



Santa Clara County Multijurisdictional Hazard Mitigation Plan 2023 Update

City of Santa Clara Annex

February 21, 2024

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1. City of Santa Clara

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 Santa Clara was the Emergency Management Analyst. This annex within the MJHMP was developed using information provided by the City of Santa Clara's Local Planning Team.

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

Name	Position	Department	Role on Team and in Planning Process
Jennifer Guzman	Emergency Management Analyst	Office of Emergency Services	General oversight, hazard identification, and plan development, Plan Review Committee
Gary Welling	Director of Water & Sewer Utilities	Water & Sewer Utilities	Hazard identification and plan development, Plan Review Committee
Shilpa Mehta	Assistant Director of Water & Sewer Utilities	Water & Sewer Utilities	Hazard identification and plan development, Plan Review Committee
Craig Mobeck	Director of Public Works	Public Works	Hazard identification and plan development, Plan Review Committee
Michael Liw	Assistant Director of Public Works	Public Works	Hazard identification and plan development, Plan Review Committee
Falguni Amin	Principal Engineer	Public Works	Hazard identification and plan development, Plan Review Committee
Manuel Pineda	Chief Electric Utility Officer	Silicon Valley Power (SVP) [City of Santa Clara Electric Utility]	Hazard identification and plan development, Plan Review Committee
Kevin Kolnowski	Electric Utility Chief Operating Officer	Silicon Valley Power (SVP) [City of Santa Clara Electric Utility]	Hazard identification and plan development, Plan Review Committee
Andrew Crabtree	Director of Community Development, Floodplain Manager	Community Development	Hazard identification and plan development, Plan Review Committee
John Davidson	Principal Planner	Community Development	Hazard identification and plan development, Plan Review Committee
Armand Lobao	Building Official	Community Development	Hazard identification and plan development, Plan Review Committee

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Name	Position	Department	Role on Team and in Planning Process
Ruben Torres	Fire Chief	City of Santa Clara Fire Department	Hazard identification and plan development, Plan Review Committee
John Madden	Deputy Fire Chief	City of Santa Clara Fire Department	Hazard identification and plan development, Plan Review Committee
Jeremy Ray	Deputy Fire Chief	City of Santa Clara Fire Department	Hazard identification and plan development, Plan Review Committee
Dennis Yee	Fire Captain	City of Santa Clara Fire Department	Hazard identification and plan development, Plan Review Committee
Wahid Kazem	Assistant Police Chief	City of Santa Clara Police Department	Hazard identification and plan development, Plan Review Committee
Cuong Phan	Police Lieutenant	City of Santa Clara Police Department	Hazard identification and plan development, Plan Review Committee
Michelle Templeton	Sustainability Manager	City Manager's Office	Hazard identification and plan development, Plan Review Committee
David Knight	Communication Management Analyst	Office of Communications	Hazard identification and plan development, Plan Review Committee

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 five 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.

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.

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Agency or Organization	Stakeholder Type	Description
Avenidas	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	Non-profit dedicated to helping older adults find critical programs and services.
CADRE - Collaborating Agencies' Disaster Relief Effort	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	A leading network of organizations that provide community services that are essential.
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 nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	An American integrated managed care consortium.

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Agency or Organization	Stakeholder Type	Description
Life Moves	Representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations.	Provides interim housing and supportive services for homeless families and individuals to rapidly return to stable housing.
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.
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.
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.

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Agency or Organization	Stakeholder Type	Description
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.
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.
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.

Agency or Organization	Stakeholder Type	Description
City of Mountain View	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 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.

Santa Clara actively engaged with a significant number of stakeholders throughout the plan development process by inviting them to meetings, incorporating them into their Local Planning Team, and providing them the opportunity to review the draft plan. These stakeholders included local and regional agencies involved in hazard mitigation activities (like Office of Emergency Services, Public Works Department, Silicon Valley Power, Santa Clara Valley Water District, Regional Water Quality Control Board and Bay Area Air Quality Management District), agencies that have the authority to regulate development (including the city's Building Official, local Floodplain Manager, Caltrans and Valley Transportation Authority, and Regional Water Quality Control Board), neighboring communities (such as the City of San Jose, City of Sunnyvale, and City of Cupertino), representatives of businesses, academia, and other private organizations (like major employer Intel, the Union Pacific Railroad, Amtrak, Capital Corridor, Mission College, and Santa Clara University), as well as representatives of nonprofit organizations, including community-based organizations, that work directly and/or provide support to underserved communities and socially vulnerable populations (including the American Red Cross, local healthcare organization Kaiser Permanente – Santa Clara, Santa Clara Unified School District, and Santa Clara County FireSafe Council).

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, email, and a City newsletter. 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 vulnerable populations. This plan update utilized the legal definition of AFN for this approach. The California Government Code Section 8593.3 defines Access and Functional Needs as "Individuals who have: Developmental, intellectual, or physical disabilities; Chronic conditions or injuries; Limited English proficiency or non-English speaking; Or individuals who are: older adults, children, or pregnant; living in institutional settings; or Low-income, homeless, and/or transportation disadvantaged." In Saratoga, according to the U.S. Census an estimated 46.1% of the population speaks a language other than English, a key factor to consider while developing any kind of emergency management and mitigation approach to public outreach. The C-MIST framework is used to integrate AFN populations in the operational area into emergency management through communications, maintain health, independence, support, safety and self-determination, and transportation. These meetings were also designed to be accessible for AFN (access and functional needs) populations. The City actively advertised this opportunity, including

specifically inviting Listos California members. Listos helps every Californian, regardless of age, ability, income, or language, receive a culturally competent education on preparing for wildfire, flood, earthquake, drought, heatwave, and other disasters. 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 expressed concern with similar hazards as the plan participants such as wildfire (including wildfire smoke), flooding, and extreme heat. Additionally, there was multiple mentions of the need for public education and outreach and evacuation routes. Specific recommendations for the City of Santa Clara including holding a public meeting on the hazards. Other relevant feedback included a discussion of the importance of the urban forest and how trees can support resilience. These types of feedback are integrated into the mitigation actions the City has selected.



Focus on Resiliency

Multi-jurisdictional hazard mitigation planning can be an effective process to build partnerships between communities that face common hazard risks, leading to shared solutions. It can also help build a foundation to shift priorities as risks and vulnerabilities change.

Learn more about natural disaster preparedness and resiliency.

Keep an eye out for the upcoming countywide Local Hazard Mitigation Plan survey to help us be more resilient to disasters.

**Learn More About Countywide
Hazard Mitigation Planning**

Figure 1: City of Santa Clara Newsletter

Santa Clara County Multijurisdictional Hazard Mitigation Plan



Hello CERTs,

You are invited to join the City of Santa Clara, the County of Santa Clara, and other jurisdictions for a public meeting to share input on a Hazard Mitigation Plan which will enable regional partners to operate collaboratively in the event of a disaster. The General Plan Safety Element and the Multi-Jurisdictional Hazard Mitigation Plan will be open for public comment on March 15, 2023 from 6pm - 7:30pm. Please join us at the Campbell Community Center located at 1 W Campbell Ave, Campbell, CA 95008.

WHEN: March 15 at 6 p.m.
WHERE: Campbell Community Center
1 W Campbell Ave., Campbell
Q80 Roosevelt Redwood Room (see map below)
PARKING: Recommended to park by Skatepark off Campbell Ave.



Figure 2: Email on Public Meeting

Estimados estudiantes de LISTOS y Preparados en Santa Clara,

Le invitamos a unirse a la Ciudad de Santa Clara, el Condado de Santa Clara y otras jurisdicciones para una reunión pública para compartir comentarios sobre un Plan de Mitigación de Riesgos que permitirá a los socios regionales operar en colaboración en caso de un desastre. El Elemento de Seguridad del Plan General y el Plan de Mitigación de Riesgos Multi-jurisdiccional estarán abiertos a comentarios públicos el 15 de marzo de 2023 a las 6 p.m. – 7:30 p.m. Únase a nosotros en el Centro Comunitario Campbell ubicado en 1 W Campbell Ave, Campbell, CA 95008.



CUÁNDO: 15 de marzo a las 6 p.m.
DÓNDE: Centro Comunitario Campbell
1 W Campbell Ave., Campbell
Q80 Roosevelt Redwood Room (ver mapa abajo)
ESTACIONAMIENTO: Recomendado para estacionar en Skatepark en Campbell Ave.



Figure 3: Email to Listos

The participation of the City of Santa Clara 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 in priorities to be highlighted in their annex.

1.2. Jurisdiction Profile

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

- **Date of Incorporation:** July 5, 1852
- **Current Population:** 130,127 as of January 1, 2022
- **Population Growth:** Based on the data tracked by the state Department of Finance, the City of Santa Clara has experienced a gradual rate of growth since the year 2000. The overall population has increased by 11.73% percent since 2010 and growth averaged 0.72% percent per year from 2017 to 2022. The City is an important employment center and houses approximately 122,000 jobs. The City is projected by the Association of Bay Area Governments (ABAG) in 2030 to have a resident population of 141,700 and to support 137,480 jobs.
- **Location and Description:** The City of Santa Clara encompasses 18.41 square miles and is located 45 miles south of San Francisco and 382 miles north of Los Angeles. The City of Santa Clara is situated near to the south end of San Francisco Bay in Santa Clara County, also known as Silicon Valley in recognition of the region's leadership in worldwide technology innovations. The City boundaries are completely urbanized, and the City is bordered by other urbanized areas, including San José, Cupertino and Sunnyvale. The City is developed on relatively flat terrain and drained by three seasonal creeks, San Tomas Aquino, Saratoga and Calabazas creeks, all of which empty into the southern portion of San Francisco Bay. The Guadalupe River, which also drains into the Bay, defines part of the City's eastern boundary.
- **Brief History:** By 1850, when California became a state, Santa Clara was an established frontier settlement. In 1851, Santa Clara College, now Santa Clara University, was founded on the Mission site. The incorporation of Santa Clara as a City followed in 1852. In 1866, the City officially established a grid street system to accommodate anticipated growth. The City of Santa Clara, "The Mission City," has been transformed over the past century, from a small agricultural town to a major employment and community center in Silicon Valley. It is called "Mission City" in reference to the Mission Santa Clara de Asis, which opened in 1777 as one of 21 Spanish missions established by Franciscan padres along El Camino Real in California. The central core of the City grew outward from the original downtown and the Old Quad residential area around the University and Agnew Village - a satellite area that established a base for residential neighborhoods in north Santa Clara. Primarily an agricultural community through the mid-1900s, the City of Santa Clara evolved to become a family-oriented, suburban community of comfortable neighborhoods in the post-World War II era, and the heart of Silicon Valley in the electronics industry boom of the 1970s. In 2014, Levi's Stadium opened in Santa Clara as the home of the San Francisco 49ers football team and a premier sports and entertainment venue that hosted Super Bowl 50.
- **Climate:** Santa Clara's climate is Mediterranean in nature, with mild temperatures year-round. January is on average the coolest month, with an average low temperature of 42 degrees Fahrenheit (°F) and an average high temperature of 58°F. July is on average the warmest month, with an average low temperature of 58°F and an average high temperature of 82°F. Average annual rainfall is 14 inches, with rain concentrated in the winter months (November through March).
- **Governing Body Format:** Santa Clara is a Charter City with a City Council and City Manager form of government, with the City Manager and City Attorney appointed by the City Council. The City of Santa Clara is governed by a seven-member city council. The Police Chief and City Clerk are elected positions. The City Manager is responsible for hiring all other City staff, preparing an annual budget, and general oversight of City operations, including the City's utilities. The City consists of fourteen departments: Community Development, Electric Utilities (Silicon Valley Power), Finance, Fire, Human Resources, Information Technology, Library, Parks and Recreation, Public Works, Police, Water and Sewer Utilities, City Attorney's Office, City Clerk's Office and the City Manager's Office. The City also has a separate Stadium Authority and

Housing Authority, which are overseen by the City Council. The City has eleven commissions that report to the City Council. The City Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.

1.3. Development Trends

Development is prominent in the City of Santa Clara. Over \$3 billion in development projects are planned for Santa Clara over the next few years, with the likelihood of more to come. Additionally, the City's 2010-2035 General Plan states that the City can expect a significant amount of population and job growth in the future. The Association of Bay Area Governments (ABAG) projects that the County of Santa Clara will grow by 512,900 (27%) in population and 427,480 (46%) in new employment between 2010 and 2035. In the same time frame, ABAG projects that the City of Santa Clara will accommodate nearly six percent of this new population, resulting in 28,300 new residents. Job growth in the City is also expected to grow just as quickly, matching that of the County, with 48,690 new jobs (45% growth).

The City of Santa Clara has increased its population since the previous plan was developed, thereby increasing its vulnerability to hazards. This will likely increase vulnerability to hazards that have the potential to impact the entire city such as heavy rain and associated flooding, high wind, extreme heat, drought, and earthquake. Landslide and wildfire risk are limited and vulnerability to these hazards is not believed to have increased. Santa Clara has and will continue to monitor the vulnerability of its population and increasing educational outreach. New development is anticipated to be slow due to the city being built out. New construction is consistent with General Plan policies and municipal code standards, and as a result, most recent development has occurred outside of identified hazard zones. Due to the fact that there was not a significant growth in population or changes in land use as well as the rigorous implementation of current building codes and standards, the overall vulnerability to all hazards is not expected to increase.

Detailed information regarding the City's recent and future development trends can be found in Table 163.

Table 3: Recent and Expected Future Development Trends

Criterion	Response
Has your jurisdiction annexed any land since the development of the previous hazard mitigation plan? If yes, give the estimated area annexed and estimated number of parcels or structures.	No
Is your jurisdiction expected to annex any areas during the performance period of this plan? - If yes, please describe land areas and dominant uses. - If yes, who currently has permitting authority over these areas?	No

Criterion	Response						
Are any areas targeted for development or major redevelopment in the next five years? If yes, please briefly describe, including whether any of the areas are in known hazard risk areas.	The City has adopted Specific Plans and Focus Areas (Tasman East, adopted in 2018; Patrick Henry Drive, adopted in 2022; and Freedom Circle, adopted in 2022) where significant development, primarily residential development, is anticipated. Also, the City has adopted entitlements in recent years for a 9 million sq. ft project named Related Santa Clara. At least the first phase of this multiphase project is expected to be constructed in the next five years.						
How many building permits were issued in your jurisdiction since the development of the previous hazard mitigation plan?		2017	2018	2019	2020	2021	2022
	Total Number of Permits	2,185	2,381	2,093	1,458	1,729	1,945
Please provide the number of permits for each hazard area or provide a qualitative description of where development has occurred.	High Liquefaction Areas: According to the USGS map, the high liquefaction area is approximately 3 miles west of Guadalupe River along the northeast City boundary. The land uses are mostly open land with a small area of low and medium densities of residential, mixed use, and industrial.						
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.	The City does not have a buildable lands inventory. The City is completely built out; however, there exists opportunity for intensification of already built out sites. The recently adopted Tasman East Specific Plan, Patrick Henry Drive Specific Plan, and Freedom Focus Area are areas where the General Plan was amended to facilitate redevelopment and intensification, as these are areas with industrial uses that will be converted through the implementation of the specific plans into high density housing.						

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 Santa Clara Annex). All the below items were additionally reviewed as part of the full capability assessment for the City of Santa Clara.

- City of Santa Clara 2010-2035 General Plan:** The General Plan, including the Land Use and Safety Elements, were reviewed for information regarding goals and policies consistent with hazard mitigation for carry over as goals and objectives.
- City of Santa Clara Municipal Code:** The Municipal Code was reviewed for the capability assessment and to identify opportunities for action plan integration.
- Flood Damage Prevention Ordinance:** The Flood Damage Prevention Ordinance was reviewed for compliance with the National Flood Insurance Program.
- Capital Improvements Plan:** The Capital Improvements Plan was reviewed to identify cross-planning initiatives for inclusion as mitigation projects.
- The City of Santa Clara Emergency Operations Plan (EOP):** This plan was reviewed to complete the Planning Documents portion of this Annex.

- **Technical Reports and Local Information:** Outside local resources, technical reports, and references were used to complete the City of Santa Clara Annex.

1.4.2. Full Capability Assessment

An assessment of legal and regulatory capabilities is presented in Table 164 and Table 165. An assessment of fiscal capabilities is presented in Table 166. An assessment of staffing capabilities is presented in Table 167. An assessment of administrative and technical capabilities is presented in Table 168. Information on National Flood Insurance Program (NFIP) compliance is presented in Table 169. An assessment of education and outreach capabilities is presented in Table 170. Classifications under various community mitigation programs are presented in Table 171. Development and permitting capabilities are presented in Table 172, and the community's adaptive capacity for the impacts of climate change is presented in Table 173.

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	Yes
<i>Comment: 2019 California Building Code, City Ordinance 2053: 2022 Building Code Update</i>				
Zoning Ordinance	Yes	No	Yes	Yes
<i>Comment: City Code, Title 18</i>				
Subdivision Ordinance	Yes	Yes	Yes	No
<i>Comment: City Code, Chapter 17.05</i>				
Stormwater Management Ordinance	Yes	Yes	Yes	Yes
<i>Comment: City Code, Chapter 13</i>				
Other Natural Hazard-Specific Ordinances	Yes	Yes	Yes	Yes
<i>Comment: Water Service and use Rules and Regulations, Ordinance No. 1901, Santa Clara City Code Chapter 13.10 Sewer, Santa Clara City Code Chapter 12.15 Water</i>				
Post-Disaster Recovery	No	No	No	No
<i>Comment: None Identified.</i>				
Real Estate Disclosure	No	No	No	No
<i>Comment: None Identified.</i>				
Growth Management	Yes	No	Yes	Yes
<i>Comment: City Code, Chapter 2 and Chapter 17</i>				
Site Plan Review	Yes	Yes	Yes	Yes
<i>Comment: City Code, Title 18</i>				

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Legal and Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Environmental Protection	No	No	No	No
<i>Comment: None Identified.</i>				
Flood Damage Prevention	Yes	Yes	Yes	Yes
<i>Comment: City Code, Chapter 15.45</i>				
Emergency Management	Yes	No	Yes	Yes
<i>Comment: City Code, Chapter 2</i>				
Climate Change	No	No	No	No
<i>Comment: None Identified.</i>				
Acquisition of land for open space and public recreation uses	No	No	No	No
<i>Comment: None Identified.</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	Yes	Yes	Yes
<i>Is the plan compliant with Assembly Bill 2140? Yes</i>				
<i>Comment: City of Santa Clara 2010-2035 General Plan</i>				
Capital Improvement Plan	Yes	No	Yes	Yes
<i>How often is the plan updated? Biannually</i>				
<i>Comment: 2023-2024 CIP</i>				
Floodplain or Watershed Plan	Yes	Yes	Yes	Yes
<i>Comment: City of Santa Clara Risk and Resilience Assessment for the America's Water Infrastructure Act 2018</i>				
Stormwater Management Plan	Yes	Yes (SCVWD)	Yes	Yes
<i>Comment: The City has a Stormwater Masterplan which aims to reduce ponding and flooding in the City.</i>				
Urban Water Management Plan	Yes	No	Yes	Yes
<i>Comment: The City develops Urban Water Management Plan every 5 years that provides an overview of the City's current and long-term water supplies, future water needs of the City, and the City's water conservation programs. This Plan does not address any natural hazards.</i>				
Habitat Conservation Plan	No	No	No	No
<i>Comment: None Identified.</i>				

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Planning, Legal, or Regulatory Capability	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Green Infrastructure Plan	Yes	No	No	No
<i>Comment: Green Stormwater Infrastructure Plan</i>				
Parks or Open Space Plan	No	No	No	No
<i>Comment: The Parks & Recreation Department does not have a systemwide Parks & Open Space Plan, that would be a section/part of the City's General Plan. The Department will be hiring a consultant in 2023 to develop a Citywide Parks & Recreation Master Plan.</i>				
Economic Development Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Transportation Plan	No	No	No	No
<i>Comment: The City's Bicycle Plan and Pedestrian Masterplan have the goal to increase alternative transportation modes (bicycling and walking) through prioritized improvements and programs. These plans don't address natural hazards, however, increasing alternative modes can reduce greenhouse gas emissions.</i>				
Shoreline Management Plan	No	Yes	No	No
<i>Comment: None Identified.</i>				
Community Wildfire Protection Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Forest Management Plan	No	No	No	No
<i>Comment: None Identified.</i>				
Climate Action Plan	Yes	Yes	Yes	Yes
<i>Comment: The City established a Climate Action Plan (CAP) in 2013.</i>				
Local Emergency Operations Plan	Yes	No	No	No
<i>Comment: City adopted the Santa Clara County Plan – Annex L and has a Volume 2 that is localized.</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	Yes	No
<i>Comment: Santa Clara County Strategic Public Health Plan</i>				
Other: Response Guides	Yes	No	No	Yes
<i>Comment: Severe Weather Response Guide, Unhealthy Air Response Guide, and the Cooling/Warming Center Response Guide</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	No
Other Federal Funding Programs	Yes	No
Capital Improvements Project Funding	Yes	Yes, desilting westside retention basin, etc., increases flood protection
Authority to Levy Taxes for Specific Purposes	Yes, though voter approval required	Yes, Storm/Flood mitigation. The Fire Department has not levied any general taxes but does use fee recovery mechanisms for mitigation. For example, CUPA fees for future HazMat incident prevention and mitigation, or weed abatement activities for which non-compliant parcels are assessed on property tax bills.
User Fees for Water, Sewer, Gas or Electric Services	Yes	Not based on the City's current impact fees/nexus studies.
Stormwater Utility Fee	No	No
Incur Debt through General Obligation Bonds	No, voter approval required	No
Incur Debt through Special Tax Bonds	No, voter approval required	No
Incur Debt through Private Activity Bonds	No	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes	No
State Funding Programs	Yes	No
Development Impact Fees for Homebuyers or Developers	Yes, nexus study required	No
Public or Private Partnership Funding Sources	No	No
Other Funding Sources	Yes	Yes, storm and public facilities; however, limited resources.

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	• Yes • Full time • Building Division	No	Yes
Parks and Recreation Director	• Yes • Full time • Parks and Recreation	No	No
Emergency Manager	• Yes • Full time • Emergency Services	No	Yes
Community Planner	• Yes • Full time • Community Development Department	No	No
Civil Engineer	• Yes • Full time • Engineering within Public Works, Community Development Department, Silicon Valley Power, Water & Sewer Utilities	No	Yes
Engineers or professionals trained in building or infrastructure construction practices	• Yes • Full time • DPW, Community Development Department, Silicon Valley Power, Water & Sewer Utilities	Yes, CDD-Building	Yes
Planners or engineers with knowledge of land development and land management practices	• Yes • Full time • DPW, Community Development Department, Silicon Valley Power, Water & Sewer Utilities	Unknown	Yes
Planners or engineers with an understanding of natural hazards	• Yes • Full time • DPW, Community Development Department, Silicon Valley Power, Water & Sewer Utilities	Yes, CDD-Building	Yes

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Staffing Capability	Have Capability?	Is staffing adequate to enforce regulations?	Is staff trained on natural hazards and mitigation?
Surveyors	• Yes • Full time • Land Surveyor, DPW	No	No
GIS Coordinator or personnel skilled or trained in GIS applications	• Yes • Full time • Contracted, IT Department for enterprise GIS and applications along with the departmental SMEs; also includes staff trained in DPW, Silicon Valley Power, Water & Sewer Utilities	Unknown	No
Public Works Director	• Yes • Full time • Public Works Department	No	Yes
Fire Chief	• Yes • Full time • Fire Department	Yes	Yes
Environmental Director	• No environmental director but PW handles some components including Waste collection, Stormwater programs, closed Landfill Operations & Maintenance. • Water and Sewer utilities oversees Water Distribution System CIP and Operation and Maintenance, supply, Water quality, Water Conservation, Recycled water, Sewer collections System and their Operations and maintenance, Fat, Oil and Grease, Pre-Treatment program.	No	No

Staffing Capability	Have Capability?	Is staffing adequate to enforce regulations?	Is staff trained on natural hazards and mitigation?
Staff with training in benefit/cost analysis	• Yes • Full time • Finance/Director	Yes	No
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 City of Santa Clara needs to comply with National Pollutant Discharge Elimination System (NDPES) permit requirements, which aim to minimize the amount or pollutants that get into our waterways via storm drains. To accomplish this, the City of Santa Clara takes the following measures: • More frequent street sweeping in industrial zones • Early sweeping schedule in industrial zones to avoid parked cars that limit access to the curbside • Educational outreach • Adoption of Single-Use Carryout Bag and Polystyrene Foam Food Service Ware Ordinances • Installation of full trash capture devices in storm drain inlets • Support community litter abatement efforts through the Adopt-a-Spot Program Also, the City has programs related to Tree Maintenance, Storm Drain System Maintenance in addition to regular street sweeping.
Mutual aid agreements	Yes	The Police & Fire Departments are part of the Countywide mutual aid plan that requires resource sharing for unplanned events. Electric Utility has mutual aid through California Utilities Emergency Association.
Hazard data and information	Yes	Flood maps, water & sewer maps, tree maps, power line maps.

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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?
Hazard analysis or GIS software	Yes	The City's Enterprise GIS is composed of dozens of data layers from the core departments engaged with hazard mitigation such as Public Works, Community Development, Fire, Police, Office of Emergency Services, Silicon Valley Power, and Water & Sewer. Data stored in the Enterprise GIS is crucial to hazard mitigation efforts (i.e., floods, fires & public safety initiatives). For example, the Enterprise GIS has been used to support the fire department in their planning for hazard mitigation around fires at a manufacturing plant where unsafe chemicals are stored.
Grant writing	Yes	The grant writer is contracted with Townsend Public Affairs (TPA) for grant opportunities including Fire, Police, DPW, IT, Parks & Rec, SVP, Water & Sewer Utilities.
Does your jurisdiction have any established warning systems or services for hazard events?	Yes	AlertSCC is the County of Santa Clara's official emergency alert and warning system and is used by the City of Santa Clara.

Table 9: National Flood Insurance Program (NFIP) Compliance

Topic	Response
What department in your jurisdiction is responsible for floodplain management?	Community Development
Who acts as your jurisdiction's floodplain administrator?	Director of Community Development
Is the floodplain administrator or NFIP Coordinator certified?	No
Is floodplain management an auxiliary function in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	Floodplain Management Ordinance 2060 was adopted by City Council on June 6, 2023.
Do floodplain development regulations meet or exceed FEMA or state minimum requirements? If regulations exceed requirements, in what ways?	Yes, they meet the minimum requirements.

Topic	Response
How are the substantial improvement/substantial damage provisions implemented?	Both the Floodplain Administrator and Building Official are authorized to make substantial improvement/substantial damage determinations. The Floodplain Administrator may further designate this duty to other employees, as necessary. The Floodplain Administrator and Building Official are responsible for working together to assess damaged buildings located in flood hazard areas and inform owners of the requirement to obtain permits for repairs. The Floodplain Administrator is responsible for reviewing all development permits where proposed development is located in flood hazard areas. All permits shall be maintained and permanently kept and made available for public inspection as necessary.
Provide an explanation of the permitting process for development within the floodplain.	See City code Title 15, Chapter 15.45.
Does your floodplain management program meet or exceed minimum requirements?	Yes, Floodplain Management Ordinance 2060 was adopted by City Council on June 6, 2023.
When did your jurisdiction enter the NFIP?	January 20, 1999
Is your jurisdiction in good standing with the NFIP?	Yes
Are the jurisdiction's Flood Insurance Rate Maps (FIRMs) digital, paper, or both?	Digital Adopted effective FIRMs 5/18/2009
Explanation of NFIP administration services within your jurisdiction.	The Building Permit review process includes review of all SFHA areas to provide proper mitigations and requirements prior to issuance of a Building Permit. Plans are clearly marked and noted when located within a designated floodplain and specific requirements are detailed.
Barriers to running an effective NFIP program in your jurisdiction.	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	2012
Is a CAV or CAC scheduled or needed?	Unknown
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
Does your jurisdiction participate in the Community Rating System (CRS)?	Yes

Topic	Response
How many structures are exposed to flood risk within your jurisdiction?	Unknown
How many flood insurance policies are in force in your jurisdiction? • What is the insurance in force? • What is the premium in force?	683 policies in force \$222,286,800 insurance in force \$643,583 premium in force
Areas of flood risk with limited NFIP policy coverage.	Unknown
How many total loss claims have been filed in your jurisdiction? • 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?	• 29 total loss claims have been filed • \$264,753 total payments for losses
How NFIP compliance will be continued during the next 5 years.	• Adoption of an updated Floodplain Management Code • The Building Permit review process includes review of all SFHA areas to provide proper mitigations and requirements prior to issuance of a Building Permit. • Floodplain mapping updates. • Ongoing communication to property owners who are interested in improving properties in SFHA to provide updated information.

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	Works in coordination with the EOC in any relevant resiliency and mitigation messaging	Yes
Does your jurisdiction have personnel skilled or trained in website development?	Yes	Works in coordination with the EOC in any relevant resiliency and mitigation messaging	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 hazard mitigation information available on your website?	Yes	The Fire Department has an emergency preparedness webpage that includes links to various resources, as well as a copy of the current local hazard mitigation plan.	Yes
Does your jurisdiction utilize social media for hazard mitigation education and outreach?	Yes	Works in coordination with the EOC in any relevant resiliency and mitigation messaging using Twitter, Facebook and NextDoor	Yes
Does your jurisdiction have any citizen boards or commissions that address issues related to hazard mitigation?	No	N/A	No
Does your jurisdiction have any ongoing public education or information programs that could be used to communicate hazard-related information?	Yes	Under the CRS program, ongoing public education continues through social media on topics related to storm preparedness, earthquake readiness, and other hazards	Yes
Does your jurisdiction have local citizen groups or nonprofit organizations focused on environmental protection, emergency preparedness, and/or underserved populations?	Yes	Training people in advance who can be leaders in their own communities as CERT volunteers assists with the City's mitigation capabilities. We have the ability to swear in CERTs as Disaster Service Workers (DSWs) if needed in a disaster. We have also increased the number of City staff members in various departments to have the ability to swear in emergency DSWs.	Yes
Does your jurisdiction have natural disaster or safety related school programs?	Yes	Safe Routes to School; emergency preparedness & fire safety outreach to schools	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	Yes	Office of Emergency Services partnership with the County Office of Emergency Management, County Climate Collaborative, Silicon Valley Urban Forest Alliance and Valley Water	Yes

Table 11: Community Classifications

	Participating?	Classification	Date Classified
Community Rating System	Yes	7	10/1/2019
Building Code Effectiveness Grading Schedule	No	-	N/A
Insurance Services Office (ISO) Fire Rating	Yes	2	2021
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 Community Development
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	Yes

Table 13: Adaptive Capacity for Climate Change

Adaptive Capacity Assessment Question	Jurisdiction Rating
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts	Medium

Adaptive Capacity Assessment Question	Jurisdiction Rating
<i>Comment: None provided</i>	
Jurisdiction-level monitoring of climate change impacts	Medium
<i>Comment: Sea level rise is expected to have minimal impacts to Santa Clara properties.</i>	
Technical resources to assess proposed strategies for feasibility and externalities	High
<i>Comment: None provided</i>	
Jurisdiction-level capacity for development of greenhouse gas emissions inventory	Medium
<i>Comment: Climate Action Plan contains a comprehensive inventory, and the update of the Climate Action Plan in the next 1-3 years will include an inventory update.</i>	
Capital planning and land use decisions informed by potential climate impacts	High
<i>Comment: General Plan principles, including the Climate Action Plan criteria, consider climate implications.</i>	
Participation in regional groups addressing climate risks	Medium
<i>Comment: Staff participates in regular regional climate change meetings as time permits.</i>	
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes	High
<i>Comment: The Climate Action Plan is incorporated into the General Plan and is considered as part of the decision-making process.</i>	
Identified strategies for greenhouse gas mitigation efforts	High
<i>Comment: The Climate Action Plan (CAP) addresses statewide GHG reduction goals through 2020, and the City updated the CAP in 2022 to address the GHG reductions goals for 2030 and 2050.</i>	
Identified strategies for adaptation to impacts	Medium
<i>Comment: The initiatives and strategies addressed across all departments through CAP.</i>	
Champions for climate action in local government departments	Medium
<i>Comment: Sustainability manager was hired in 2020.</i>	
Political support for implementing climate change adaptation strategies	Medium
<i>Comment: Sustainability is continually gaining additional support in the community and with the Council.</i>	
Financial resources devoted to climate change adaptation	Medium
<i>Comment: None provided.</i>	
Local authority over sectors likely to be negative impacted	Medium
<i>Comment: None provided.</i>	
Public Capacity	
Local residents' knowledge of and understanding of climate risk	Medium
<i>Comment: Some members are highly educated. More City outreach could contribute to overall knowledge base.</i>	
Local residents' support of adaptation efforts	Medium

Adaptive Capacity Assessment Question	Jurisdiction Rating
Comment: Climate adaptation is a concept that has not yet been discussed widely and is often only associated with natural disaster response, not with the need for climate adaptation. Therefore, support for adaptation will depend on regional and statewide support for tying the public awareness about disaster response to the need for climate adaptation measures and funding as a strategy in natural disaster relief.	
Local residents' capacity to adapt to climate impacts	High
Comment: Lower income residents have expressed concerns about access and implementation of climate adaptation strategies at the individual level.	
Local economy current capacity to adapt to climate impacts	High
Comment: In order to implement climate adaptation elements, cities will need to be creative in folding initiatives into existing CIP projects and seeking grant and community partnership approaches to funding.	
Local ecosystems capacity to adapt to climate impacts	Medium
Comment: Valley Water is lead on riparian corridors and is addressing ecosystem health from that perspective. Additionally, Santa Clara is part of the Silicon Valley Urban Forest Alliance to address tree-related urban ecosystems.	

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:

- 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, including lower income residents.
- Actively identify and utilize a variety of funding sources for mitigation grants including capital improvement funds, grants, and community partnerships
- Support public education and outreach on climate adaptation and climate risk.
- Incorporate considerations of natural hazards including climate change into the next Urban Water Management Plan update.
- Update the Climate Action Plan and incorporate additional data and actions related to hazard mitigation for those hazards influenced by climate change.
- Since the last update, multiple new grant programs that support mitigation measures have been established. FEMA's annual BRIC grant program funds a variety of mitigation actions, including infrastructure projects, nature-based solutions, climate adaptation, hazard resistant building codes, and projects benefitting disadvantaged communities.

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:

- **General Plan:** The City of Santa Clara incorporates relevant mitigation measures into the policies and actions of the General Plan, including Safety Policy 5.10.5-P1, which calls for the LHMP to be the primary guide for disaster preparedness in the City. It addresses natural disasters such as earthquake, landslide, wildfire, and flooding.
- **Climate Action Plan:** Integrated into the General Plan, the CAP identifies steps for the City to take in its own operations and in review/approval of new development to reduce greenhouse gas emissions. At the time of the next update, information obtained in the update of the hazard mitigation plan will be integrated into the Climate Action Plan as appropriate.
- **Public engagement, education, and outreach:** The City of Santa Clara engages the public through various media and outreach platforms on a broad range of hazard, resiliency, and adaptation messages. Examples include winter preparedness during the fall through the City's newsletter and social media, ongoing social media and TV news stories about access to warming and cooling centers, and a booth with details about flood preparedness at the Art & Wine festival. The City continues CRS activities program for public information (PPI) in collaboration with Valley Water. Water and Sewer Department booth at various City events like Earth Day/Arbor Day, Art and Wine Festivals, and parades for the engagement and outreach of drought and water conservation. The City also partners with SFPUC and Valley Water for various online classes on planting and succulents, all related to Water conservation.
- **Building and/or zoning codes:** The City of Santa Clara regularly updates the California Title 24 Building Codes on the same triennial cycle that the State employs. Currently, the 2022 California Building Codes with local amendments have been adopted and registered with the State and were effective January 1, 2023. In addition, the City has adopted the revised 2023 City of Santa Clara Reach Code which has been accepted by the California Energy Commission and is in full effect as of January 1, 2023.

- **Floodplain management program and/or National Flood Insurance Program (NFIP):** The City's Floodplain Management Regulations Ordinance will be updated with Federal FEMA requirements and coordinate with adopted Building Code regulations was adopted by City Council on June 6, 2023.
- **Community Rating System (CRS) program:** The City of Santa Clara participates in the CRS program and currently has a Class 7 rating which provides 15% discount on all Flood Insurance policies in special flood hazard area.

1.5.2. Opportunities for Future Integration

Mitigation has already been integrated into many of the City of Santa Clara's planning mechanisms. The update timeline for the majority of them do not align well with the hazard mitigation plan update process. However, if future opportunities become available, this plan may be incorporated into additional planning mechanisms. The following plans do provide an opportunity for future integration:

- **Urban Stormwater Management Plan:** The next update of the Urban Stormwater Management Plan is due in 2025. Information from the MJHMP on related hazards, like flooding, and mitigation goals/actions can be incorporated into this plan.
- **Citywide Parks & Recreation Master Plan:** The Parks & Recreation Department intends to hire a consultant in 2023 to develop this plan. The city can evaluate consistency with the hazard mitigation plan and incorporate recommendations as needed.

The City's Local Planning Team, including the Planners, will be responsible for incorporating this MJHMP into other planning mechanisms. Where appropriate, this may include sharing the plan with contractor teams working on other plan updates.

1.6. Jurisdiction-Specific Natural Hazard Event History

Table 174 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
Winter Storms	DR-4301 DR-4308	02/14/2017 04/012017	Emergency Protective Measures & Electric Utility Repair
Drought	N/A	07/2021–04/2023	15% Water cut back and other Water Shortage Contingency Stage 2 Plan implementation to reduce water consumption
Heat and Cold Events	N/A	Year Round	Severity of extreme temperature events create the need for warming and cooling center operations.

Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Wildfire Smoke/Air Quality	N/A	Seasonal	Communities staying indoors; elderly and AFN; downed trees & power lines
Storm Impacts	N/A	Seasonal	Public Works, Water/Sewer, & SVP: downed trees & power lines

1.7. Jurisdiction-Specific Vulnerabilities

- Hazus earthquake models show significant risk to Santa Clara. Estimates for 100-year probabilistic earthquake show an estimated \$2.9 million in damages, or 9.07% of the total replacement value in the city. This was the 4th highest percentage in the OA. Santa Clara had the second highest loss ratio for the San Andreas and Calaveras fault scenarios. Moderate to very high liquefaction potential exists across the city, with higher potential along the creeks.
- Concerns regarding earthquakes include communications disruptions, limited or total loss of access to damaged sites, damaged roads may limit emergency vehicle access, availability of personnel, long-term staffing issues (rotation/relief), ALERTSCC may be unusable due to loss of power and/or communications, records retrieval maybe affected by cloud-based or internet disruptions. There are a number of older structures built before modern building codes. Aging infrastructure and deferred maintenance of emergency response fire stations could be significantly damaged as a result of a major earthquake, resulting in potential emergency response apparatus being unable to respond to emergencies. Similar vulnerabilities are expected with landslides, inclement weather, and wildfire.
- Hazus also shows that Santa Clara has very high risk to flooding. 16,644 residents (13% of the total population) are in the 1% SFHA which is the 2nd highest percentage in the OA. 35,182 residents (27.57%) are in the 0.2% floodplain, which is the highest percentage in the OA. Flooding may cause communications failure, mass casualties, inability to respond, lack of PD resources for search/rescue efforts, employees' ability to respond to PD to provide emergency services, long-term staffing issues (rotation/relief), ALERTSCC may be unusable due to water damage, loss of power and/or communications, records retrieval maybe affected by cloud-based/internet disruptions, and CLETS messaging maybe affected by communications disruptions. The Santa Clara Fire Department does not have any rescue boat resources and would rely on mutual aid from San Jose; however, those resources would likely not be available due to San Jose also being significantly impacted. This would require resource requests from a greater distance which would delay boat-based rescue response if needed.
- Several potential storm water system improvements have been identified to reduce flood risk, including assessment and repair of pump station outfalls, slide gate replacements at pump stations, curb and gutter repairs, improvements at Bowers Avenue Storm Drain pump station, and other storm drain improvement projects identified in the city's storm drain master plan.
- Wildfire hazard risk is lower than most cities in the OA. 113 structures valued near \$4 million and 325 people are at risk. Small areas of risk are found in riparian areas near creeks and also in the open space closer to the bay. Weed and other vegetation management in these areas can keep wildfire risk low. Wildfires in the region could contribute to poor air quality in Santa Clara, 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.

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- Over 50,000 people are potentially at risk to dam failure in Santa Clara. \$12.5 billion in structural value is within dam inundation areas from the J Lenihan Dam. Access to adequate evacuation routes is critical for residents to leave areas that may be impacted by a dam failure.
- Santa Clara has low risk to landslide. 614 people (0.48% of the total city population) are within potential landslide areas, primarily along creek banks. Structures in these areas are valued at \$148 million. The stream channel may experience bank erosion or other slope instability during or immediately following flood or heavy rain events. Due to limited vulnerability and potential mitigation measures, the City has selected to omit this hazard from further consideration.
- Drought is a hazard that has similar conditions over broad areas. It is anticipated that the impacts of drought will be fairly consistent across the OA. Drought impacts can make vegetation more vulnerable to disease and wildfire. Extended drought may necessitate limits on landscape irrigation or higher costs for irrigation, which can have economic impacts. Although agriculture is not a primary economic sector in the OA, drought can have severe negative impacts on growth of crops and gardens. A severe drought may result in an increase of casualties. There will be increased mutual aid requests statewide for wildfire response, taxing Santa Clara resources. Fire Department training becomes limited due to water restrictions, increasing the risk to responders. Drought conditions may become more frequent or more intense in the future due to climate change, requiring increased attention to maintaining an adequate water supply for the city. Water conservation and drought-tolerant landscaping can reduce risk by decreasing demand for water.
- 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 with underlying health conditions, access and functional needs, people over 65, and others may be particularly impacted by severe weather. People who work outdoors are also more at risk. Climate change is expected to increase the frequency and severity of severe weather events, including extreme heat, drought, and heavy rain.
- Extreme cold events are infrequent and expected to occur less in the future due to warming trends associated with climate change. Impacts to critical facilities, infrastructure, and other assets are minimal. Primary concerns associated with extreme cold are potential health impacts to vulnerable populations such as unhoused individuals, outdoor workers, or individuals without adequate heat in their homes.
- Trees can help cool surfaces and reduce the urban heat island effect in times of extreme heat. However, high wind events can lead to damage from falling trees or tree limbs. Proper maintenance, watering, and pruning are needed to keep trees healthy to avoid potential damage.
- Santa Clara does not have any assets directly at risk to tsunamis. Some regional transportation or utility services may have indirect impacts on residents if disrupted by a tsunami. The mapped evacuation area for tsunami comes close to Hwy 237, a primary transportation route on the north end of Santa Clara. Although it is not expected, a tsunami could cause closure or other obstruction on this road or bridges in this area.
- Potential communication disruptions and power outages could affect technology and, employees' ability to respond from home. Records retrieval may also be affected by cloud-based or internet disruptions.

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 subsequent 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.

Intense rainstorms can result in increased risk of landslides occurrences, so increased heavy rain events driven by climate change may also increase the occurrence of landslides. Loss of vegetation from wildfire reduces slope stability, so an increase in wildfires resulting from climate change may also increase post-fire debris flows.

Climate change may lead to frequent fluctuation of water levels retained by dams and may result in 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 was not available for the OA; however, changes in temperature and extreme weather events may also be accompanied with increases in high wind. Winds can damage utility lines, resulting in power outages and can also contribute to extreme wildfire risk conditions.

Santa Clara 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 Santa Clara. Climate change may impact those conditions but may not significantly increase the potential impacts to the city due to the limited extent. Climate impacts to earthquake hazards are not well understood and not currently believed to have an effect in Santa Clara. 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

Santa Clara residents have moderate to moderately high social vulnerability, as shown in Figure 113. Several characteristics among the population may make efforts to recover from the impacts of natural hazards more difficult for many residents. Housing Type and Transportation characteristics are a major influencing factor in the overall high social vulnerability scores, as well as a high percentage of racial and ethnic minority populations in the city. Household characteristics and socioeconomic status also contribute to overall vulnerability, although to a lesser extent. The city will have to take additional steps to meet the specific needs of these vulnerable populations.

U.S. Census Bureau QuickFacts reports that 47% of Santa Clara residents are Asian, and 15.3% are Hispanic. 45% are foreign born and 55% primarily speak a language other than English at home. Cultural or language barriers may limit their access to information regarding hazard risks and post-disaster relief. 4.6% of individuals under 65 have a disability. These individuals may also have mobility limitations that increase their risks from severe weather and other hazards, and they may depend on others for medical care and other day-to-day assistance. 8% of the population have an income below the poverty level. Those with lower incomes may be more likely to live in areas of poorly maintained or aging housing and

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infrastructure. Older homes may be more susceptible to damage from earthquake, severe weather, or flooding. Individuals with fewer financial resources have less capacity to recover from disaster losses and are less able to secure temporary housing if needed.

Heavy rain, wind, extreme heat or cold, and drought can occur throughout the city, so all vulnerable populations could potentially experience greater impacts from those hazards. Earthquake and liquefaction risk and flood risk are also high throughout the city and could potentially impact all vulnerable populations. Landslide susceptibility is minimal in Santa Clara and not a high concern for vulnerable populations. Wildfire hazard is also limited in Santa Clara, but poor air quality from wildfires in nearby jurisdictions could contribute to health consequences for vulnerable populations such as children or people over age 65, outdoor workers, or those with respiratory or other chronic health conditions.

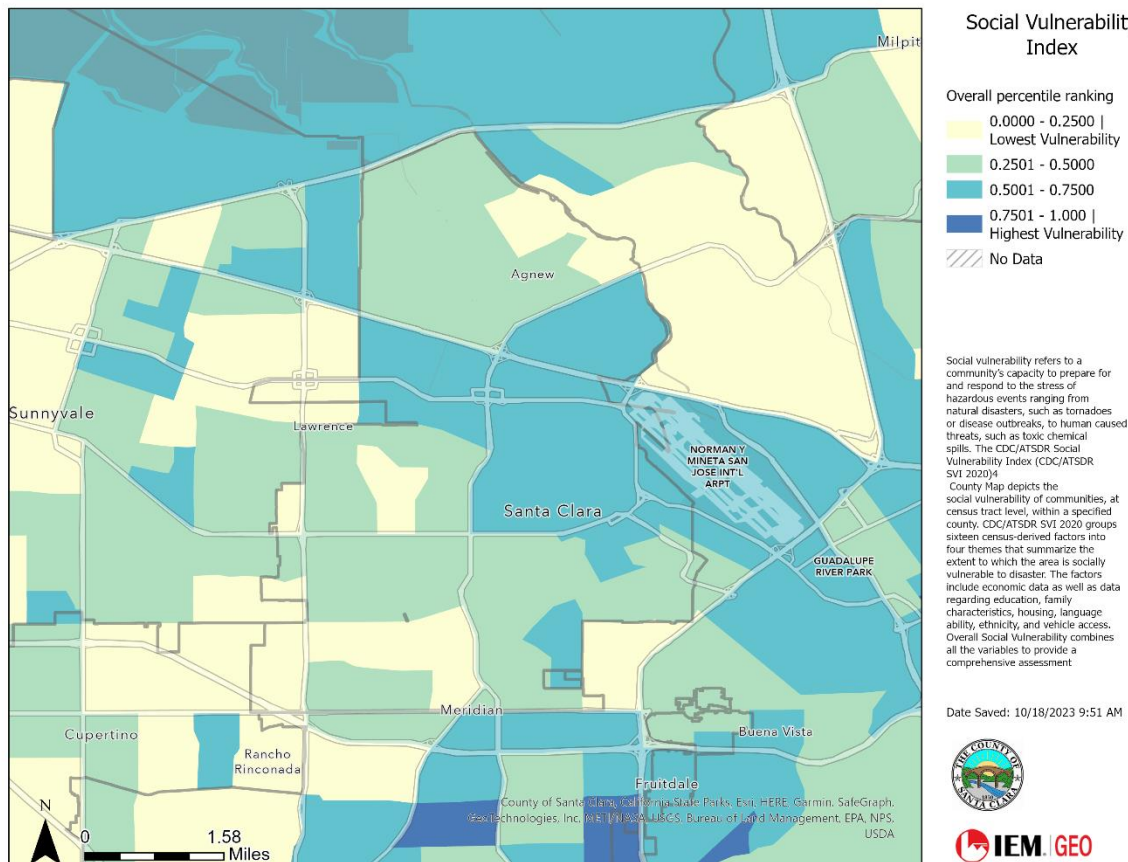


Figure 4: Santa Clara City Social Vulnerability

The Climate and Economic Justice Screening Tool (CEJST) in Figure 114 identifies census tracts that are overburdened and underserved. One tract in Santa Clara meets the thresholds for disadvantaged communities. Linguistic isolation, percentage of individuals with less than a high school diploma, high flood risk, exposure to air pollutants, and proximity to superfund and hazardous waste sites are among the factors contributing to Santa Clara's disadvantaged status.

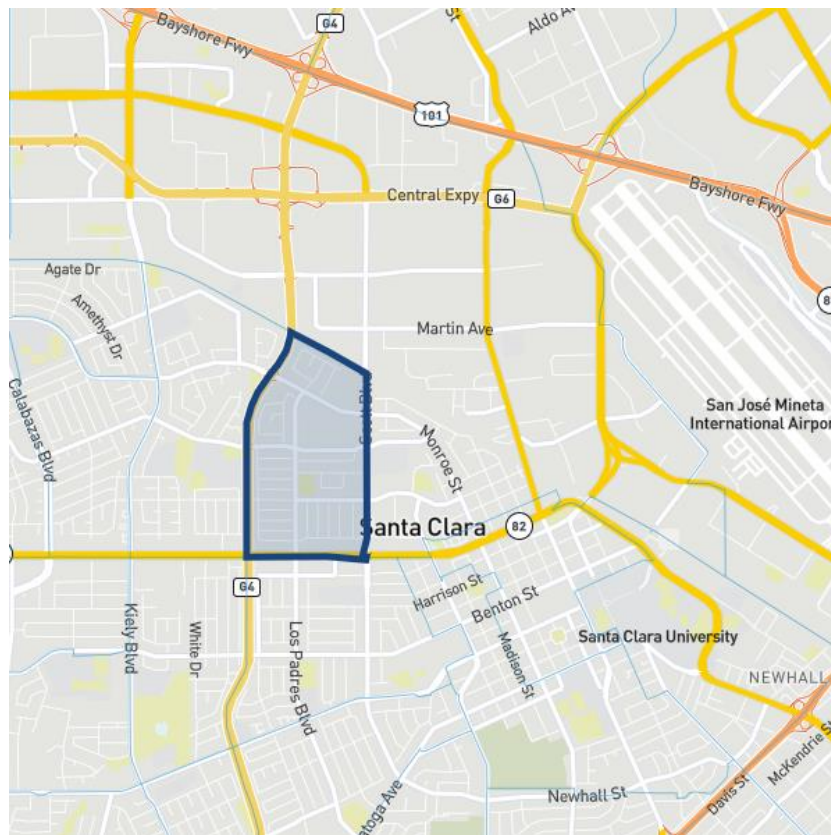


Figure 5: CEJST Disadvantaged Communities in Santa Clara City

1.8. Hazard Risk Index

Table 175 presents the hazards of concern from highest risk index number to lowest, as assigned by the City of Santa Clara.

Table 15: Hazard Risk Index

Hazard	Probability	Life Impact	Property Impact	Percentage of Area Impacted	Maximum Probable Extent
Earthquake	Highly Likely	Catastrophic	Catastrophic	Extensive	Major
Flood	Likely	Critical	Critical	Significant	Moderate
Dam/Levee Failure	Occasional	Critical	Critical	Extensive	Major
Heavy Rain	Highly Likely	Limited	Limited	Significant	Moderate
High Wind	Likely	Limited	Limited	Significant	Moderate
Extreme Heat	Likely	Limited	Limited	Significant	Moderate
Extreme Cold	Likely	Limited	Limited	Significant	Moderate
Drought	Highly Likely	Limited	Minor	Significant	Moderate
Climate Change	Likely	Limited	Limited	Significant	Moderate

Hazard	Probability	Life Impact	Property Impact	Percentage of Area Impacted	Maximum Probable Extent
Wildfire/Smoke/Air Quality	Likely	Limited	Limited	Minimal	Moderate

Table 16: Comparison of Santa Clara City Hazard Risk Scores with Operational Area (OA)

Risk Score	Earth-quake	Dam/Levee Failure	Heavy Rain	High Wind	Extreme Heat	Wildfire	Drought	Flood	Land-slide	Tsunami	Climate Change
Santa Clara	3	1.8	1.7	1.4	1.4	1.3	1.45	2	0	0.35	1.4
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 and Vulnerability

Capabilities needed to better understand risk include frequent testing of PD and Fire communication systems in adverse conditions, with additional testing on backup communication abilities. As well as staffing modules to forecast long-term catastrophic relief or rotation, training PD personnel on the ICS Command Structure, and ensuring that historical records can be retrieved during catastrophic events.

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
SC-1	Where appropriate, support retrofitting, purchase, or relocation of structures in	All Hazards	In progress. The City of Santa Clara permits retrofits of existing structures, including flood-

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
	hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses		proofing, consistent with the building code. In addition, the City is supportive of other agencies, including the Santa Clara Valley Water District (Valley Water), in their efforts to remove structures from hazard-prone areas. OES will support Community Development's lead on this effort and assist with identifying applicable funding.
SC-2	Continue to support the Planning Area-wide actions identified in this plan	All Hazards	In progress. This objective is re-worded for clarity. OES/FIRE will continue to support hazard mitigation planning actions in the City.
SC-3	Actively participate in the plan maintenance strategy identified in this plan	All Hazards	In progress. OES will continue to coordinate the maintenance strategy identified in this plan.
SC-4	Consider participation in incentive-based programs such as Tree City and Storm Ready	All Hazards	In progress. The City of Santa Clara has been recognized as a Tree City USA for the past 36 years running. The City updated our Trees and Shrubs Ordinance in 2021. Although the City participates extensively in storm readiness, it is not currently an official Storm Ready City. Pursuing an official Storm Ready designation is not a priority at this time as this would require resources that exceed the City's current capacity such as a 24-hour Emergency Operations Center and trained "severe weather spotters." The City leverages working relationships with the National Weather Service and the County Office of Emergency Management to maintain situational awareness of the weather and messages the community through the City's communications channels with severe weather notices and preparedness information.
SC-5	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP	Flood	In progress. The City of Santa Clara participates in the Federal Emergency Management Agency's (FEMA's) Community Rating System (CRS). CRS is a

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
	requirements. Such programs include enforcing an updated, adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts. Continue participating in the Santa Clara County Multijurisdictional Program for Public Information.		program through which FEMA rewards communities that perform floodplain management activities above and beyond the minimum requirements of the NFIP. The City has a CRS class 7 rating, so residents and businesses can receive a 15% discount in insurance premiums for properties in Special Flood Hazard Areas and a 5% discount in insurance premiums for properties outside Special Flood Hazard Areas. The City maintains its participation in NFIP, CRS and PPI. The City regularly coordinates with other Santa Clara County communities for the annual PPI evaluation. The City's 5-year cycle visit for CRS is scheduled for November 2023. The City's updated Floodplain Management Regulations ordinance was adopted by Council on June 6, 2023.
SC-6	Integrate the Hazard Mitigation Plan into other plans, programs, or resources that dictate land use or redevelopment, such as the General Plan, Climate Action Plan, Zoning Ordinance, Building Code, etc.	All Hazards	In progress. The City of Santa Clara has incorporated the HMP into the City's General Plan through its Safety Goals and Policies. In addition, the Adopted 2022 CAP Update will incorporate adaptation and resilience measures into the CAP's Community Resilience and Well-being strategy. At the end of 2021, the City Council adopted updated Reach Codes and it cleared the regulatory review in June 2022. The City has adopted the 2022 Building Codes and an updated 2023 City of Santa Clara Reach Code, all of which were effective January 1, 2023.
SC-7	Based on EOC staffing capabilities assessment, ensure that mandated training is provided to all employees in SEMS, FEMA ICS-100, ICS-	All Hazards	In progress. The objective is reworded for clarity. EOC staff have the goal of completing training to achieve Level III credentialing defined by the

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
	200, IS-700, and IS-800; and ensure that employees training records are security maintained.		California Specialized Training Institute (CSTI), the training branch of the California Governor's Office of Emergency Services (Cal OES). As a short-term objective to this goal, the City Manager formally appointed City staff to work in the EOC as part of a formal training program that was launched in September 2019. City staff assigned to the EOC during the pandemic response gained extensive experience that will assist with credentialing.
SC-8	Based on EOC staffing capabilities assessment, ensure that mandated training is provided to employees who require advanced knowledge and application of the ICS, such as primary and alternate EOC Section Chiefs and senior field personnel, to include at least ICS-300, ICS-400, and the FEMA Professional Development Series; and ensure that employee training records are securely maintained.	All Hazards	No longer relevant. This objective was deleted and integrated into SC-7 and SC-9.
SC-9	Based on EOC staffing capabilities assessment, ensure that all Fire and Police Department staff who may be assigned the role of incident commander at an emergency/disaster scene have received incident Commander training; and ensure that employee training records are securely maintained.	All Hazards	In progress. The Fire Department is training Captains and above to the Incident Command System (ICS)-300 level and Battalion Chiefs and above to the ICS-400 level. The Police Department is training Lieutenants and above to the ICS-300 level and Captains and above to the ICS-400 level.
SC-10	Monitor local availability of upcoming training opportunities for city staff regarding incident staffing, disaster response, and recovery	All Hazards	In progress. OES monitors local availability of training opportunities and notifies applicable EOC staff.
SC-11	Continue to conduct EOC tabletop exercise(s) to evaluate capabilities and train	All Hazards	In progress. EOC staff gained practical experience responding to the COVID-19 pandemic. EOC

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
	employees in their assigned EOC role(s)		staff facilitated the regional simulation cell in the City EOC for the 2022 Golden Eagle Exercise. Tabletop exercises will continue when COVID response activities are expected to further decrease beginning in the late fall of 2022. (In November 2022, the EOC tabletop exercises resumed.) Water and Sewer Department performed the tabletop exercise on December 8th as a part of the Emergency Response Plan that included Water and Sewer Department staff, crew, engineers, administrative and department management staff.
SC-12	Develop and exercise a Disaster Debris Management Plan	Dam Failure Earthquake Flood Severe Weather	Retain. Not yet started. However, the City is further in development of a disaster debris management plan based upon the disaster recovery and reimbursement process for the 2017 Winter Storms that concluded in late 2018. The formal plan is a long-term goal. The County of Santa Clara does not currently have a formal Debris Management Plan. Once the County drafts a debris management plan with an included template for use by local jurisdictions in developing plans for debris management, the City of Santa Clara will utilize these resources to develop a localized plan.
SC-13	Enhance public education and awareness of natural and manmade hazards in the community and public understanding of disaster preparedness, including foreign language translations	All Hazards	In progress. In partnership with the Santa Clara County Office of Emergency Management, the City has distributed disaster preparedness materials in English, Spanish, Mandarin, and Vietnamese. City departments distribute these materials throughout City Hall and to the community, including at fire stations, the Community Recreation Center, Teen Center, Youth Activity Center, Senior

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
			Center, the Mission Branch, Central, and Northside Libraries. The Fire and Police Departments and City Manager's Office also distribute the materials at trainings and special events. Even during the unprecedented challenges posed in 2020 and 2021, the Police Department continued to be an answering point for public concerns ranging from pandemic/shelter in place questions to police policies and practices. In addition, the Fall/Winter Edition of Inside Santa Clara provides winter preparedness tips. The Summer 2022 Edition of Inside Santa Clara was distributed and included a section dedicated to fire and safety tips. Other editions of the magazine and the City's website and other communication channels provide pandemic outreach materials. https://www.santaclaraca.gov/our-city/departments-g-z/public-works/engineering/flood-protection/flood-safety-tips. Outreach is also conducted in other languages, including Spanish, to promote emergency preparedness. The City is also collaborating with the local VOAD (Voluntary Organizations Active in Disasters) to provide MyShake earthquake preparedness outreach in our community in multiple languages.
SC-14	Develop improved capabilities to incorporate GIS technology by all departments into services provided to the public and for use during emergency/disaster incidents.	Dam Failure Earthquake Flood	In progress. This objective is re-worded for clarity. The EOC has a GIS-based operating picture and will continue to add layers for increased situational awareness as funding and staff time become available. Water and Sewer Utilities is transitioning their Water, Sewer and Recycled Water plat maps to GIS version. SVP

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
			maintains Electric Utility infrastructure in GIS.
SC-15	Conduct a test of emergency communications and information systems interoperability, to establish baseline capabilities for employee call-back, communications between the EOC and incident command, and communications with the Operational Area and Mutual Aid resources	All Hazards	In progress. Baseline capability with the AlertSCC application for employee callback was established in August 2018. Key EOC leadership positions may also be notified through the low technology option of telephone. (Confidential wallet cards with contact information are maintained and updated regularly for this option. Communications between the EOC and Incident Command are tested regularly during Levi's Stadium events. Communications with the Operational Area and Mutual Aid resources are implemented day-to-day with the Police and Fire Departments. The Fire Department uses CrewSense staffing software for enhanced callback notification of personnel to their cell phone during large events that require a recall of personnel. The City's Alert and Notification Workgroup convened in March 2020 and had been in recess due to the current COVID-19 pandemic response. However, during 2022 the workgroup reconvened with Communications and Police Departments participating to coordinate in advance and engage in practice drills. (Please Note: For the purposes of emergency operations, the Communications Team is defined as all departmental PIOs or operational leads.) SVP, in collaboration with Water and Sewer Utilities, is also looking into implementing staffing software to callback utilities crew and staff.
SC-16	Conduct a gap analysis of the Santa Clara City Emergency/Disaster preparedness and response program, to include a	All Hazards	In progress. A review of plans and procedures identified the need for a Severe Weather/Flood Plan to formalize practices in this area, and a draft Incident Planning and

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
	comprehensive review of employee training requirements and needs, plans and procedures, EOC equipment and staffing capabilities, and related analysis		Response Guide has been developed. The Water/Sewer Department hired a consultant to complete a Risk and Resilience Assessment (RRA) by March 31, 2020, and an Emergency Response Plan (ERP) by September 30, 2020, to meet federal regulations under the America's Water Infrastructure Act (AWIA). The consultant has completed both RRA and ERP and conducted a thorough review of all critical assets and risk assessment of the water system that involves all hazards that include natural hazards, dependency and proximity threats, offsite threats and malevolent threats that might impact water system operations and engineering systems. The Department is also performing once a year tabletop exercise and update to the ERP for water and sewer utilities. The purpose of the RRA and ERP is to identify City response actions during an emergency that will maintain the expected quantity of water, maintain water treatment, protect employees, minimize disruption to the public, preserve property, and maintain community trust in the City. The recommendations by the consultant will be incorporated into the department future Capital Improvements Program (CIPs) projects.
SC-17	Acquire a mobile Emergency Operations Center	All Hazards	Retain. Acquisition is not yet started. This continues to be a low priority in consideration of other City priorities and available resources, including from neighboring jurisdictions.
SC-18	Develop unmanned aerial vehicle (UAV/drone) capability for hazard mitigation surveys and post-disaster damage	Dam Failure Flood Earthquake Severe Weather	In progress. The Fire Department purchased a UAV and obtained FAA approvals to operate it within the City. It is recommended that a

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
	assessments, and develop policies, procedures, and staff training guidelines for UAV use.		policy be developed regarding UAV capability and for the public to be made aware. The Police Department is developing applicable UAV policies for both the Police and Fire Departments. As of October 2019, both Fire and Police Departments have obtained Council approvals to purchase UAV capabilities. After a significant delay due to position freezes, the Police Department recently began the process to standup their UAV program. Currently, the program is being managed as a collateral assignment. The Fire Department completed the purchasing process for a drone and took possession in May 2021. The Certificate of Authorization (COA) process is completed, and the Department has full FAA authorization. Six personnel have completed a drone pilot process and are authorized to fly under those regulations. Future growth of the Fire Department's Drone Program includes training more pilots, developing more internal operational procedures for use outside of emergency incidents and outreach to community members who are certified drone pilots that might be interested in joining the Santa Clara Fire Department Volunteer Reserve Firefighter Program.
SC-19	Enhance Fire Department field inspection system using portable computers for engine company inspections and Fire Prevention inspections, to integrate inspections, re-inspections, invoicing, permits, CUPA and business license data	All Hazards	In progress. The Fire Department coordinated a purchase with the Community Development and Finance Departments of a common software platform (i.e., Accela) to accomplish this objective. The platform is currently functioning and in use.
SC-20	Conduct seismic and functional assessment of Emergency Operations Center	All Hazards	Retain. The assessment has not yet started. A seismic and functional assessment of the EOC was part of a facilities

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
			infrastructure assessment of Fire Department buildings expected to be initiated in 2020. Since the budget for this project was not approved, other avenues will continue to be explored.
SC-21	Acquire emergency generators for the City's critical facilities, specifically Fire Stations 5,7,8 and 9. Citywide Generator Replacement Program includes Water well, water tanks/reservoir, Sewer Pump Stations and Storm Pump Station Sites.	All Hazards	In progress. This objective was reworded for clarity. Phase I of the generator replacement project is nearing completion and new generators have been installed at several fire stations and the Emergency Operations Center. Phase II of the project includes two storm pump stations and two water well sites, construction contract is awarded, in pre-construction phase, and estimated construction completion date is Fall 2025.
SC-22	Maintain and improve Water and Sewer Utilities as necessary to ensure systems are able to maintain their functionality in response to potential hazards such as drought, flood, or earthquakes	Drought Flood Earthquake	In progress. The City ended the proclamation of drought emergency on May 9th and kept water use restrictions unchanged to prepare for the inevitable drought known to come. It requires level 2 drought water shortage contingency plans. On July 18, 2023, the Council adopted a resolution rescinding stage 2 of the City's water shortage contingency plan while continuing to implement State Water Resources Control Board Water Use Restrictions. The City is maintaining the 15% voluntary water use reduction compared with 2019 in alignment with Valley Water policy. City staff continues to work closely with Valley Water, Bay Area Water Supply and Conservation Agency and SFPUC staff to provide a coordinated message to customers and develop conservation strategies, outreach materials and a communication plan for water conservation to

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
			address future drought and climate change impacts.
SC-23	Integrate climate change and natural hazards planning into current city plan revisions and future planning initiatives.	All Hazards	In progress. Climate Change is addressed both in the sustainability section of the City's General Plan and in the Climate Action Plan (CAP). The CAP, which was adopted by the City Council on June 7, 2022, includes more stringent 2030 reduction targets, along with adaptation and resiliency measures as a part of the Community Resilience and Well-being strategy.
SC-24	Develop and maintain a landscape design manual to provide general guidance and education to the public on water efficiency in landscaping and to serve as a resource for water efficient landscape design and installation in compliance with the State Water Efficiency Landscape Ordinance (as amended), including lists of recommended site appropriate native and drought-tolerant plant species	Drought	In progress. The City offers a number of design and conservation resources on its website, including How to Conserve Water in the Garden, and Valley Water's Rules of Thumb for Water-Wise Gardening and Garden Planner (California Native Plant Society). The City also offers landscape rebate conversions in partnership with Valley Water. The Department is in the process to amend its water conservation rules and regulations to promote water conservation and use of recycled water.
SC-25	Continue to improve the City's bike network in coordination with partner agencies, such as the Valley Transportation Authority	All Hazards	• Ongoing. Significant progress has occurred in this area as described below. • The City of Santa Clara adopted a Bicycle Master Plan Update (2018) in September 2019. The Bicycle Master Plan contains a set of project recommendations along corridors and intersections to build out our bicycle network throughout the city. These projects are ranked in order of priority for our top 40 projects and cost estimates are included for all projects within the plan. The city has 58.8 miles of existing bikeways, and at complete build-out there

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
			would be 130 miles of bikeways. • Creek Trail Master Plan. Creek trails are for both pedestrians and bicyclists. The Creek Trail Master Plan encompasses new trails of approximately 9+ combined miles along Calabazas Creek, a major portion of Saratoga Creek, and the Hetch Hetchy corridor (which is under the jurisdiction of the San Francisco Public Utilities Commission). Coordination with numerous stakeholders (Valley Water, Santa Clara County, City of Sunnyvale, Union Pacific Railroad, etc.) for this project has been a challenge, but progress is being made as we are targeting to complete the Master Plan with 30% design plans in 2024. Public outreach to begin in summer 2023. • Several bike projects have been completed since adoption of the 2018 Bicycle Plan Update. • Several bike study projects are planned in the next year (studies required to look at design options which may include parking and/or travel lane removal).
SC-26	Hire or assign a management-level staff member as the Sustainability Manager to coordinate sustainability efforts among different departments and outside agencies	All Hazards	Completed. A Sustainability Manager was hired in January 2021.

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
SC-27	Continue to implement and monitor the current 2014 Climate Action Plan (CAP) and prepare a comprehensive update to the CAP to comply with state greenhouse gas reduction targets. Include adaptation strategies within the updated CAP	All Hazards	In progress. The City is implementing its adopted CAP, including divesting itself from ownership of a coal-fired power plant at the end of 2017. The City has prepared two annual reports (2016 and 2018) that monitor progress towards climate goals under the 2014 CAP. In addition, as a part of the 2018 CAP annual report, the City performed both citywide and municipal inventories, which give the City a baseline for future climate planning efforts. In summer of 2022 the City Council adopted an Update to the CAP to include more stringent 2030 reduction targets, along with adaptation and resiliency measures as a part of the Community Resilience and Well-being strategy.
SC-28	Increase situational awareness capacity in the EOC by expanding GIS resources and providing air to ground communications	All Hazards	In progress. Levi's Stadium has air-to-ground communications, and the EOC has established communications with Levi's Stadium. The Police Department has audio communications with both the Sheriff's Office and the San Jose Police Department. The County Sheriff is in the process of developing air-to-ground communications that may benefit the City in the future.
SC-29	Secure all critical infrastructure in the EOC, the EOC perimeter, and immediate vicinity	All Hazards	Retain. Not yet started. However, security in the EOC has increased with the addition of security badges. Grant opportunities to establish an EOC secure perimeter will continue to be assessed as staff resources allow.
SC-30	Restore the original storage capacity of the Westside Water Retention Basin to hold additional storm water and reduce flooding risk by desilting the basin	Flood	Completed. The Westside Retention Basin desilting project is completed.

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Action Item Number*	Action Item Description	Hazard(s) Mitigated	Current Status and Comments
SC-31	New; added to the City's Annual Evaluation Report for the 2017 Plan. Restore the original storage capacity of the Eastside Retention Basin to hold additional storm water and reduce flooding risk by desilting the basin. Funding for the design of the project was transferred to another storm drain project, Laurelwood Storm drain pump station rehabilitation project (higher priority). The additional funding request for the desilting project is unfunded.	Flood	Retain. Funding for the design, permitting and desilting of the Eastside Retention Basin will be requested in the FY 2024/25 and FY 2025/26 CIP budgeting process.
SC-32	New; added to the City's Annual Evaluation Report for the 2017 Plan. Laurelwood Storm Pump Station Rehabilitation: The pump station was constructed in 1986 and there have been no major improvements to the station since its construction. The Project will modify existing headworks of the wet well, replace existing pumps with new, replace pump controls, improve station configuration, and rehabilitate existing building structure to meet current building codes. The proposed improvements will help the station to meet or exceed the station capacity and improve efficiency.	All hazards	In progress. The project construction has started, and the tentative construction completion date is Fall 2023 (most of the work is completed except the new generator).
SC-33	New; added to the City's Annual Evaluation Report for the 2017 Plan. Replace the Westside Storm Pumps: The Westside Retention Basin Pump Replacement Project is to replace all five pumps (three large pumps and two dry weather flow pumps), associated motors, appurtenances, and structural components.	All hazards	Completed.

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

1.11. Mitigation Successes

Hazard Mitigation is incorporated into the City of Santa Clara's plans and regulations beyond this Hazard Mitigation Plan, including the General Plan, Climate Action Plan, and Storm Drain Master Plan. Santa Clara actively conducts public education and outreach activities on mitigation. During the development of the Climate Action Plan, despite the COVID-19 pandemic unexpectedly requiring virtual engagements, the City was able to engage with hundreds of people and received over 1,000 comments throughout the planning process. During these engagements, not only was the City of Santa Clara able to hear directly from stakeholders but was also able to educate the community about the importance and urgency of climate action. The City also participates in a Multijurisdictional Program for Public Information. As a part of this, Santa Clara actively shares information on hazard mitigation measures, like reducing flood and fire risk, on the City's website, through a citywide newsletter, at a flood readiness table at a local event, and directly to residents and businesses in the SFHA through a newsletter. Additionally, Santa Clara has begun implementing more structural and infrastructure mitigation measures. For example, the City has been working to implement flood protection measures, including making improvements to the existing storm drain system.

During severe drought and pandemic, the City actively conducted several public outreach measures, council updates, and rebates to conserve water indoor and outdoor. Due to likelihood of having drought in near future, the city continues to promote conservation as a way of life.

1.12. Hazard Mitigation Action Plan and Evaluation of Recommended Actions

Table 178 lists the actions that make up the City of Santa Clara hazard mitigation action plan. The maps in Figure 115 through Figure 122 present the City's critical infrastructure 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

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- 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;
 - 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 Santa Clara 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
SC-1*	Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.	All Hazards, including Earthquake, Flood, Dam Failure	OES/Community Development	Pre-Disaster Mitigation (PDM), Hazard Mitigation Grant Program (HMGP), Local Budget (local match)	Dependent on Funding (Short-term)	Low
SC-2*	Continue to support the Planning Area-wide actions identified in this plan.	All Hazards	OES	Local Budget	Ongoing	High
SC-3*	Actively participate in the plan maintenance strategy identified in this plan.	All Hazards	OES	Local Budget	Ongoing	Medium
SC-4*	Consider participation in incentive-based programs such as Tree City and Storm Ready.	Heavy Rain, High Wind, Extreme Heat, Drought	Community Development and Public Works	Local Budget	Short-term	Low
SC-5A*	Maintain good standing under the National Flood Insurance Program (NFIP) by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an updated, adopted flood	Flood	Community Development and Public Works	Local Budget	Ongoing	High

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
	damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts. ¹					
SC-5B*	Continue participating in the Santa Clara County Multijurisdictional Program for Public Information.	Flood, Heavy Rain, High Wind, Extreme Heat, Drought, Dam Failure, Wildfire, Earthquake,	Community Development and Public Works	Local Budget	Ongoing	High
SC-6*	Integrate the Hazard Mitigation Plan into other plans, programs, or resources that dictate land use or redevelopment, such as the General Plan, Climate Action Plan, Zoning Ordinance, Building Code, etc.	All Hazards	All City Departments	Local Budget	Ongoing	High
SC-7*	Based on EOC staffing capabilities assessment, ensure that mandated training is provided to all employees in SEMS, FEMA ICS-100, ICS-200, IS-700, and IS-800; and ensure that employees training records are security maintained.	All Hazards	OES	Local Budget	Short-term/Ongoing	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
SC-9*	Based on EOC staffing capabilities assessment, ensure that all Fire and Police Department staff who may be assigned the role of incident commander at an emergency/disaster scene have received incident Commander training; and ensure that employee training records are securely maintained.	All Hazards	OES/Fire and Police	Local Budget	Short-term/Ongoing	High
SC-10*	Monitor local availability of upcoming training opportunities for city staff regarding incident staffing, disaster response, and recovery.	All Hazards	All City Departments	Local Budget	Short-term/Ongoing	Medium
SC-11*	Continue to conduct EOC tabletop exercise(s) to evaluate capabilities and train employees in their assigned EOC role(s).	All Hazards	OES	Local Budget, UASI, HSGP	Long-term	Medium
SC-12*	Develop and exercise a Disaster Debris Management Plan.	Dam Failure, Earthquake, Flood, Heavy Precipitation / Atmospheric River, Extreme Heat/Extreme Cold, High Wind	CMO/OES/Public Works/SVP	Local Budget, UASI, HSGP	Long-term	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
SC-13*	Enhance public education and awareness of natural and manmade hazards in the community and public understanding of disaster preparedness, including foreign language translations. ¹	All Hazards, including Flood, Heavy Rain, High Wind, Extreme Heat, Drought, Dam Failure, Wildfire, Earthquake,	All City Departments	Local Budget, UASI	Long-term	High
SC-14*	Develop improved capabilities to incorporate GIS technology by all departments into services provided to the public and for use during emergency/disaster incidents.	Dam Failure, Earthquake, Flood Wildfire	OES	Local Budget, PDM	Long-term	High
SC-15*	Conduct a test of emergency communications and information systems interoperability, to establish baseline capabilities for employee call-back, communications between the EOC and incident command, and communications with the Operational Area and Mutual Aid resources.	All Hazards	Communications / OES	Local Budget, UASI, HSGP	Long-term	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
SC-16*	Conduct a gap analysis of the Santa Clara City Emergency/Disaster preparedness and response program, to include a comprehensive review of employee training requirements and needs, plans and procedures, EOC equipment and staffing capabilities, and related analysis.	All Hazards	OES	Local Budget, HSGP	Long-term	Medium
SC-17*	Acquire a mobile Emergency Operations Center.	All Hazards	OES	Local Budget, UASI, HSGP	Long-term	Low
SC-18*	Develop unmanned aerial vehicle (UAV/drone) capability for hazard mitigation surveys and post-disaster damage assessments, and develop policies, procedures, and staff training guidelines for UAV use.	Dam Failure, Flood Earthquake, Heavy Precipitation / Atmospheric River, Extreme Heat/Extreme Cold, High Wind	OES/Fire, Police	Local Budget, PDM, HMGP	Long-term	Medium
SC-19*	Enhance Fire Department field inspection system using portable computers for engine company inspections and Fire Prevention inspections, to integrate inspections, re-inspections, invoicing, permits, CUPA and business license data.	All Hazards	Fire	Local Budget	Ongoing/Short-term	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
SC-20*	Conduct seismic and functional assessment of Emergency Operations Center.	All Hazards, including Earthquake	OES/Fire	Local Budget, HMGP, PDM	Ongoing/Short-term	Medium
SC-21*	Acquire emergency generators for the City's critical facilities, specifically Fire Stations 5,7,8 and 9. Citywide Generator Replacement Program includes Water well, water tanks, Sewer Pump Stations, and Storm Pump Station Sites.	All Hazards, including Flood, Heavy Rain, High Wind, Extreme Heat, Drought, Dam Failure, Wildfire, Earthquake	Public Works, Water and Sewer Utilities	Local Budget, PDM, HMGP	Short-term	High
SC-22*	Maintain and improve Water and Sewer Utilities, as necessary, to ensure systems are able to maintain their functionality in response to potential hazards such as drought, flood, or earthquakes.	Drought, Flood, Earthquake, Dam Failure	Water and Sewer Utilities	Local Budget, PDM, HMGP	Long-term	Medium
SC-23*	Integrate climate change and natural hazards planning into current city plan revisions and future planning initiatives.	All Hazards, including Drought, Extreme Heat, Wildfire, Heavy Rain, High Wind, Flood	Community Development	Local Budget	Ongoing/Medium-term	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
SC-24*	Develop and maintain a landscape design manual to provide general guidance and education to the public on water efficiency in landscaping and to serve as a resource for water efficient landscape design and installation in compliance with the State Water Efficiency Landscape Ordinance (as amended), including lists of recommended site appropriate native and drought-tolerant plant species.	Drought	Community Development/Water & Sewer Utilities	Local Budget	Ongoing/Medium-term	High
SC-25*	Continue to improve the City's bike network in coordination with partner agencies, such as the Valley Transportation Authority.	All Hazards	Public Works and Community Development	Local Budget	Ongoing	Medium
SC-27*	Continue to implement and monitor the current 2022 Climate Action Plan (CAP) and prepare a comprehensive update to the CAP to comply with state greenhouse gas reduction targets. Include adaptation strategies within the updated CAP.	All Hazards	All City Departments	Local Budget	Ongoing/Medium-Term	Medium
SC-28*	Increase situational awareness capacity in the EOC by expanding GIS resources and providing air to ground communications.	All Hazards	OES/Police	Local Budget, PDM	Ongoing	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
SC-29*	Secure all critical infrastructure in the EOC, the EOC perimeter, and immediate vicinity.	All Hazards	OES/ Police	Local Budget, PDM	Long-term	High
SC-31*	Restore the original storage capacity of the Eastside Retention Basin to hold additional storm water and reduce flooding risk by desilting the basin.	Flood, Heavy Rain	Public Works	Local Budget	Long-term	Low
SC-32*	Laurelwood Storm Pump Station Rehabilitation: The Project will modify existing headworks of the wet well, replace existing pumps with new, replace pump controls, improve station configuration, and rehabilitate existing building structure to meet current building codes. The proposed improvements will help the station to meet or exceed the station capacity and improve efficiency.	All hazards, including Flood, Heavy Rain	Public Works	Local Budget	Long-term	Medium
1	Complete Anna Drive Storm Drain Improvement Project.	Flood, Heavy Rain	Public Works	General Fund	Short term	High
2	Complete Bowers Avenue Storm Drain Pump Station Improvement.	Flood, Heavy Rain	Public Works	General Fund	Short term	High
3	Complete slide gates upgrades or replacement and number slide gates at various locations throughout the City to assist with pump station operations.	Flood, Heavy Rain	Public Works	General Fund	Short term	Med

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
4	Conduct curb and gutter repairs or replacement.	Flood, Heavy Precipitation / Atmospheric River, High Wind	Public Works	General Fund, Bond Measure	Short-term/Ongoing	Low
5	Maintain the urban forest by pruning healthy trees, removing unhealthy trees and replenish and expand it by planting and watering new trees.	Climate Change, Drought, Flood, Heavy Rain, High Wind, Extreme Heat, Wildfire/Smoke/Air Quality	Public Works	General Fund	Ongoing/Short-term	Medium
6	Conduct condition assessment of storm drain pump station outfalls and complete associated repair work.	Flood, Heavy Rain, Atmospheric Rivers	Public Works	General Fund, Bond Measure	Short term	Medium
7	Maintain gas collection system and ground water monitoring wells at the closed all purpose landfill.	Climate Change, Wildfire/Smoke/Air Quality	Public Works	Solid Waste Fund, General Fund	Ongoing/Short-term	High
8	Remove dead and overgrown vegetation from the Tasman Drainage Swale.	Drought, Wildfire, Flood	Public Works	General Fund	Ongoing/Short-term	Medium
9	Complete Storm Drain Improvement projects (highest priorities projects) as identified in the City's storm drain master plan.	Flood, Heavy Rain	Public Works	General Fund	Ongoing/Medium-term	High

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
10	Complete the Eastside Retention Basin Desilting Project.	Flood, Heavy Rain	Public Works	General Fund, Bond Measure	Short term	Medium
11	Continue to identify and utilize facilities as appropriate for community information, respite & distribution centers in the case of severe hazards and emergencies.	Climate Change, Drought, Flood, Heavy Precipitation / Atmospheric River, Extreme Heat/Extreme Cold, High Wind, Wildfire/Air Quality	OES	General Fund	Ongoing/Medium-term	Medium
12	Conduct drought public education and outreach.	Drought, Heavy Rain, Heavy Wind, Extreme Heat	Water & Sewer Utilities	Utility rates funded	Ongoing/Short-term	High
13	Remove tree vegetation near power lines.	Heavy Precipitation / Atmospheric River, Extreme Heat/Extreme Cold, High Wind, Wildfire/Air Quality	SVP	Utility rates funded	Ongoing/Short-term	High
14	Upgrade aged infrastructure for major electric receiving stations.	Heavy Precipitation / Atmospheric River, Extreme Heat/Extreme Cold, High Wind, Wildfire/Air Quality	SVP	Utility rates and Developer funded	Mid-term	High

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
15	Ensure sufficient electrical back-up is available for emergency response.	Heavy Precipitation / Atmospheric River, Extreme Heat/Extreme Cold, High Wind, Wildfire/Air Quality	SVP	Utility rates funded	Long term	High
16	In coordination with the results of the City's Pedestrian Masterplan and draft ADA Transition Plan, enhance pedestrian safety by studying and implementing improvements at uncontrolled crosswalks in Santa Clara and improving existing pedestrian infrastructure.	Transportation Incidents	Public Works	City Gas Tax or Grants	Long term	Medium
17	In coordination with the results of the City's Pedestrian Masterplan and draft ADA Transition Plan, complete sidewalk network repairs & gaps within Santa Clara.	Transportation Incidents	Public Works	City Gas Tax or Grants	Long term	Medium
18	Eliminate the use of potable water for non-domestic uses by extending current recycled water lines throughout the city,	Pipeline Hazards	Water & Sewer Utilities	Utility rates	Long term	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
19	Supervisory Control and Data Acquisition (SCADA) system expansion will allow authorized water technicians to be able to monitor and operate pumps and valves remotely. During an emergency, this can mean reducing hours of a potential response time, mitigating and possibly eliminating damage and potential emergencies.	Pipeline Hazards	Water & Sewer Utilities	Utility rates	Mid term	High
20	Conduct a tabletop exercise that supports the Emergency Response Plan (water and Sewer dept only).	Pipeline Hazards	Water & Sewer Utilities	Utility rates	Mid Term	Medium
21	Address gaps in data and missing information within this Annex for the next plan update.	All Hazards, including Flood, Heavy Rain, High Wind, Extreme Heat, Drought, Dam Failure, Wildfire, Earthquake	All Departments	General fund	Short term	Medium

Santa Clara County Multijurisdictional Hazard Mitigation Plan

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
22	Identify facilities to serve as warming or cooling centers/short-term severe weather shelters in an effort to reduce loss of life. Assist vulnerable populations by facilitating and also notifying them about warming centers/cooling centers (a short-term emergency shelter that operates when temperatures or a combination of precipitation, wind chill, wind, and temperature become dangerously inclement).	Heavy Precipitation, High Wind, Extreme Heat/Extreme Cold	OES	General Fund	Ongoing/Medium-term	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.

Santa Clara County Multijurisdictional Hazard Mitigation Plan

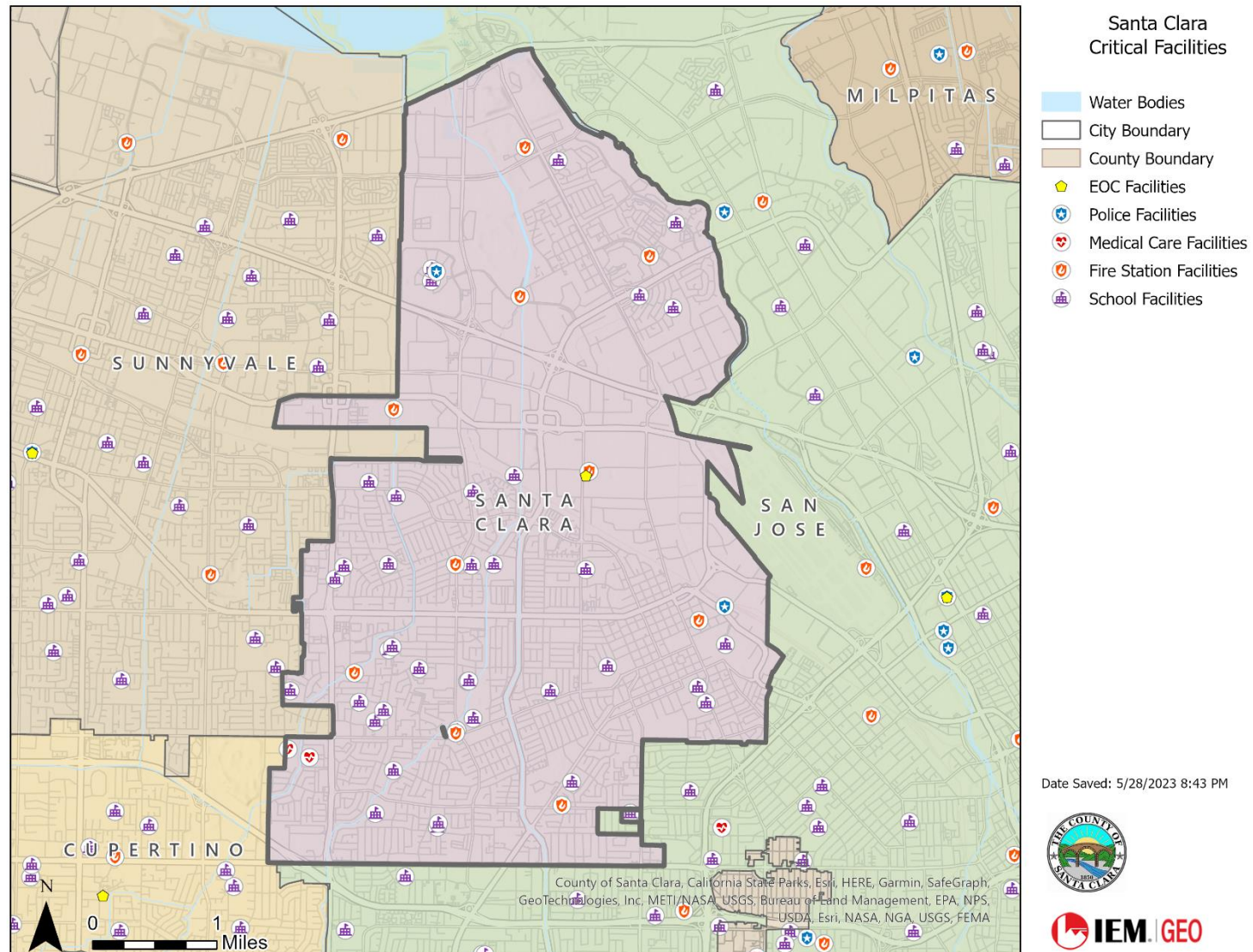


Figure 6: Santa Clara Critical Facilities

Santa Clara County Multijurisdictional Hazard Mitigation Plan

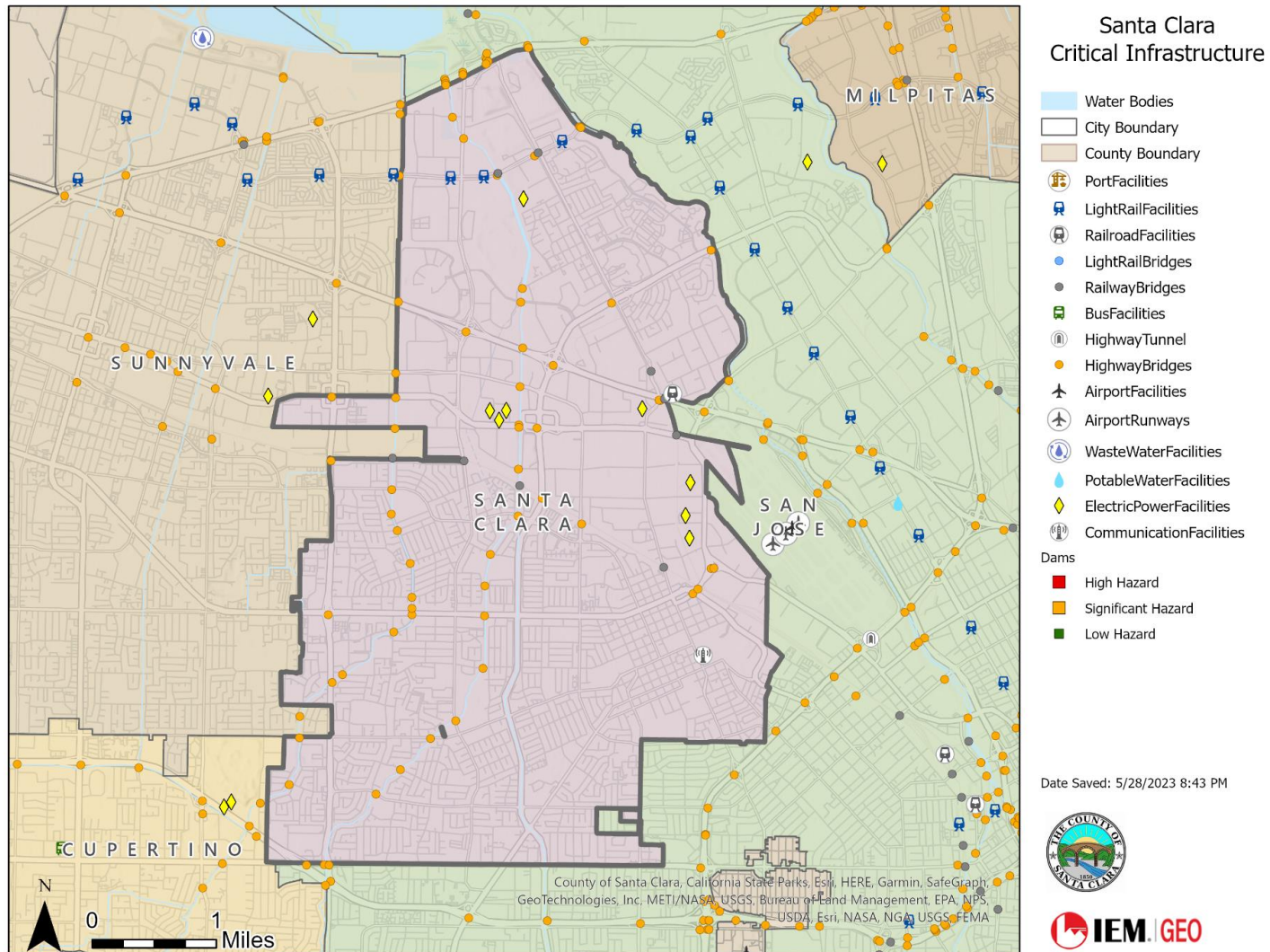


Figure 7: City of Santa Clara Critical Infrastructure

Santa Clara County Multijurisdictional Hazard Mitigation Plan

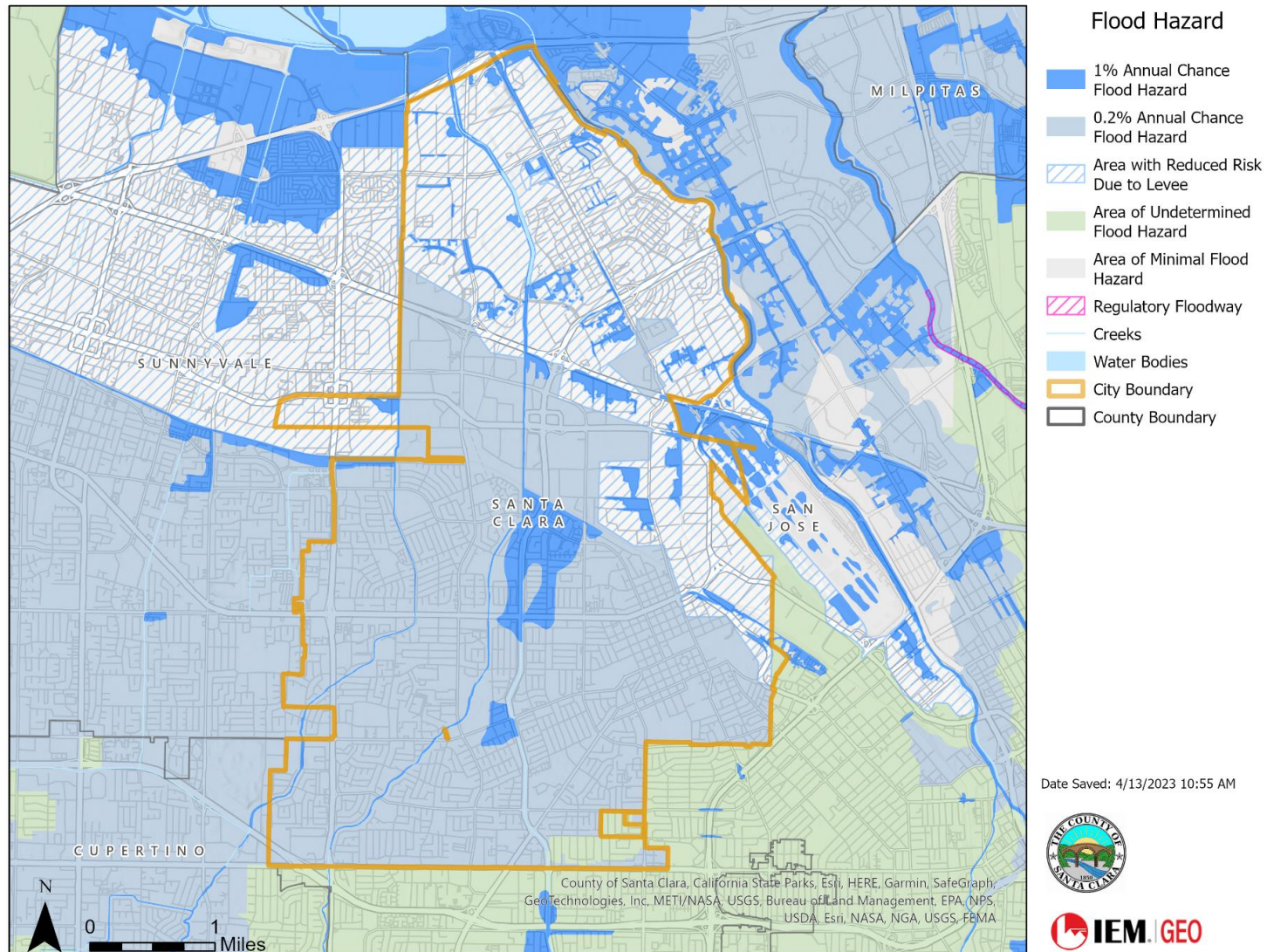


Figure 8: City of Santa Clara Flood Hazard Area Map

Santa Clara County Multijurisdictional Hazard Mitigation Plan

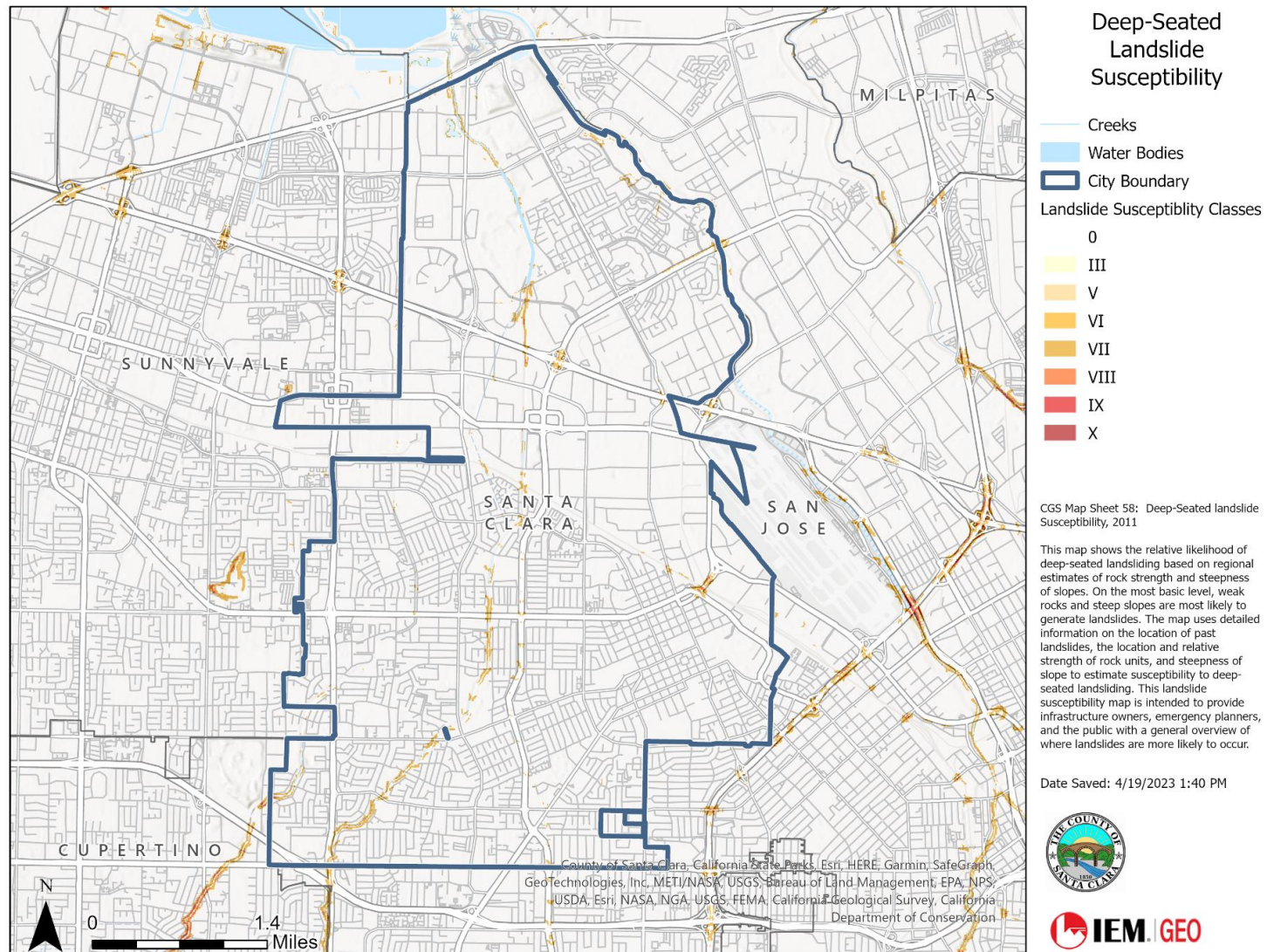


Figure 9: City of Santa Clara Deep-Seated Landslide Susceptibility

Santa Clara County Multijurisdictional Hazard Mitigation Plan

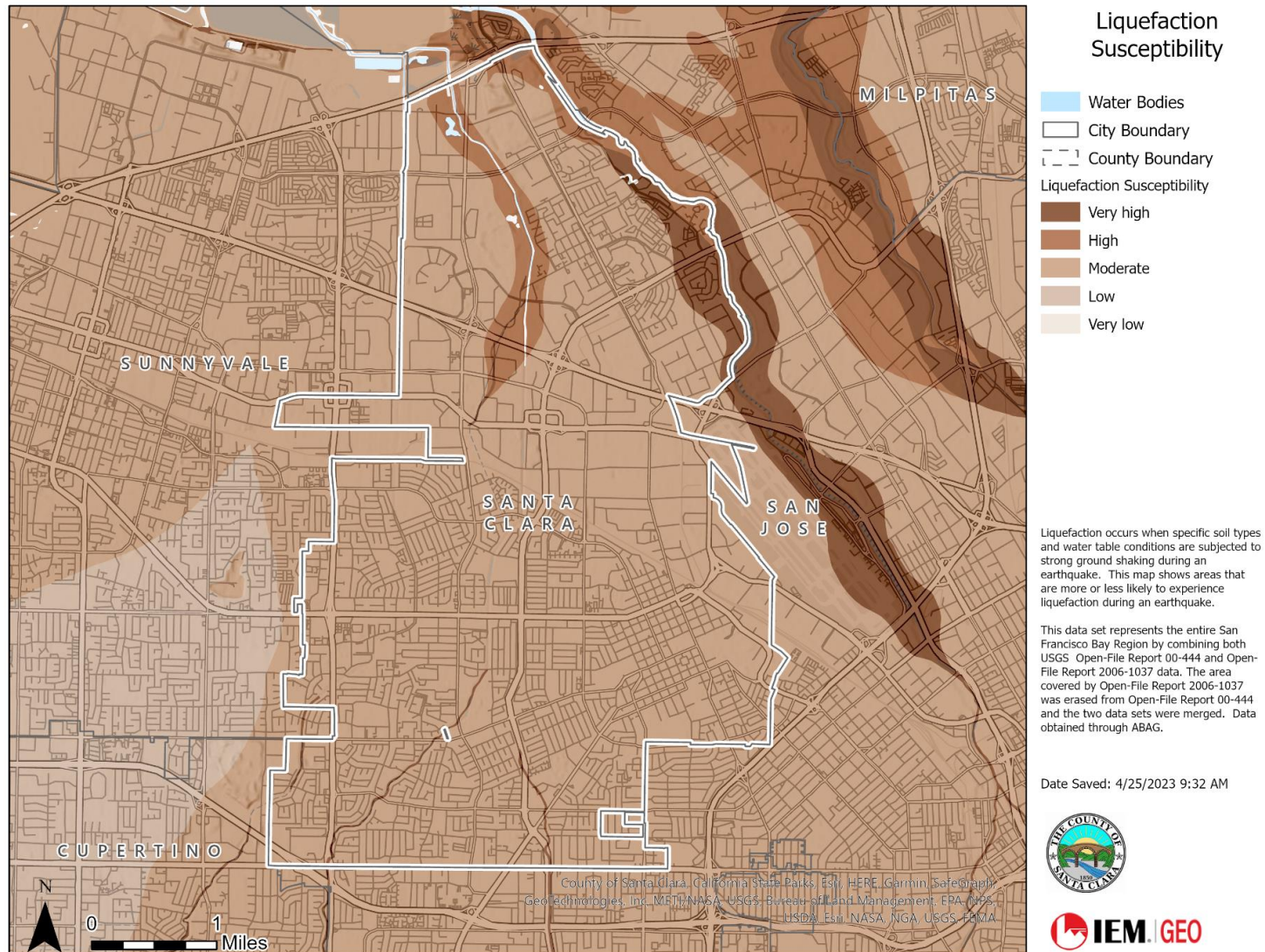


Figure 10: City of Santa Clara Liquefaction Susceptibility

Santa Clara County Multijurisdictional Hazard Mitigation Plan

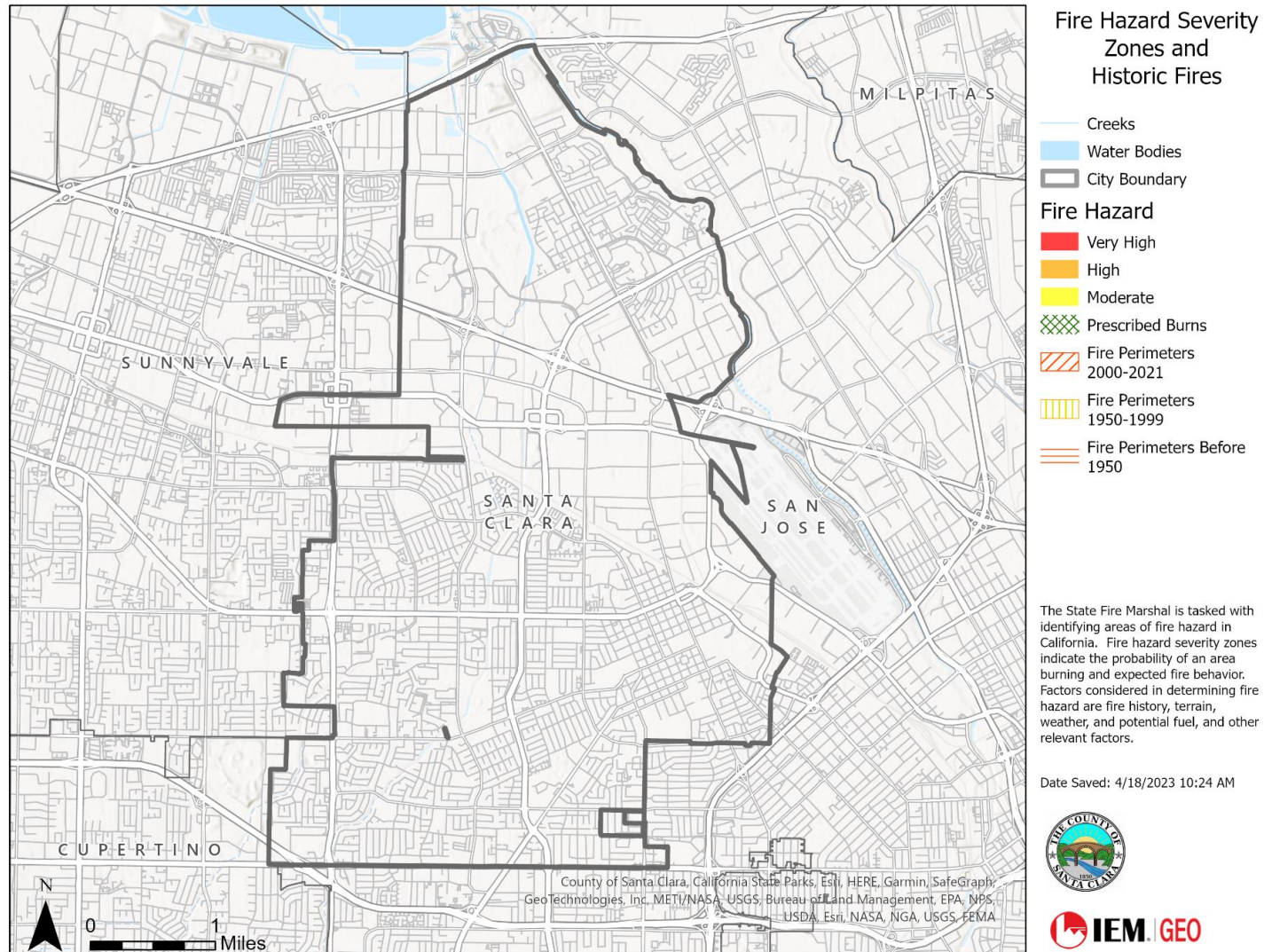


Figure 11: City of Santa Clara Fire Hazard Severity Zones

Santa Clara County Multijurisdictional Hazard Mitigation Plan

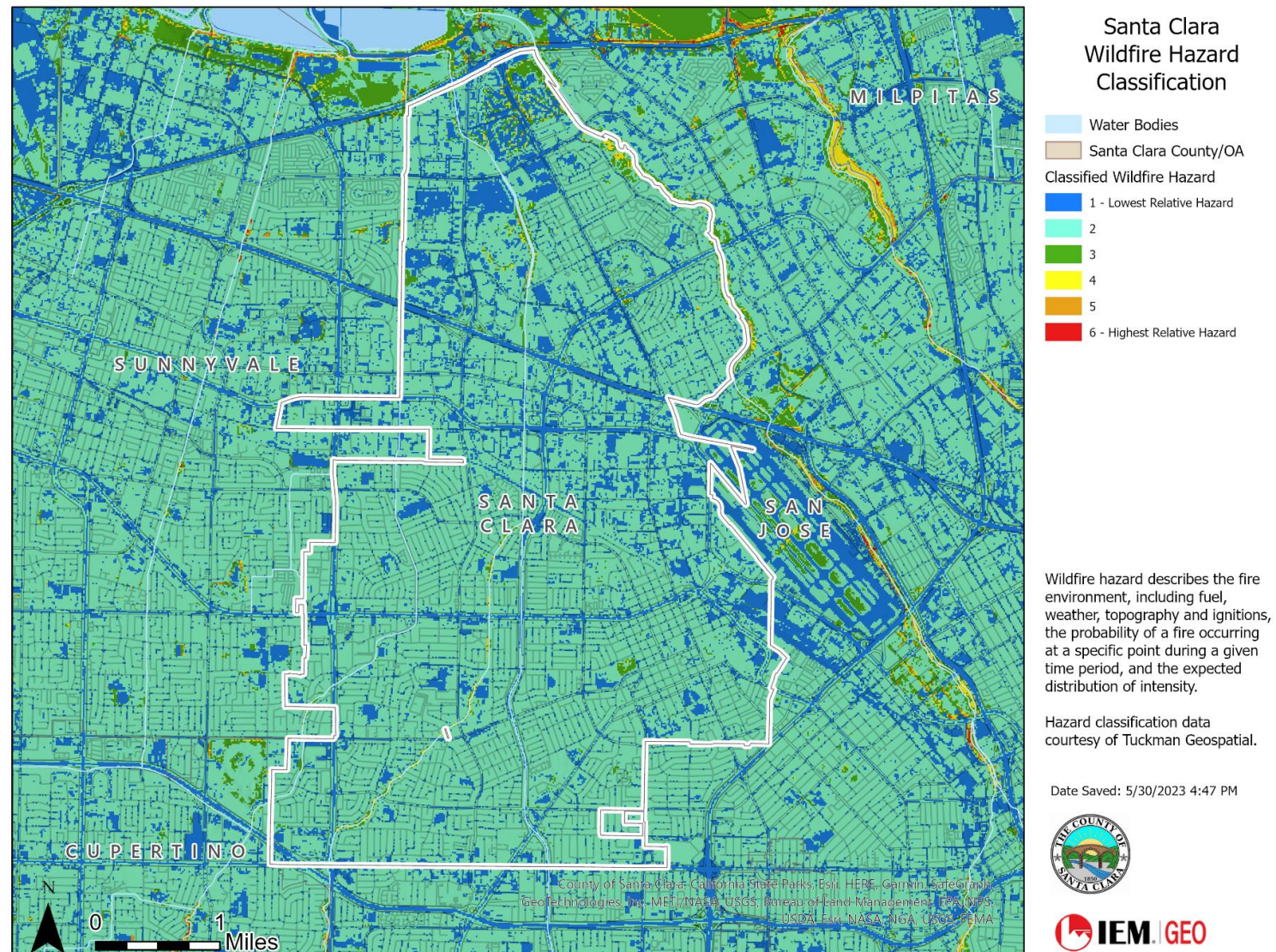


Figure 12: City of Santa Clara Wildfire Hazard Classification

Santa Clara County Multijurisdictional Hazard Mitigation Plan

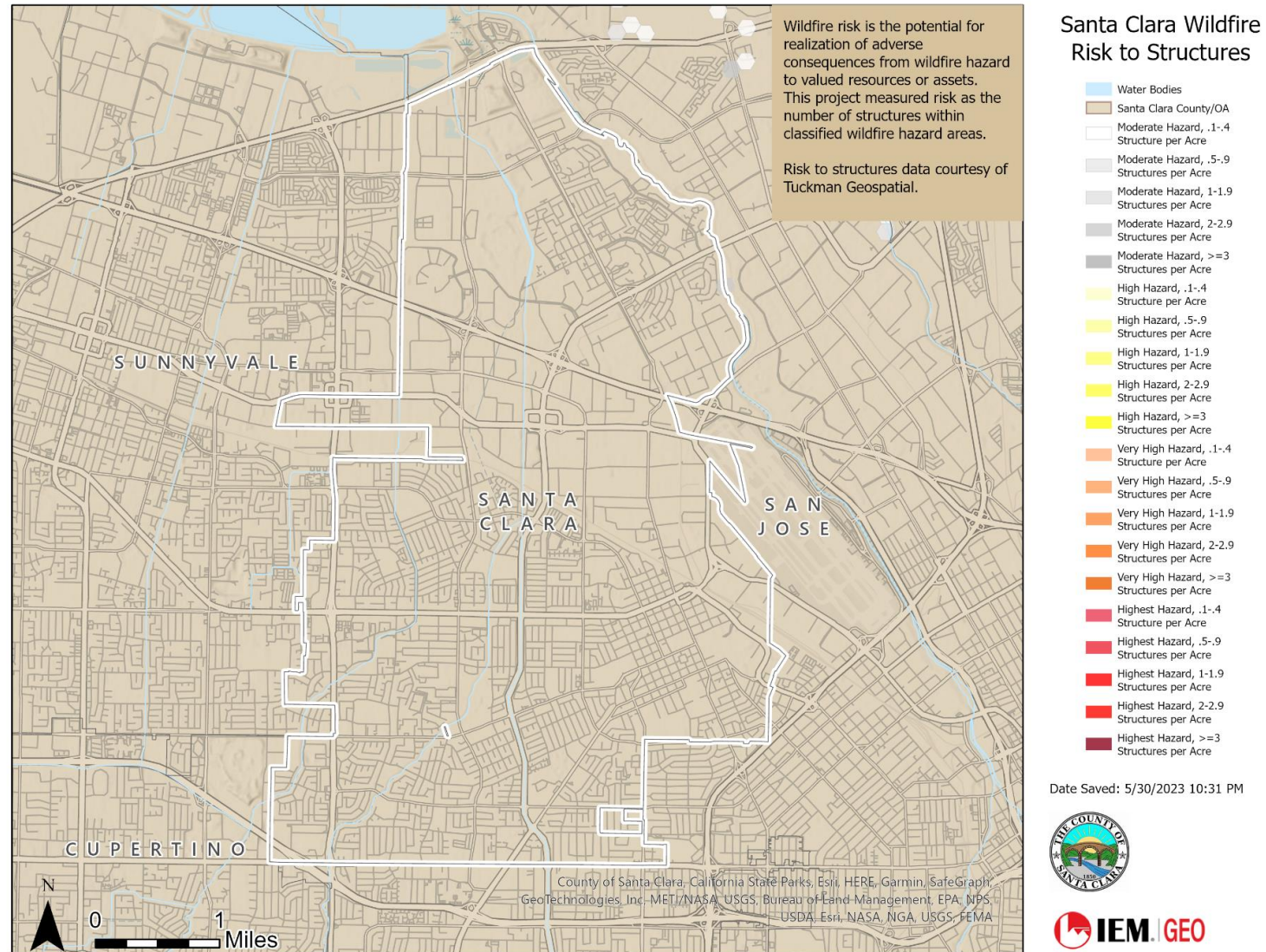


Figure 13: City of Santa Clara Wildfire Risk to Structures