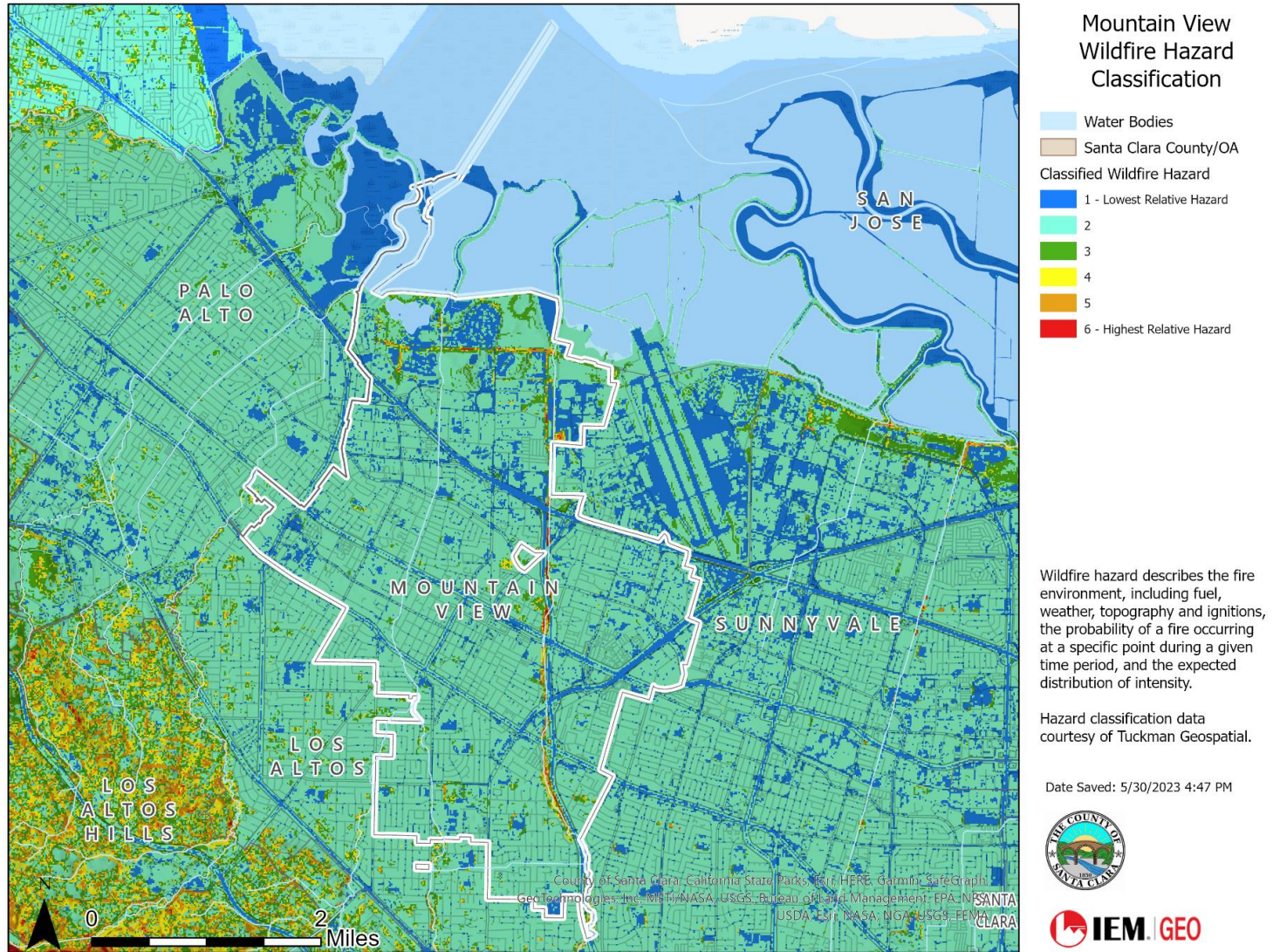


Figure 11: City of Mountain View Wildfire Hazard Classification

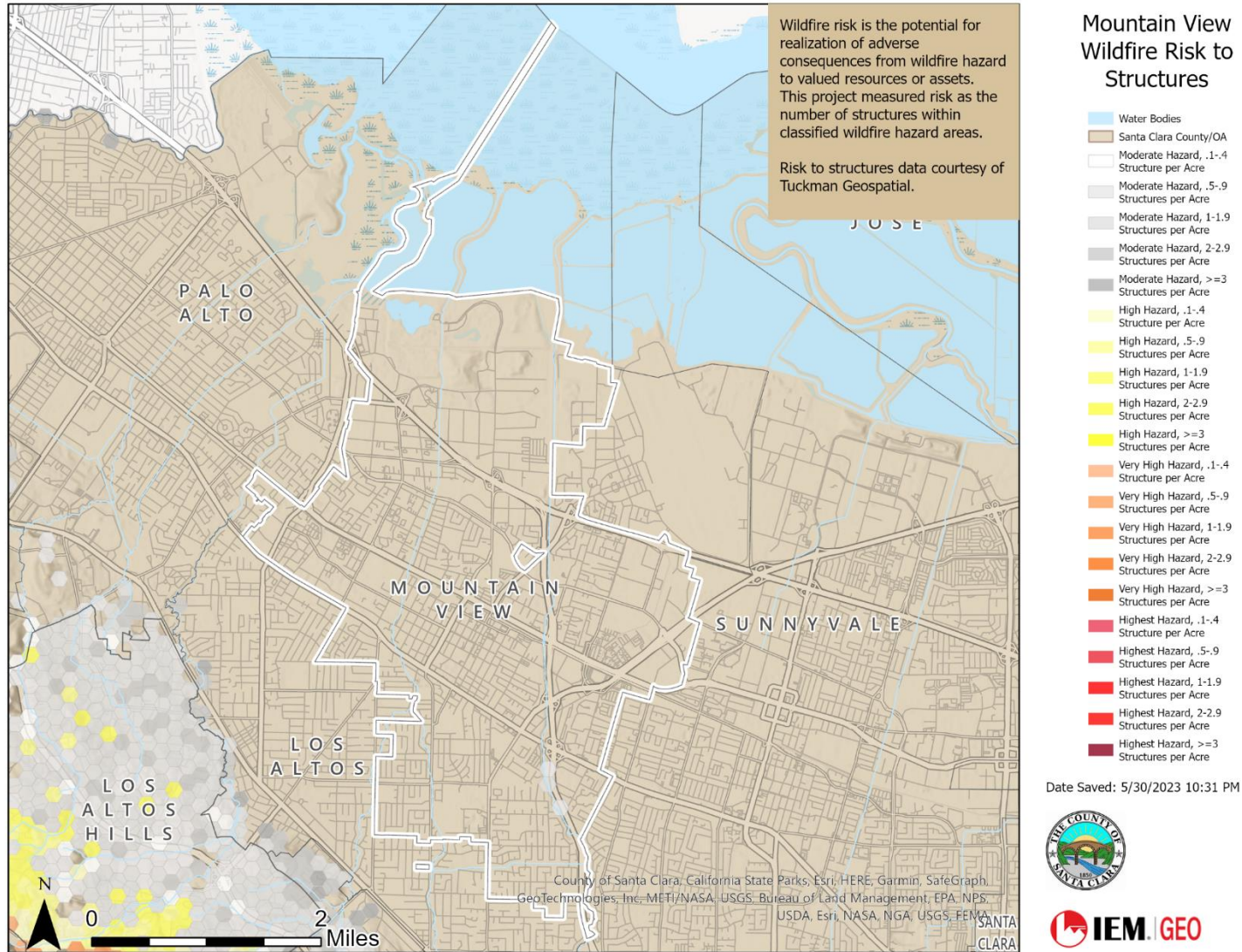


Figure 12: City of Mountain View Wildfire Risk to Structure